

## NMR Database of Lignin and Cell Wall Model Compounds

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This database was designed to provide a coherent, single source of NMR data of lignin and other plant cell wall model compounds. The database exists in several different formats: a FileMaker Pro© database for cross-platform use, an Adobe© pdf cross-platform file for viewing and printing, and a hardcopy version derived from the FileMaker Pro database. FileMaker Pro and pdf versions are available for downloading over the internet from the Dairy Forage Research Center (DFRC) web site:

<http://www.dfrc.ars.usda.gov>  
(under the Software section)

A hardcopy version is available by request from the authors at the Forest Products Laboratory, but users are encouraged to print their own version. The use of trade or firm names in this publication is for reader information and does not imply endorsement by the US Department of Agriculture of any product or service.

In general  $^{13}\text{C}$  NMR data was collected in three common deuterated solvents (acetone, chloroform and dimethyl sulfoxide) for each compound. We used the center line of the solvent peaks as our reference, 2.04 and 29.83 ppm for acetone- $\text{d}_6$ , 7.24 and 77.00 for  $\text{CDCl}_3$  and 2.49 and 39.50 ppm for  $\text{DMSO-}d_6$ . The  $^1\text{H}$  NMR data early on was reported for only one solvent. A standard set of acquisition parameters was used to acquire and process the spectra to keep the data as uniform and constant as possible. The samples were run at ambient temperature, about 298° K.

Those compounds with an index number less than 1000 were run on a Bruker 250 MHz spectrometer at FPL and those compounds with an index number between 1000 and 10,000 were run at the DFRC on a Bruker 360 MHz instrument. The order of the compounds in the database reflects their arrival at the spectrometer rather than a preordained plan. The inclusion of analogous series of structures with small structural differences allows calculation of substituent effects that are invaluable for chemical shift predictions of structures not included in the database.

The chemical shift assignments for most of the compounds were made by comparison with other compounds, literature values, and in some cases using the standard set of 1D and 2D NMR experiments. Every effort was made to correctly assign the chemical shifts; however, limited time and resources precluded confirming the shifts for many of the compounds. The shifts are reported to the second decimal place only to distinguish very close shifts; comparisons between spectra are practical only within  $\pm 0.1$  ppm. The authors would greatly appreciate learning of any corrections on suspect assignments.  
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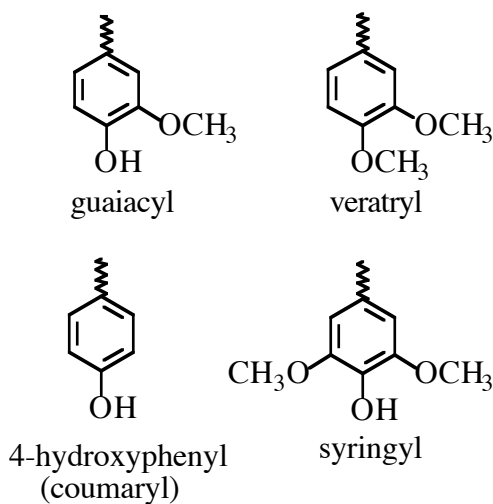
The compounds themselves came from many sources — in-house collections, syntheses and donations from other researchers for which we are grateful. The source of the compounds is often given in the “Notes” field along with other pertinent data.

This database was originally intended as an aid for the assignment of chemical shifts for wood and plant lignin NMR spectra. The trivial names used throughout are well known to wood chemists as is the numbering system. We have attempted to include more formal chemical names for many of the compounds and these were obtained using Beilstein’s Autonom© program. The chemical names for the larger 3 and 4 ring models became so cumbersome that the authors employed an abbreviated system to identify both the moieties involved as well as the linkages between the moieties. Examples of the naming, numbering and linking conventions used are given below.

case letters and numbers to describe the type of linkage between the rings.

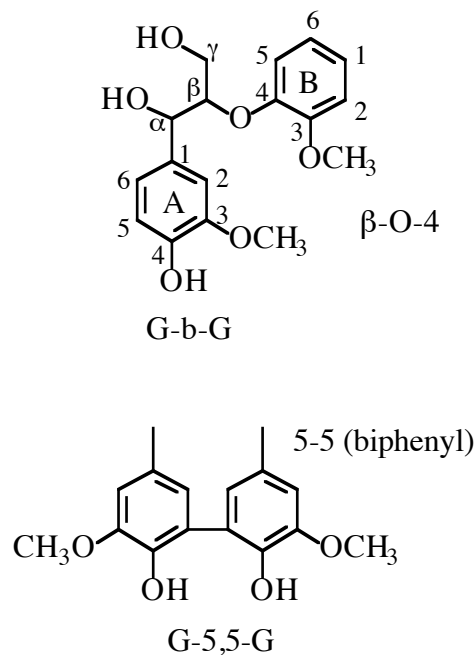
**Table 2.** Terminology of Abbreviated Structural Entities

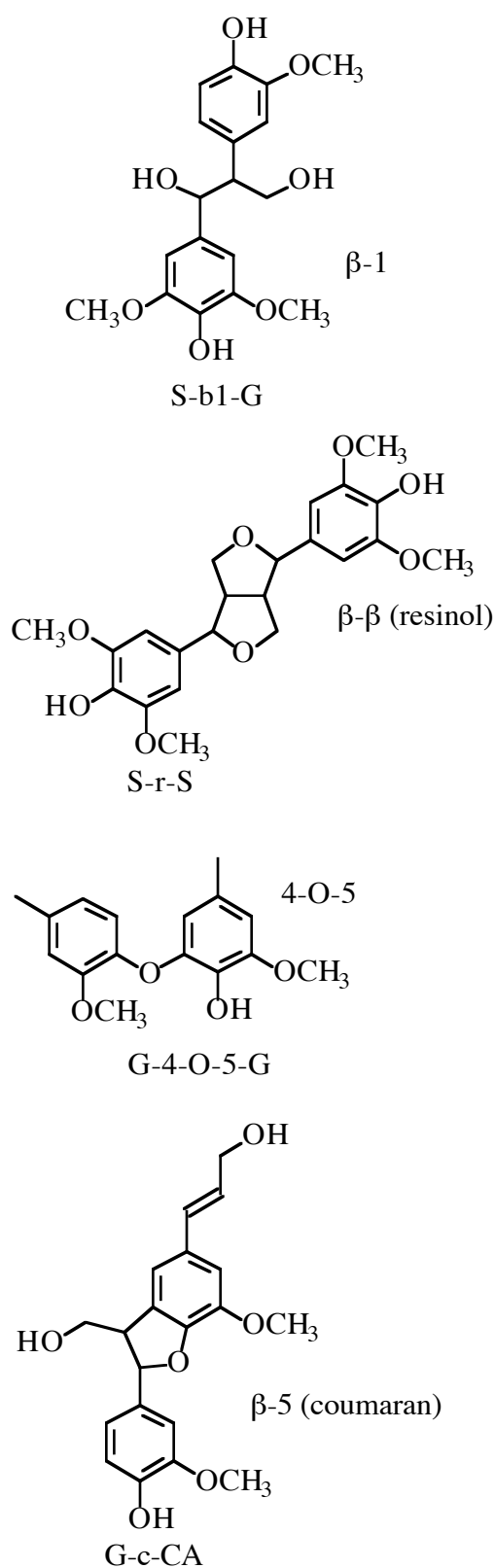
Entity	Abbreviation
guaiacyl ring	G
syringyl ring	S
coumaryl ring	H
$\alpha$ -O-4 linkage	a
$\beta$ -O-4 linkage	b
$\beta$ -5 (phenylcoumaran)	c
$\beta$ -1 linkage	b1
$\beta$ - $\beta$ (resinol)	r
5-5 (biphenyl)	5,5
coniferyl alcohol end unit	CA
sinapyl alcohol end unit	SA
p-coumaryl alcohol end unit	HA
ferulic acid end unit	FA
<i>erythro</i>	<i>e</i>
<i>threo</i>	<i>t</i>



**Fig. 1** Trivial names for substituents at the 3,4 and 5 positions on the aromatic ring.

The naming of the larger oligomer lignin models uses a combination of upper case letters to describe the ring structure and lower





**Fig. 2** Examples of linkages and abbreviated names.

With this convention the name FA-5,5-FA would represent a diferulic acid biphenyl structure. The trimer CA-a-G-b-CA would be a guaiacyl unit with two coniferyl alcohol end groups etherified at the  $\alpha$ - and  $\beta$ -positions.

The structure index is arranged based upon the number of rings in the structure. Where possible the structures are also arranged by ring type such as guaiacyl, syringyl etc. The number under the structure refers to the index number at the top of the data sheet. An asterisk after a number indicates the acetylated analog of that compound. In some cases only the acetylated compound is included.

We hope to continue adding to and improving this database. Regular updates will be made to the database to keep the online sources current. This database was written and prepared for the most part by U.S. Government employees on official time, and it is therefore in the public domain and not subject to copyright. Please feel free to contact the authors with suggestions or questions.

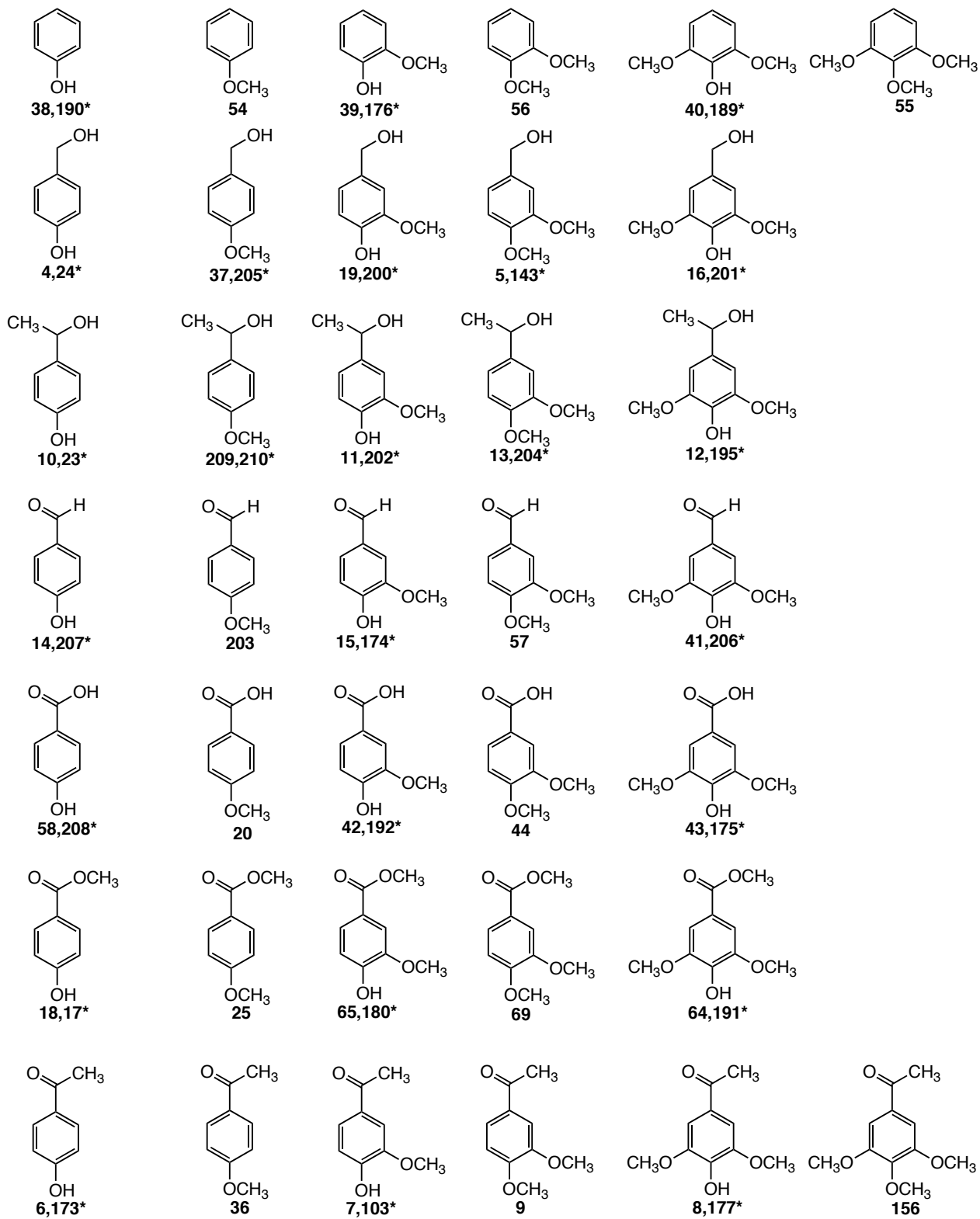
The authors gratefully acknowledge the many generous contributions made by others at both labs towards this database; Foremost Larry Landucci for compounds, patience, assignments and encouragement. William Landucci for software development, Martin Wesolowski and Kolby Hirth, NMR spectroscopists, and the frequent donation of compounds from Mike Mozuch, Noritsugu Terashima, Stéphane Quideau, Rich Helm, Fachuang Lu, Hoon Kim, Jamie Milhaupt and Susana Luque. The authors also acknowledge partial support of the National Research Initiative Competitive Grants Program/USDA (Wood Section), award #94-03465.

# Structure Index

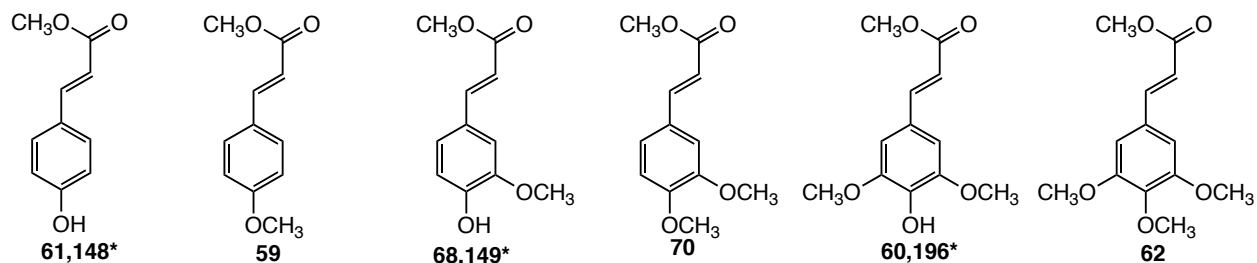
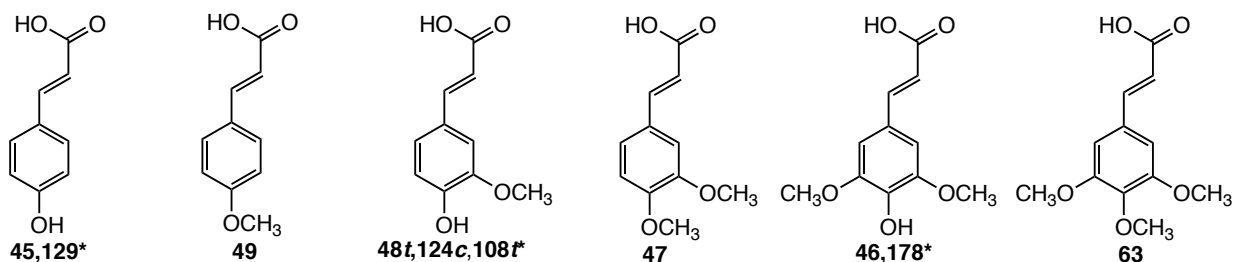
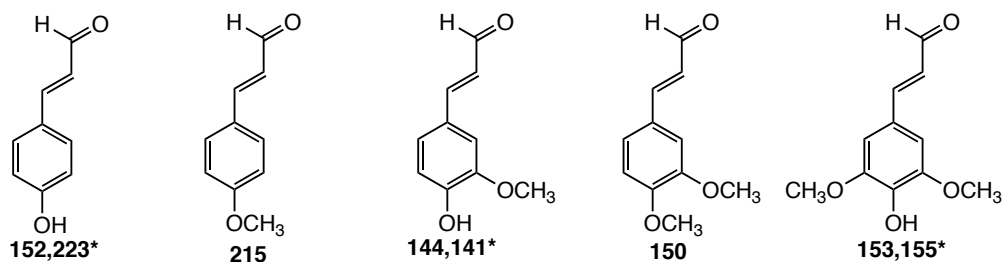
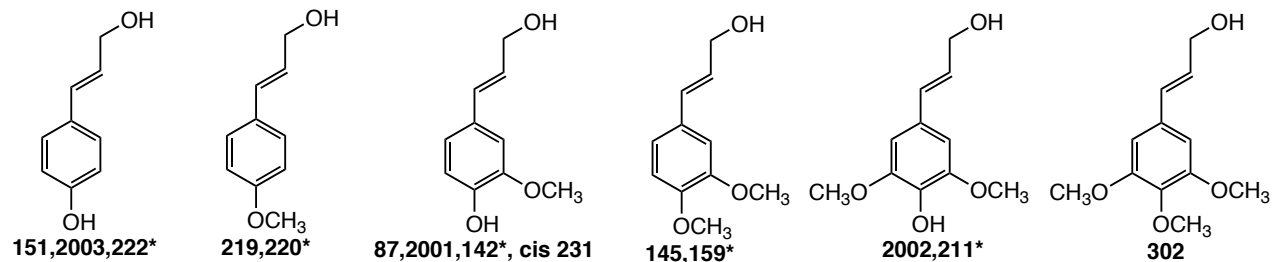
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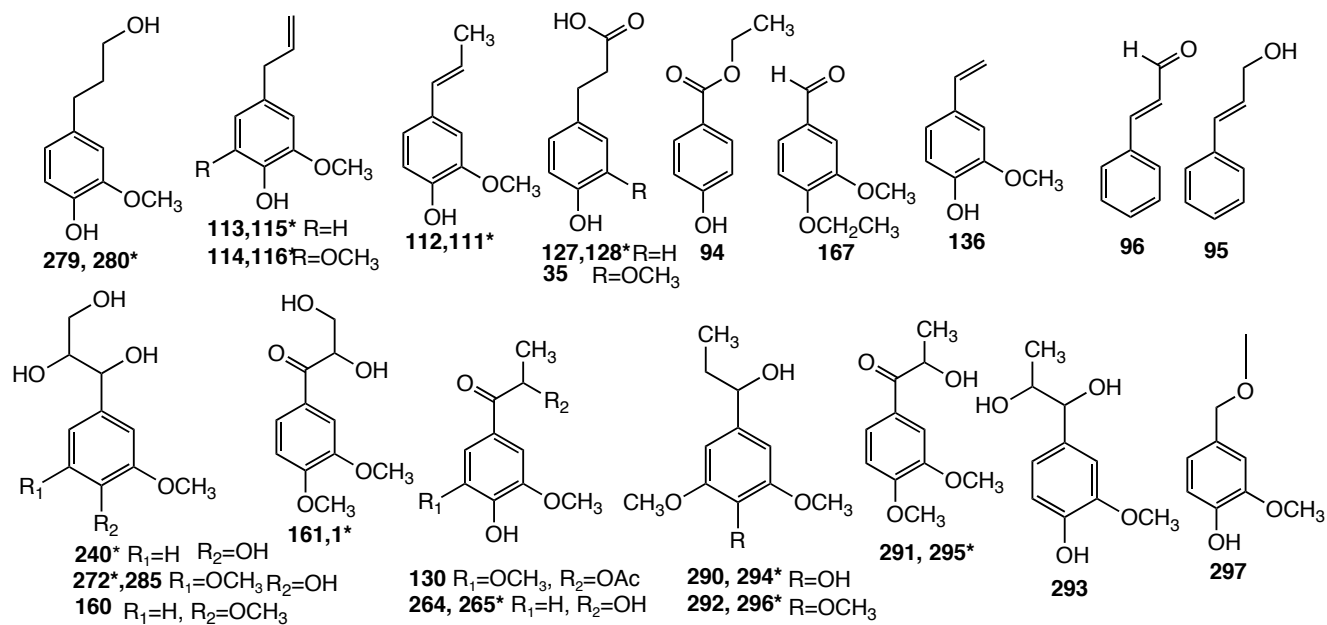
## Monomers

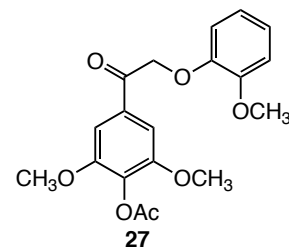
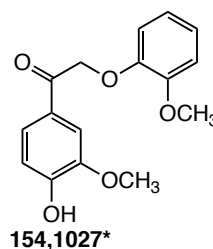
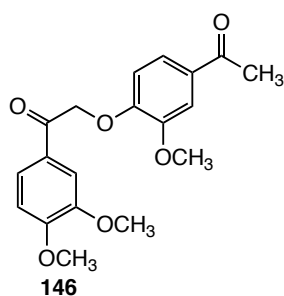
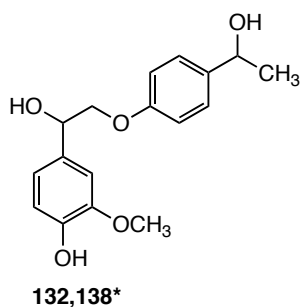
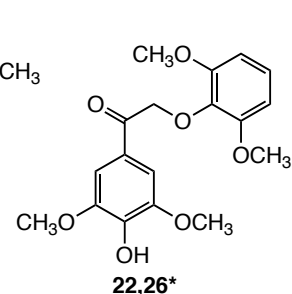
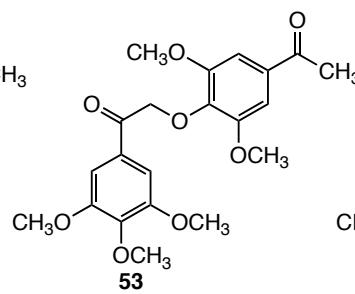
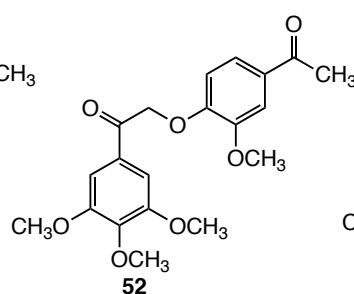
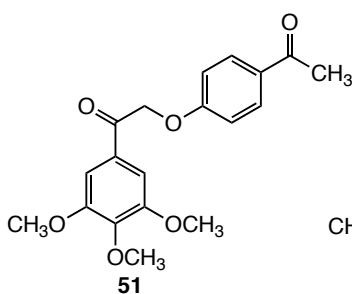
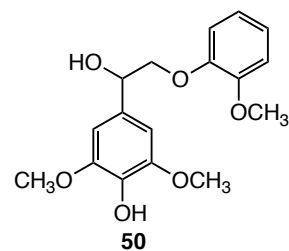
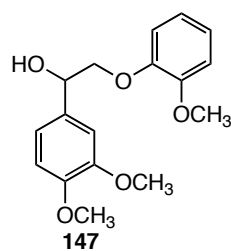
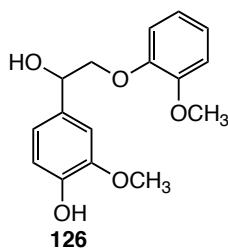
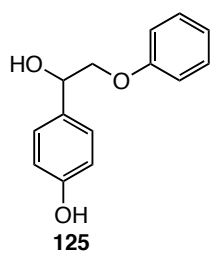
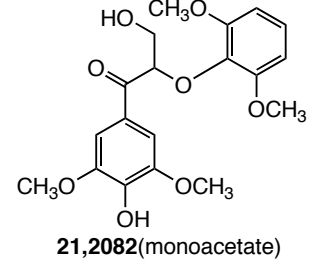
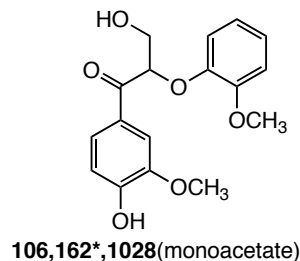
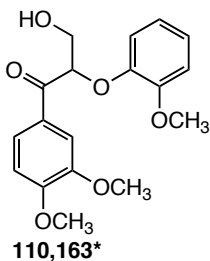
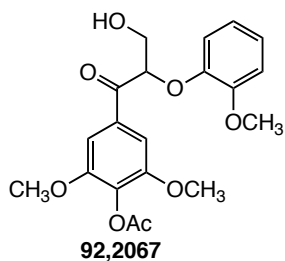
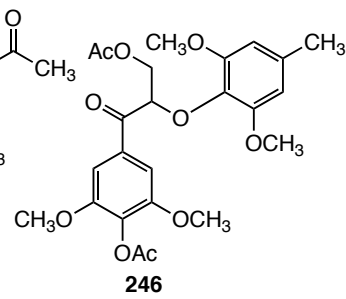
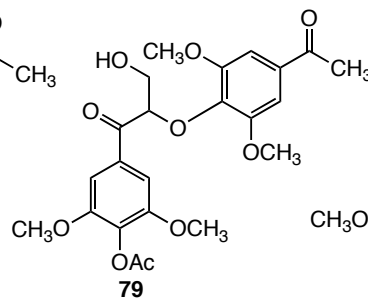
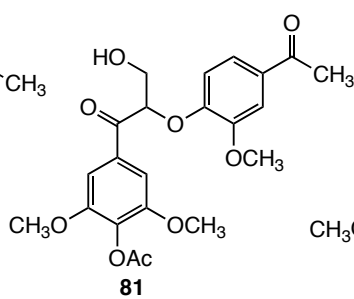
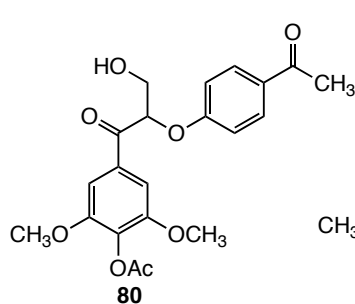


## Monomers ctd

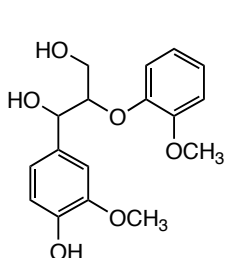


## Misc. Monomers

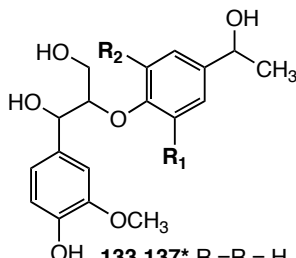


**b-O-4 Dimers, 2-Carbon Sidechain****b-O-4 Dimers, 3-Carbon Sidechain, a-C=O**

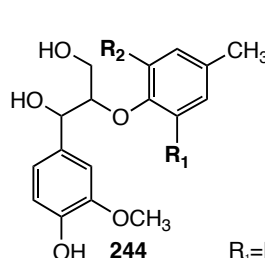
## b-O-4 Dimers, 3-Carbon Sidechain



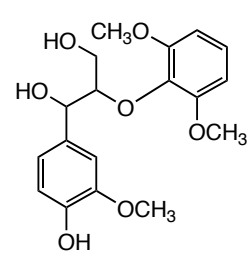
101e,102t,74f\*,214e\*  
(1029t,1030e a,g Ac'd)



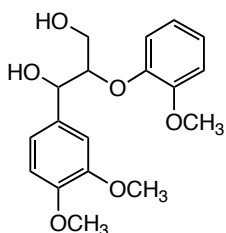
133,137\* R<sub>1</sub>=R<sub>2</sub>=H  
131,140\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=H  
134,139\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=OCH<sub>3</sub>



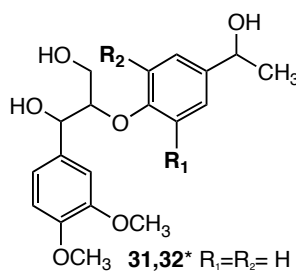
244 R<sub>1</sub>=R<sub>2</sub>=H  
248t,227e\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=H  
242,232\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=OCH<sub>3</sub>



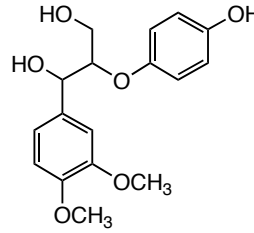
179



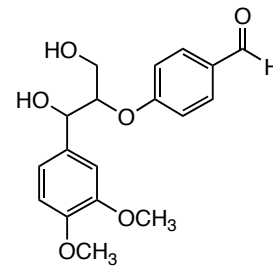
104t,105e,3e\*



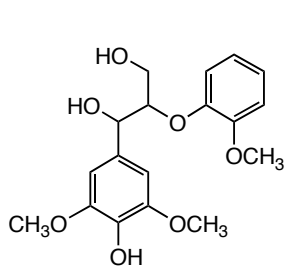
31,32\* R<sub>1</sub>=R<sub>2</sub>=H  
34,33\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=H  
2,29\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=OCH<sub>3</sub>



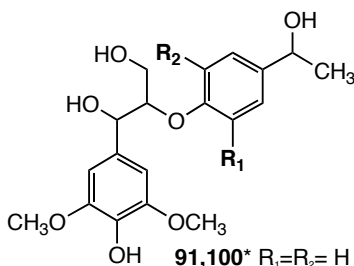
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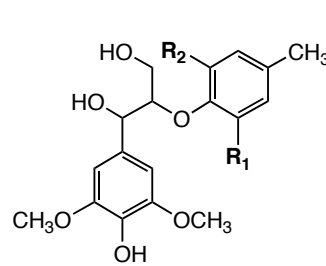
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90,99\*

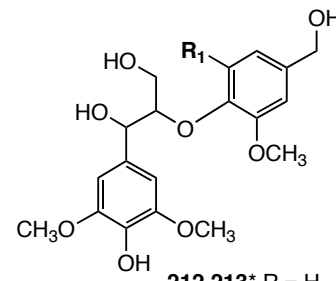


91,100\* R<sub>1</sub>=R<sub>2</sub>=H  
88,97\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=H  
89,98\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=OCH<sub>3</sub>

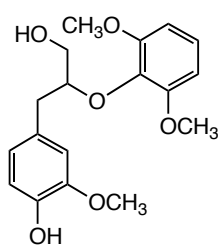


245

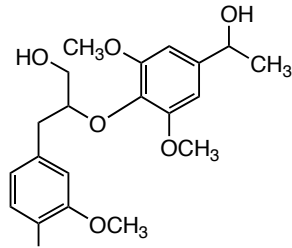
R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=H  
243,230\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=OCH<sub>3</sub>



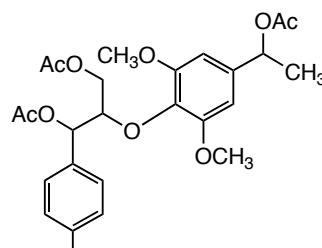
212,213\* R<sub>1</sub>=H  
229\* R<sub>1</sub>=OCH<sub>3</sub>



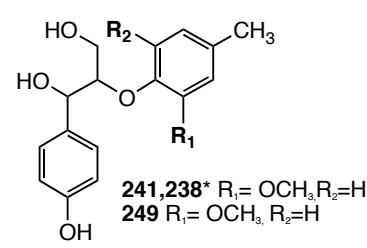
217,218\*



135

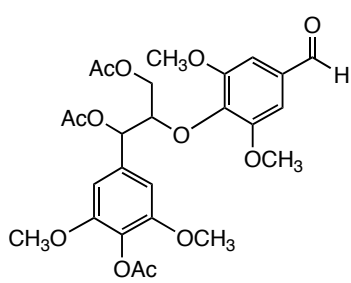


225

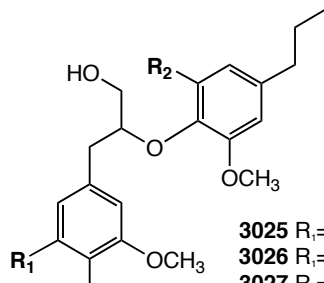


241,238\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=H  
249 R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=H

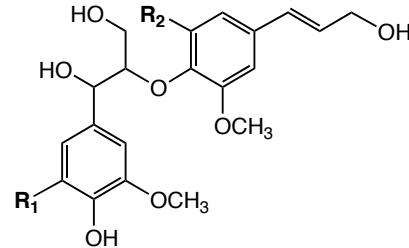
268e,269t,270e\*,271f\* R<sub>1</sub>=R<sub>2</sub>=H



228



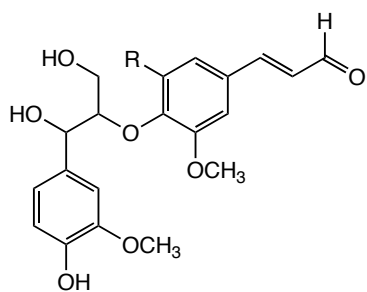
3025 R<sub>1</sub>=R<sub>2</sub>=H  
3026 R<sub>1</sub>=H, R<sub>2</sub>=OCH<sub>3</sub>  
3027 R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=H  
3028 R<sub>1</sub>=R<sub>2</sub>=OCH<sub>3</sub>



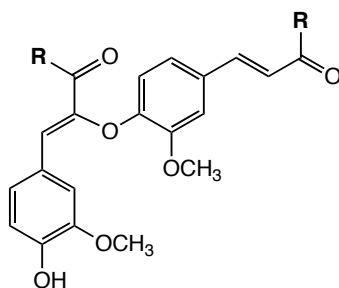
2013t,2014e,2012e\*,2011f\*,3008f\* R<sub>1</sub>=R<sub>2</sub>=H  
3067,188\* R<sub>1</sub>=H, R<sub>2</sub>=OCH<sub>3</sub>  
186\* R<sub>1</sub>=OCH<sub>3</sub>, R<sub>2</sub>=H  
185\* R<sub>1</sub>=R<sub>2</sub>=OCH<sub>3</sub>



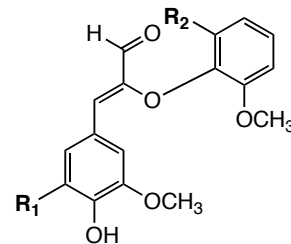
## More b-O-4 Dimers, 3-Carbon Sidechain



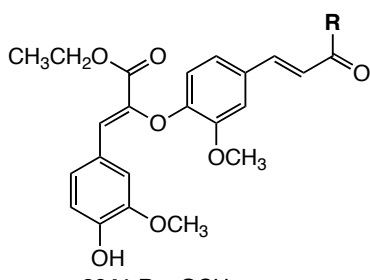
3010<sup>f</sup>, 3011<sup>e</sup>\* R = H  
3071 R = OCH<sub>3</sub> (with only g-Ac)



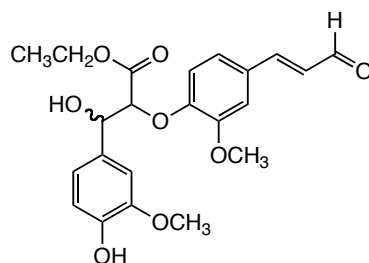
3031 R = H  
2040 R = OH



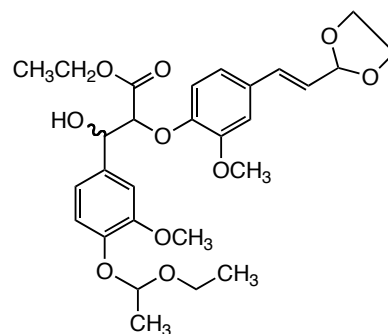
3034, 3035\* R<sub>1</sub>, R<sub>2</sub> = H  
3036, 3037\* R<sub>1</sub> = OCH<sub>3</sub>, R<sub>2</sub> = H  
3038, 3039\* R<sub>1</sub> = H, R<sub>2</sub> = OCH<sub>3</sub>  
3040, 3041\* R<sub>1</sub>, R<sub>2</sub> = OCH<sub>3</sub>



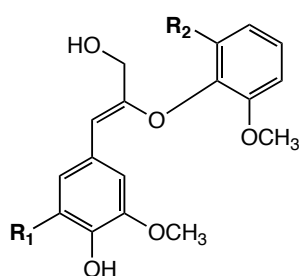
2041 R = OCH<sub>3</sub>  
2042 R = H



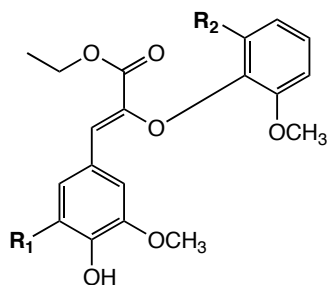
2043e, 2044f



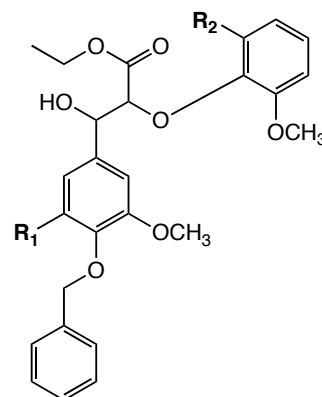
2045e, 2046f



3053, R<sub>1</sub> = H, R<sub>2</sub> = OCH<sub>3</sub>  
3057, R<sub>1</sub> = OCH<sub>3</sub>, R<sub>2</sub> = H

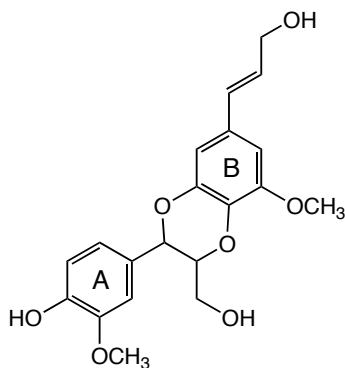


3052, R<sub>1</sub> = H, R<sub>2</sub> = OCH<sub>3</sub>  
3056, R<sub>1</sub> = OCH<sub>3</sub>, R<sub>2</sub> = H

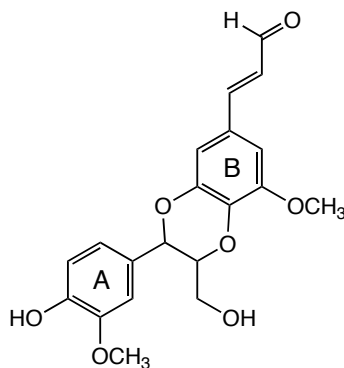


3050, 3051 isomers R<sub>1</sub> = H, R<sub>2</sub> = OCH<sub>3</sub>  
3054, 3055 isomers R<sub>1</sub> = OCH<sub>3</sub>, R<sub>2</sub> = H

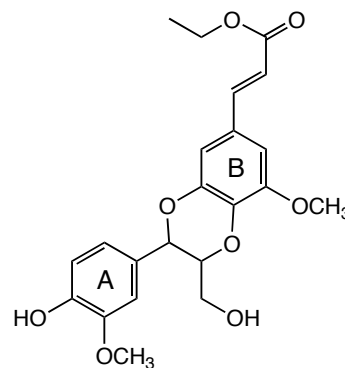
## 5-Hydroxyconiferyl alcohol b-O-4 Dimers, 3-Carbon Sidechain



3068



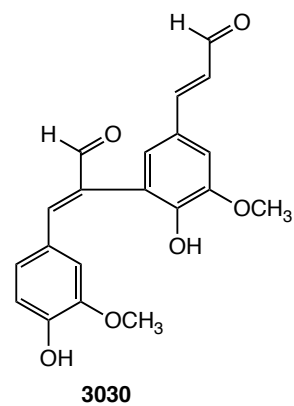
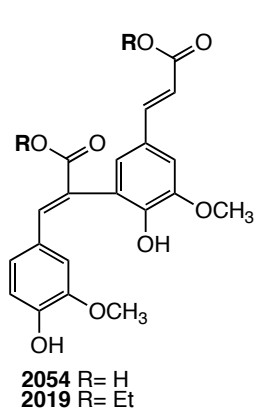
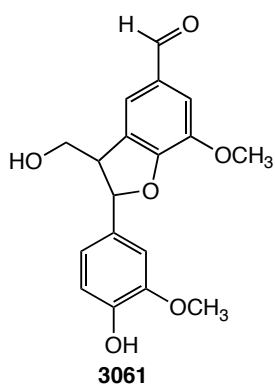
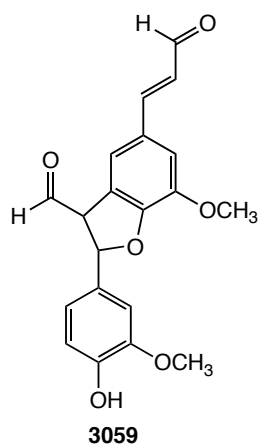
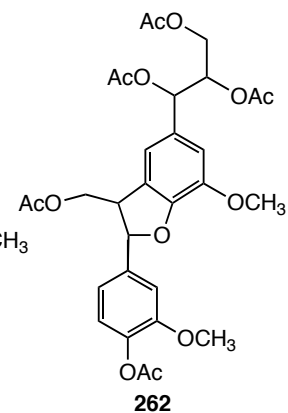
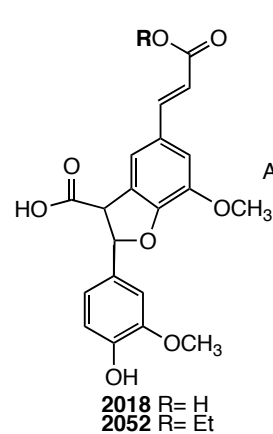
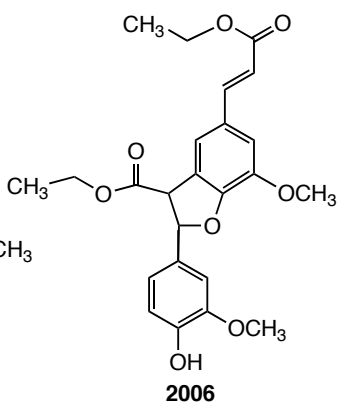
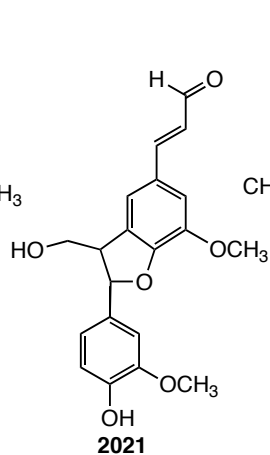
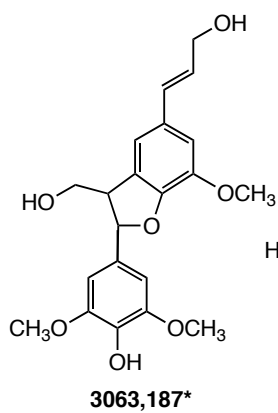
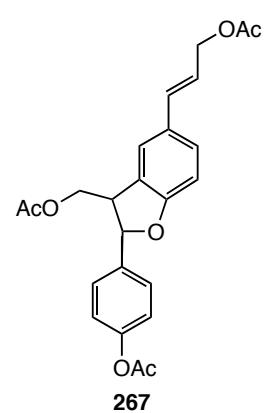
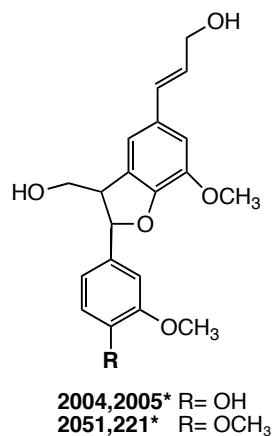
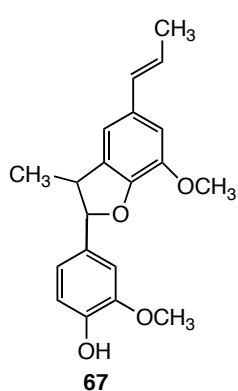
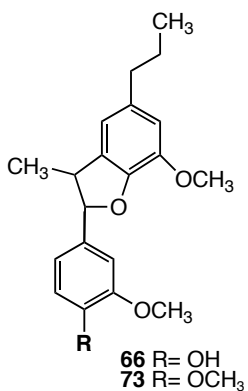
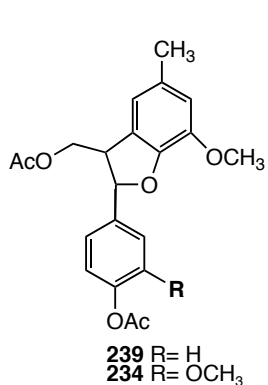
3069



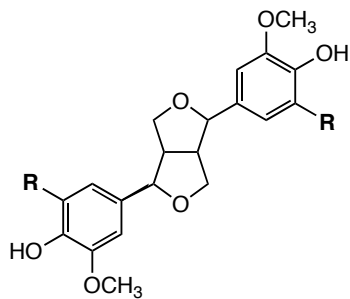
3070

X

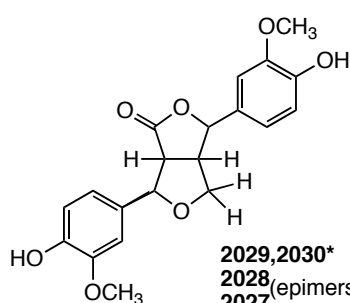
### b-5 Dimers



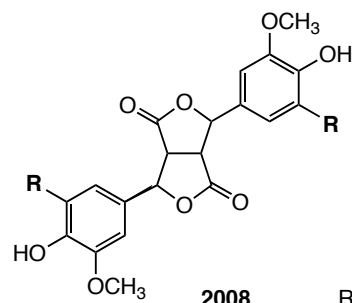
## b-b Dimers



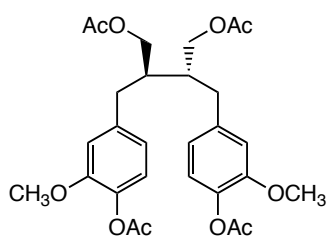
2020,109\* R = H  
117,123\* R = OCH<sub>3</sub>



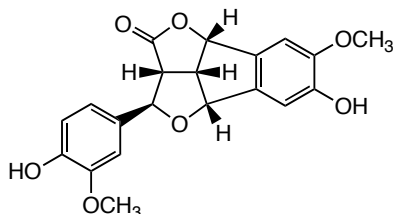
2029,2030\*  
2028, (epimers)  
2027



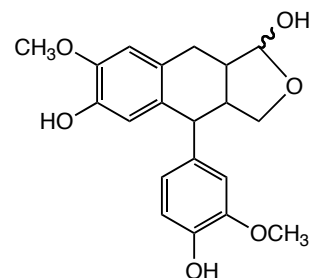
2008  
3002, 3042\* R = H  
R = OCH<sub>3</sub>



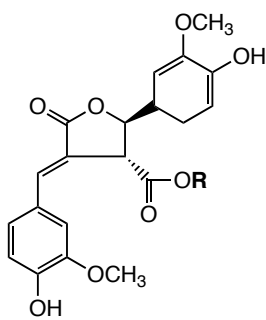
2070



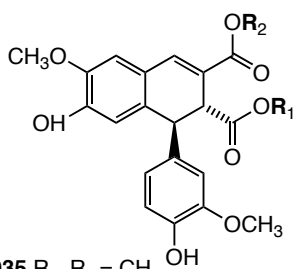
2026



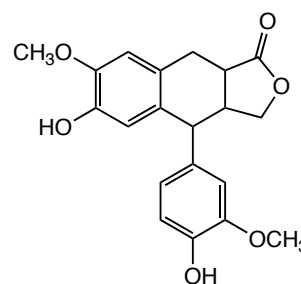
3014, 3015 isomers



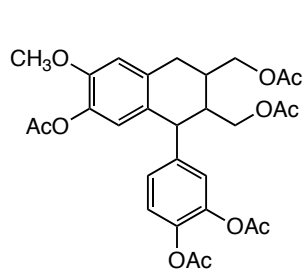
2033 R = H  
2034 R = OCH<sub>3</sub>



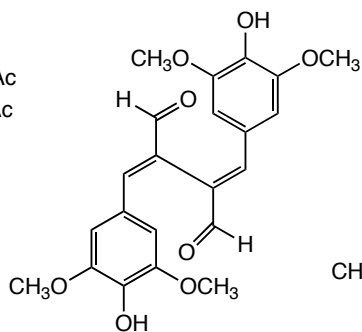
2035 R<sub>1</sub>, R<sub>2</sub> = CH<sub>3</sub>  
2036 R<sub>1</sub>, R<sub>2</sub> = H  
2062 R<sub>1</sub> = CH<sub>3</sub>, R<sub>2</sub> = H



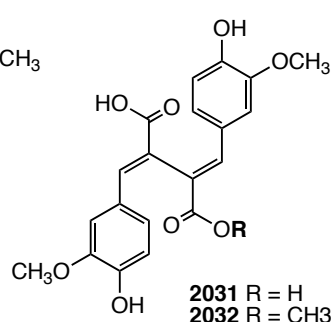
3017, 3016\*



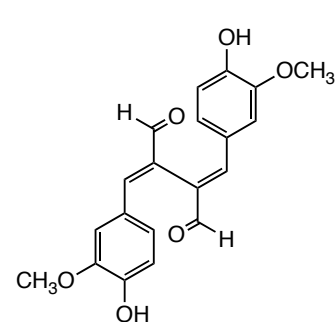
2069,3018



3060

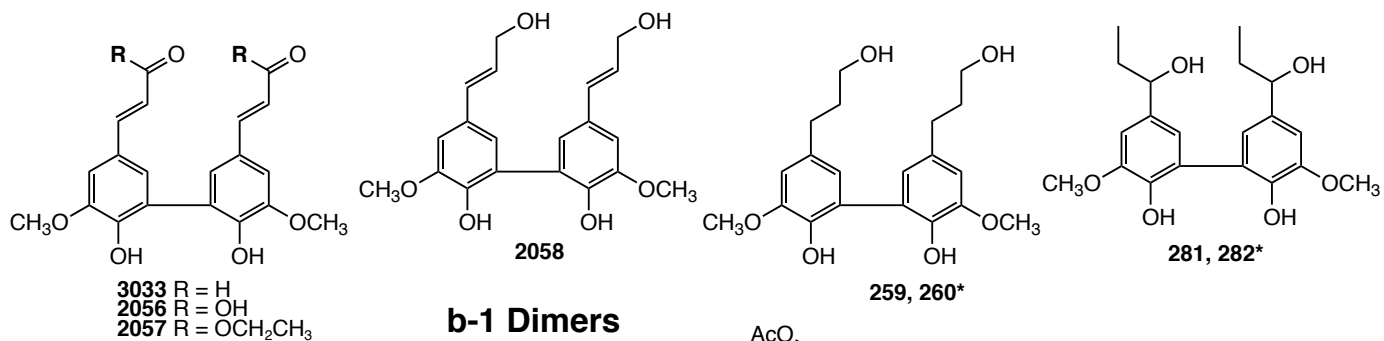
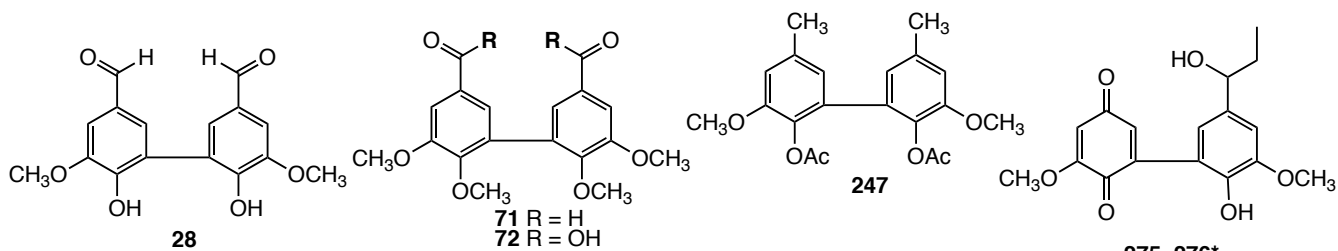


2031 R = H  
2032 R = CH<sub>3</sub>

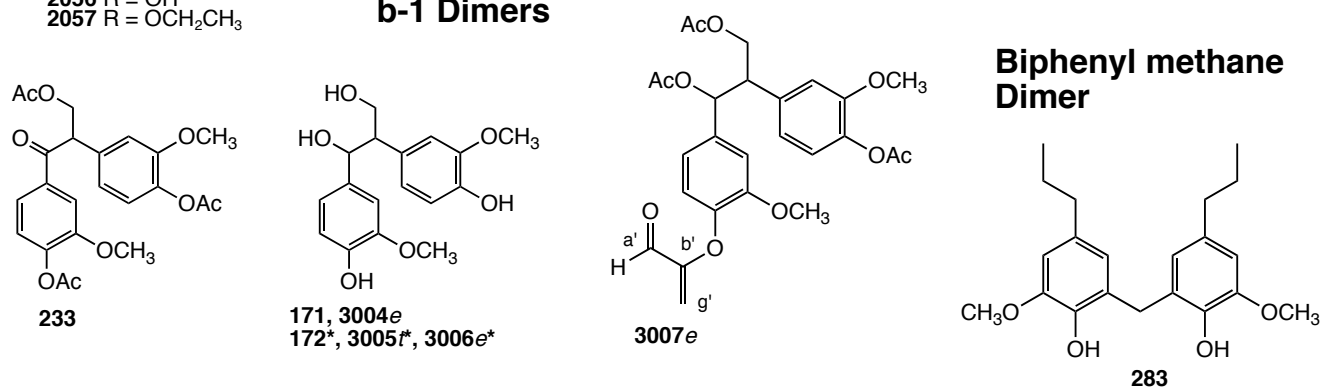


3032

## 5-5 Dimers

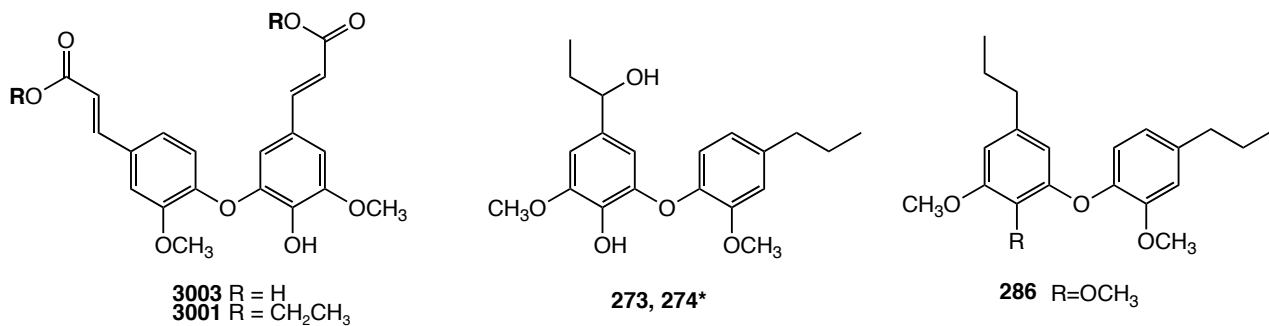
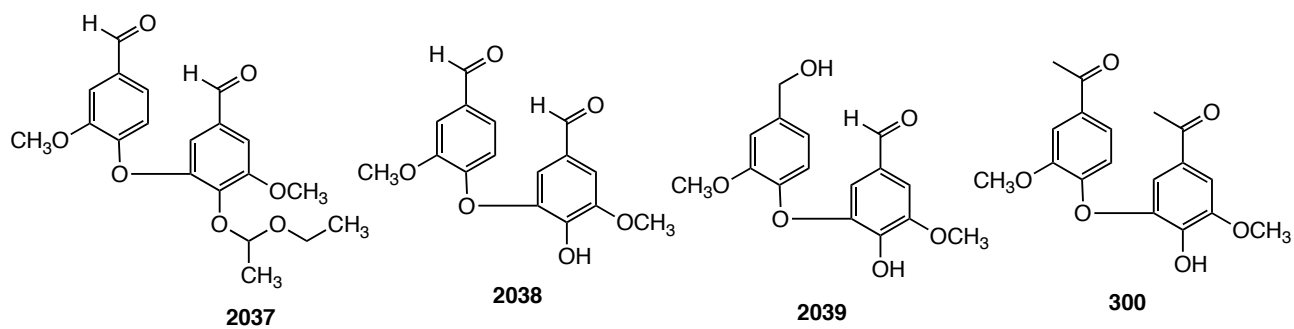


## b-1 Dimers

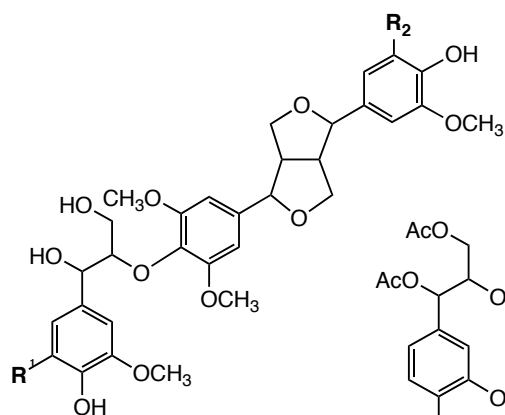
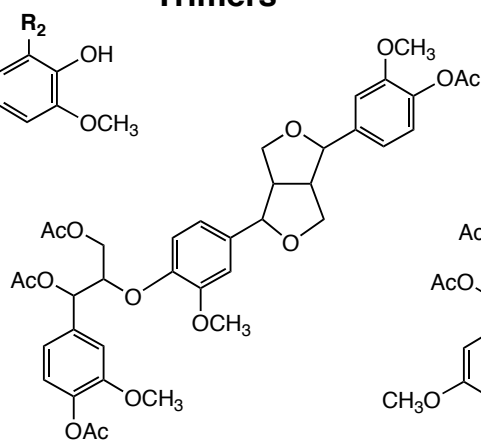
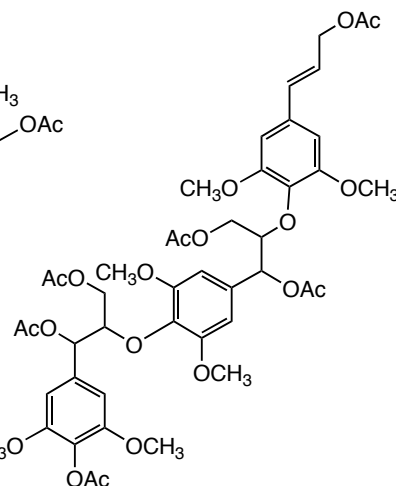
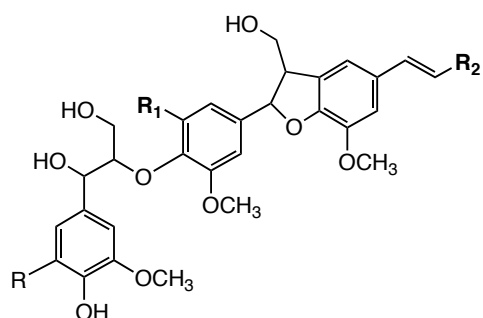
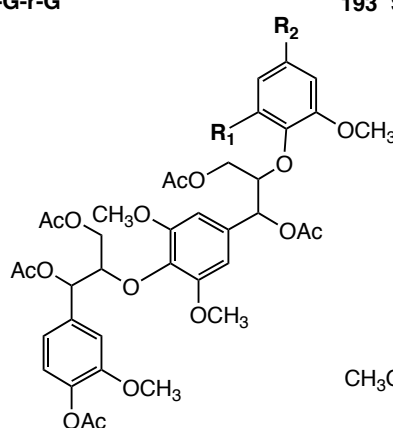
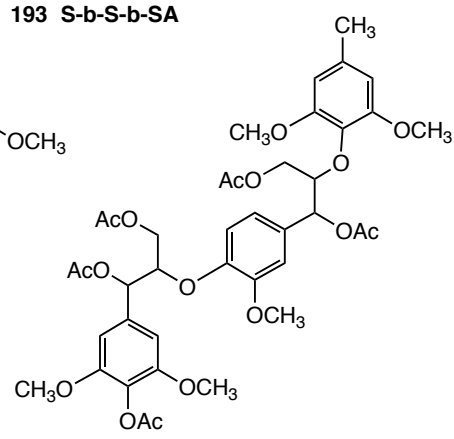
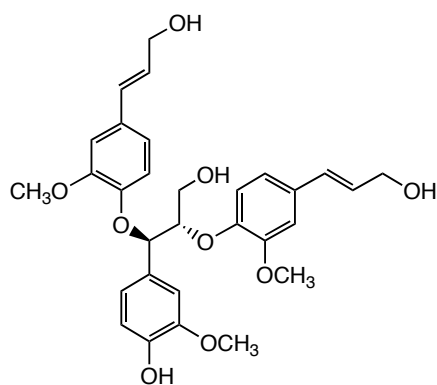
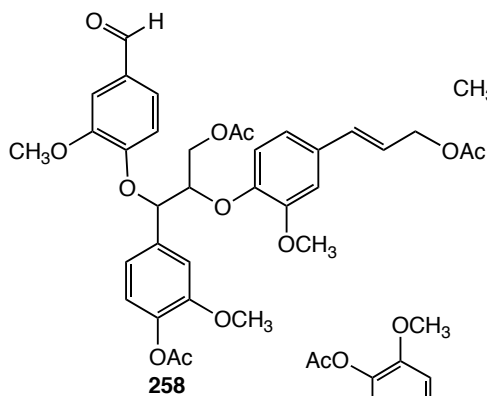
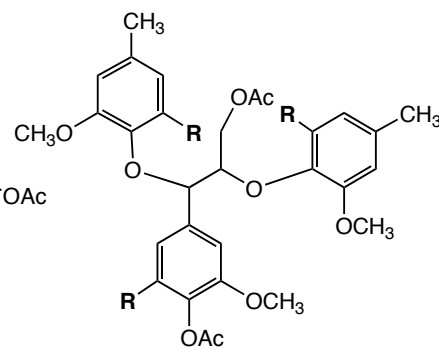
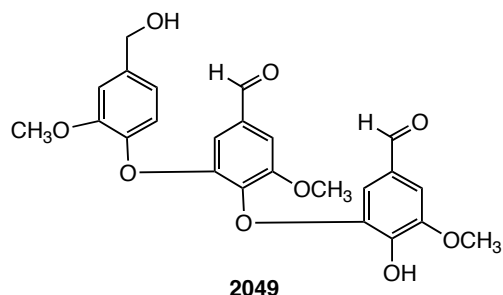
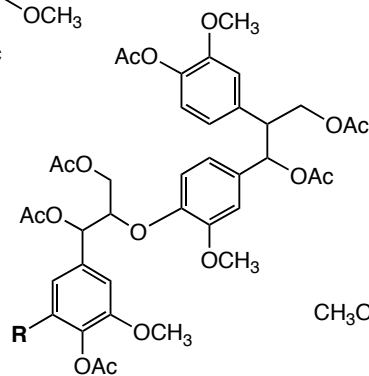
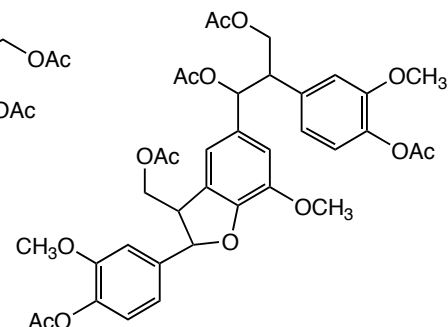


## Biphenyl methane Dimer

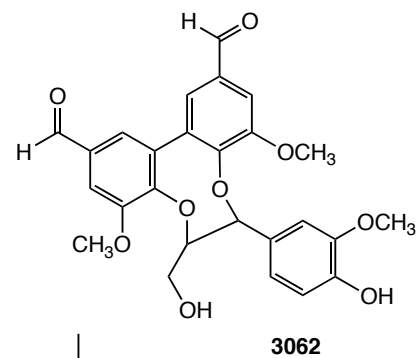
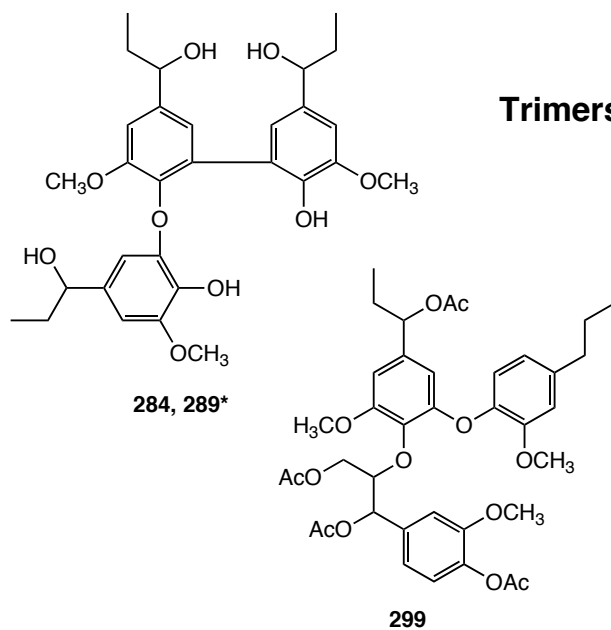
## 5-O-4 Dimers



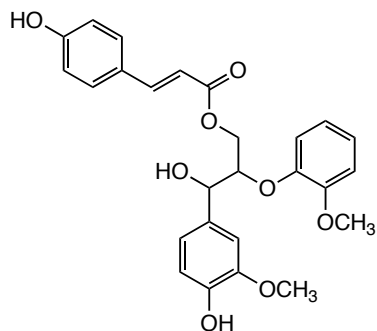
## Trimers

**183,184\***  $R_1 = H, R_2 = OCH_3$ , **G-b-S-r-S****198,199\***  $R_1, R_2 = OCH_3$ , **S-b-S-r-S****3064**  $R_1, R_2 = H$ , **G-b-S-r-G****263** **G-b-G-r-G****193** **S-b-S-b-SA****181,182\***  $R = H, R_1 = OCH_3, R_2 = CH_2OH$  **G-b-S-c-CA****216\***  $R = H, R_1 = H, R_2 = CH_2OH$  **G-b-G-c-CA****3065**  $R = H, R_1 = OCH_3, R_2 = CHO$  **G-b-G-c-CAld****3072**  $R = OCH_3, R_1 = H, R_2 = CH_2OH$  **S-b-G-c-CA****226**  $R_1 = R_2 = H$  **G-b-S-b-G****250**  $R_1 = OCH_3, R_2 = CH_3$  **G-b-S-b-S****261** **S-b-G-S****2015e,2022e\*** **CA-a-G-b-CA****258****237**  $R = H$  **G-a-G-b-G****266**  $R = OCH_3$  **S-a-S-b-S****2049****236, 3013**  $R = H$  **G-b-G-b1-G****235**  $R = OCH_3$  **S-b-G-b1-G****3012**

## Trimers Cont'd

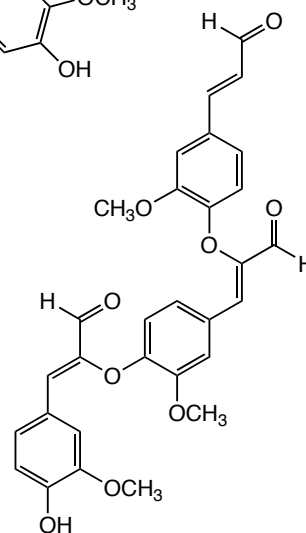


## Trimers Containing Ferulic or Coumaric Acid

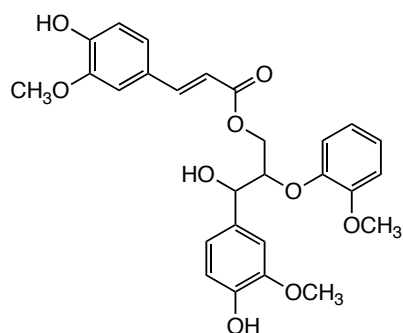


1015t, 1016e, 1019t\*, 1020e\*, 82t\*, 83e\*

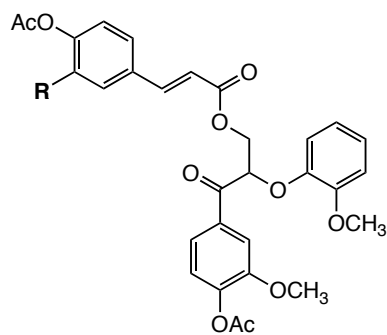
1011t, 1012e (diacetates, phenolic)



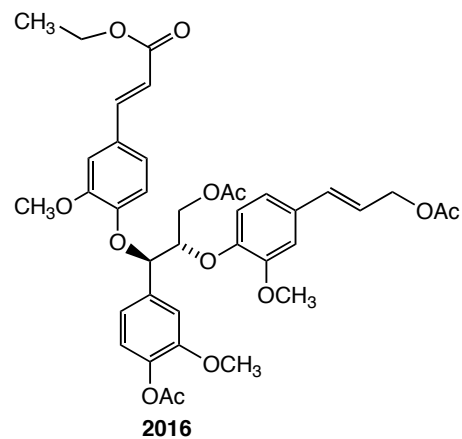
3058



1017t, 1018e, 1021t\*, 1022e\*, 76e\*, 75t\*  
1013t, 1014e (diacetates, phenolic)

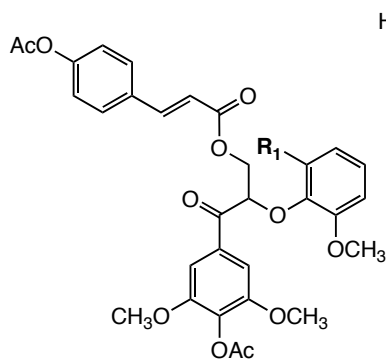


1009 R = H  
1010 R = OCH<sub>3</sub>

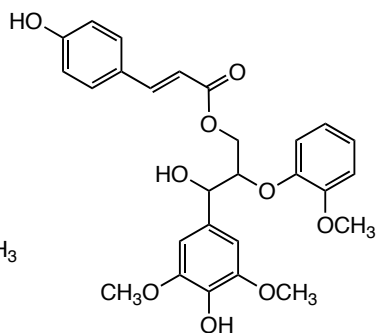


2016

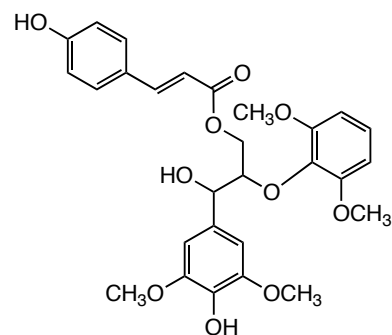
### More Trimers Containing Ferulic, Coumaric or *p*-OH-Benzoic Acid



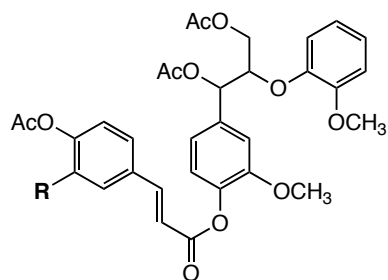
**2066** R = H  
**2081** R = OCH<sub>3</sub>



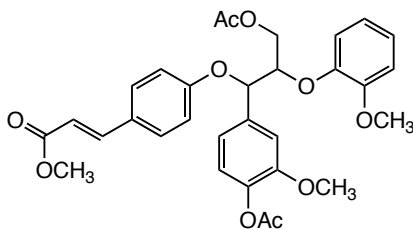
**2076t, 2078e**  
**2075t\*, 2077e\***  
**2068e**, (diacetate, phenolic)



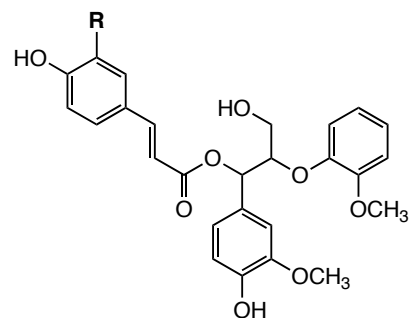
**2071t, 2072e, 2073t\*, 2074e\***  
**2079t, 2080e** (diacetate, phenolics)



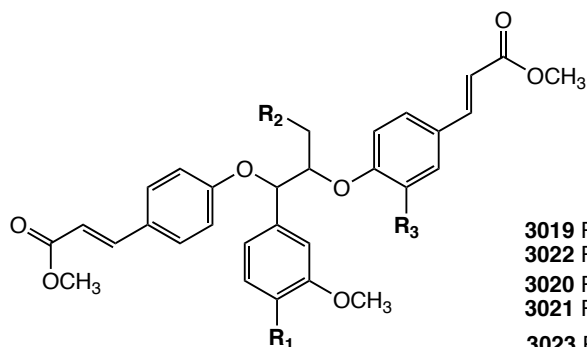
**1023t, 1024e** R = H  
**1025t, 1026e, 84e** R = OCH<sub>3</sub>



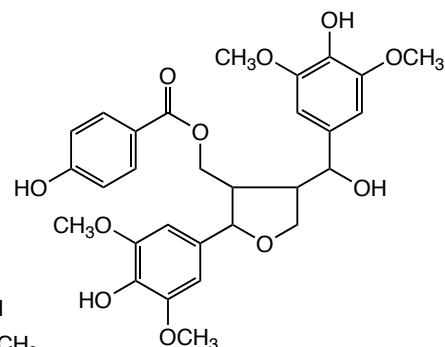
**85, 86**



**1001t, 1002e, 1005t\*, 1006e\*, 78t\*, 77e\*** R = H  
**1003t, 1004e, 1007t\*, 1008e\*** R = OCH<sub>3</sub>

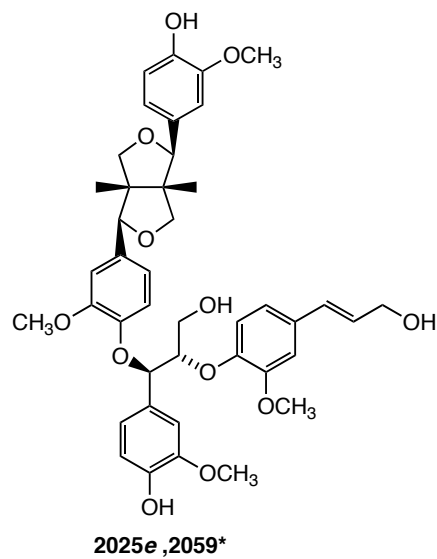
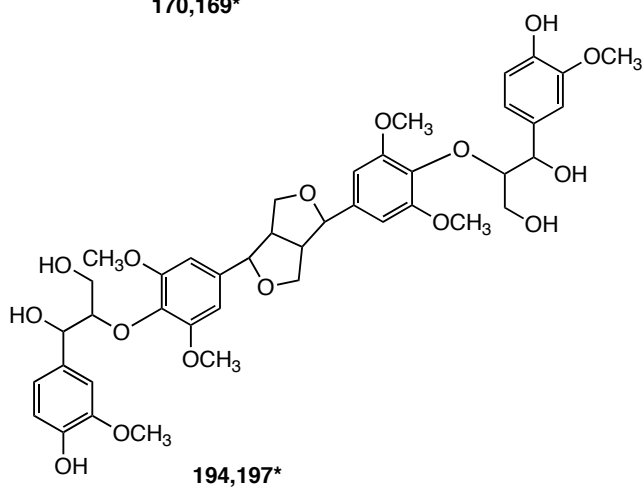
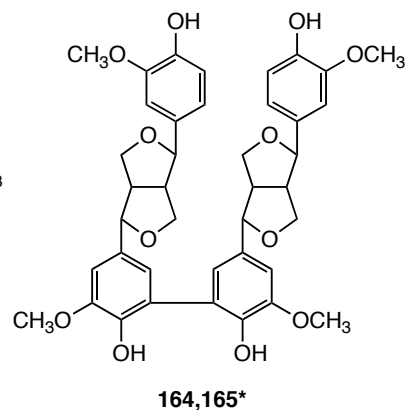
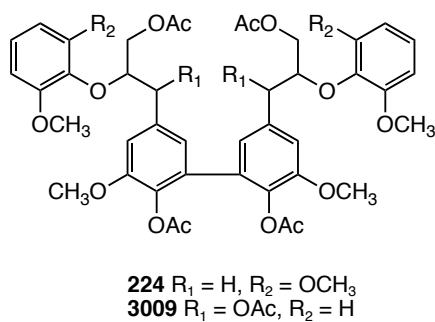
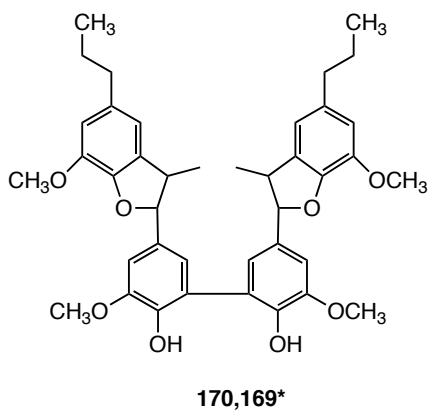
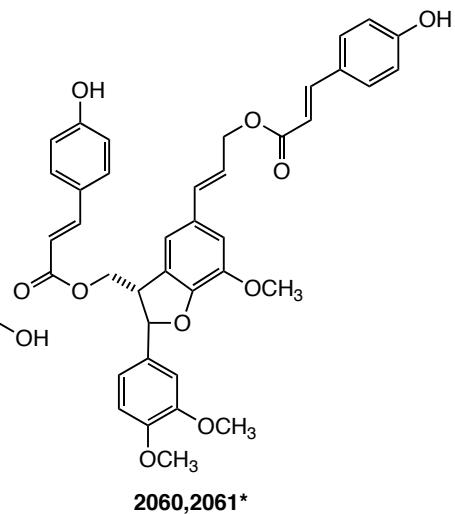
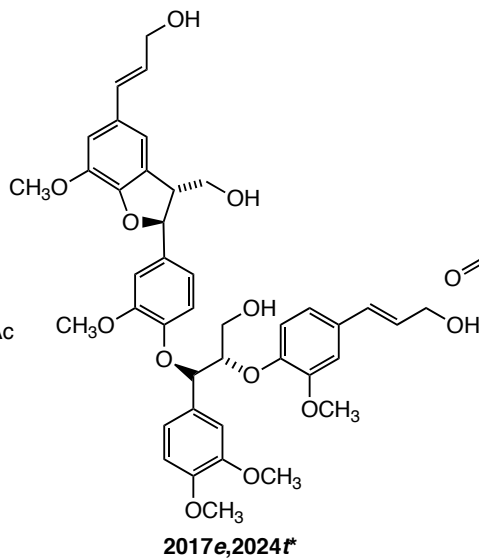
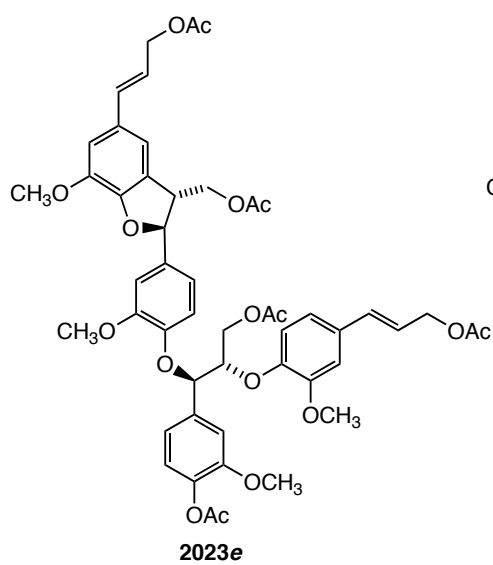


**3019** R<sub>1</sub>=R<sub>2</sub>= OH, R<sub>3</sub>= H  
**3022** R<sub>1</sub>=R<sub>2</sub>= OH, R<sub>3</sub>= OCH<sub>3</sub>  
**3020** R<sub>1</sub>= OCH<sub>3</sub>, R<sub>2</sub>= OH, R<sub>3</sub>= H  
**3021** R<sub>1</sub>= OCH<sub>3</sub>, R<sub>2</sub>= OAc, R<sub>3</sub>= H  
**3023** R<sub>1</sub>= OCH<sub>3</sub>, R<sub>2</sub>= OH, R<sub>3</sub>= OCH<sub>3</sub>  
**3024** R<sub>1</sub>= OCH<sub>3</sub>, R<sub>2</sub>= OAc, R<sub>3</sub>= OCH<sub>3</sub>



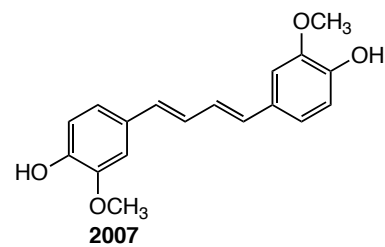
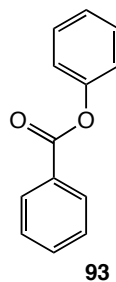
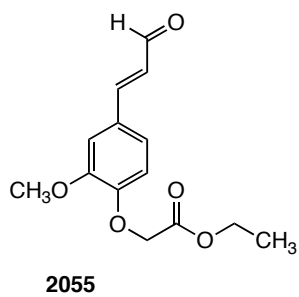
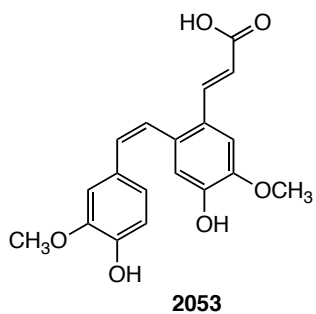
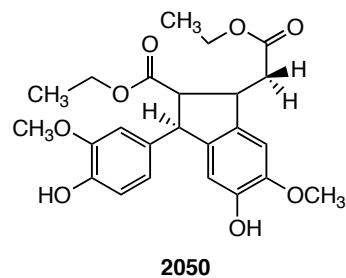
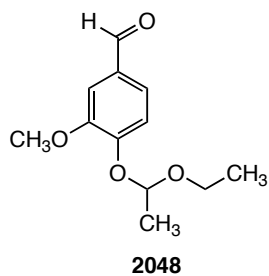
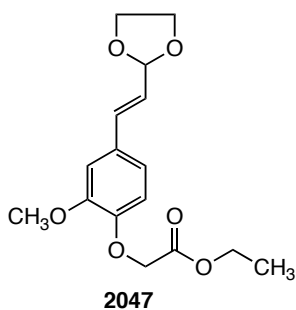
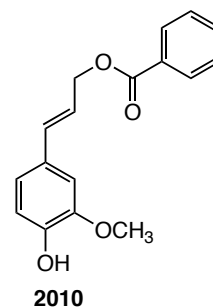
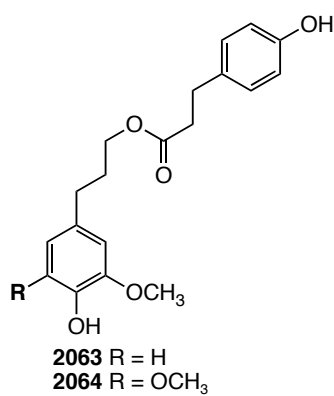
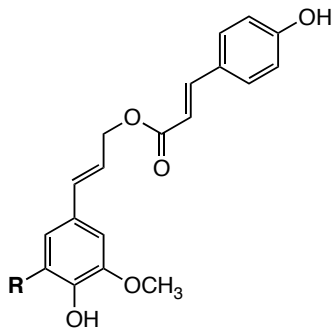
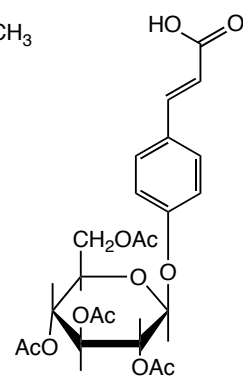
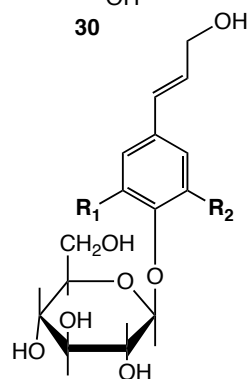
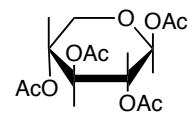
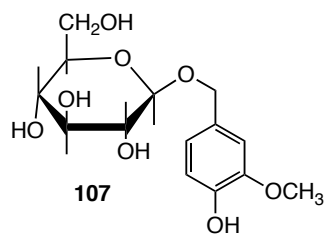
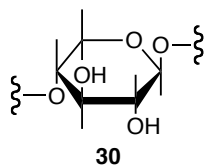
**3066**

## Tetramers

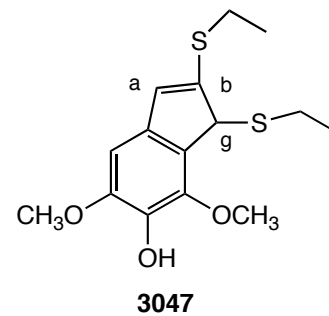
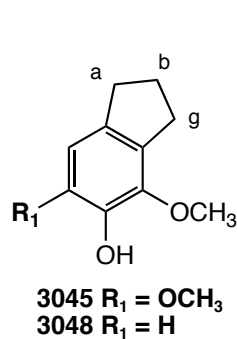
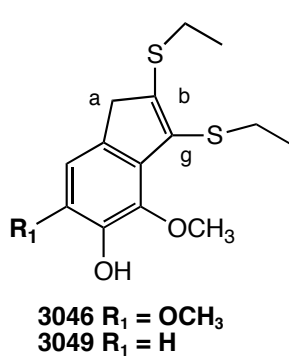
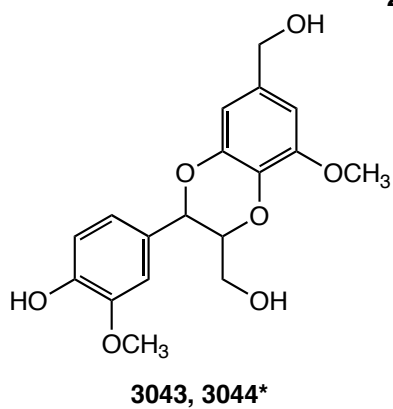
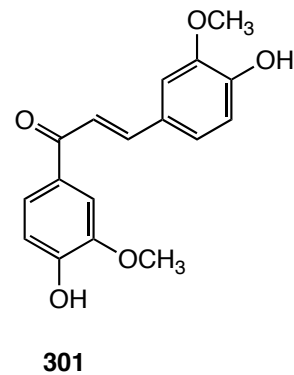
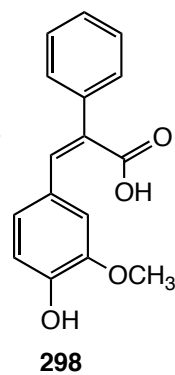
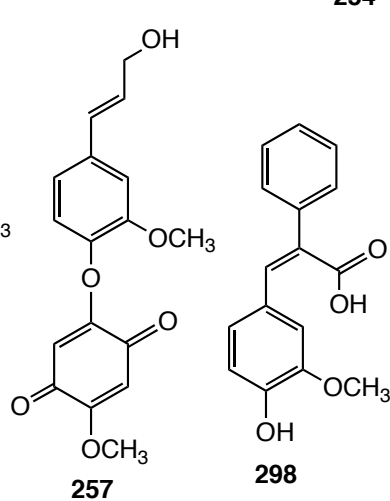
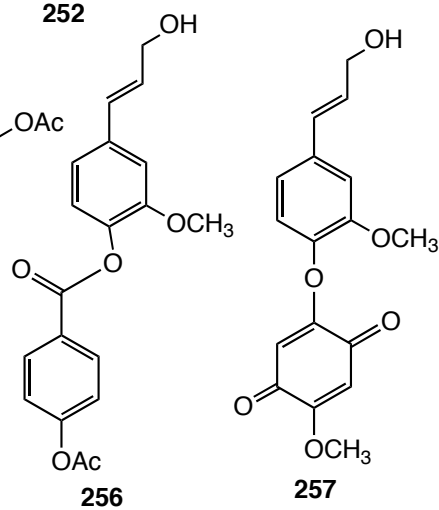
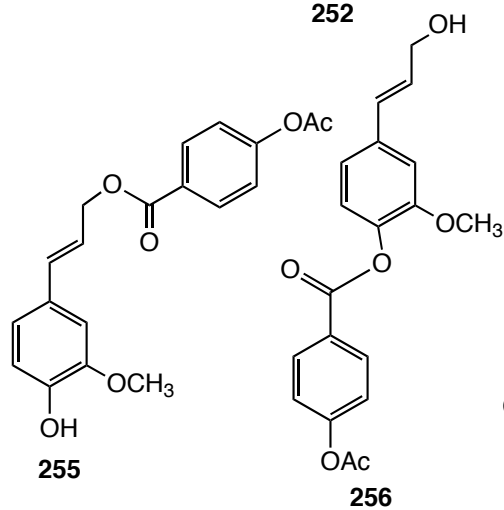
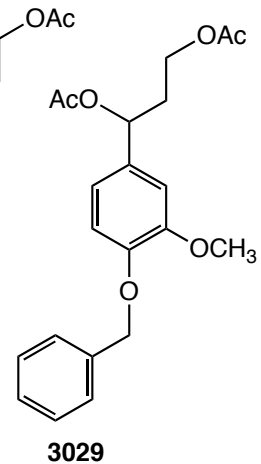
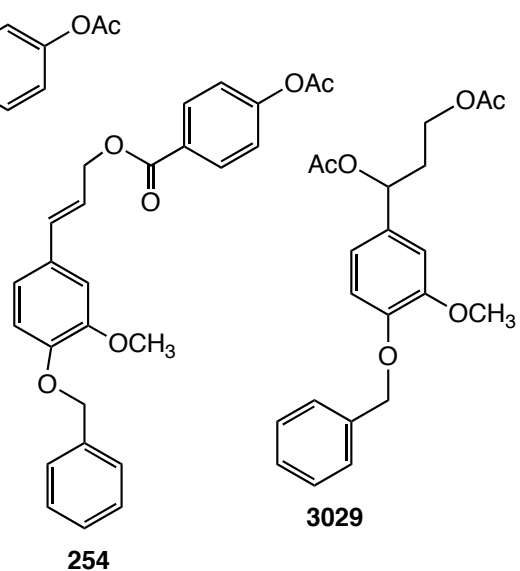
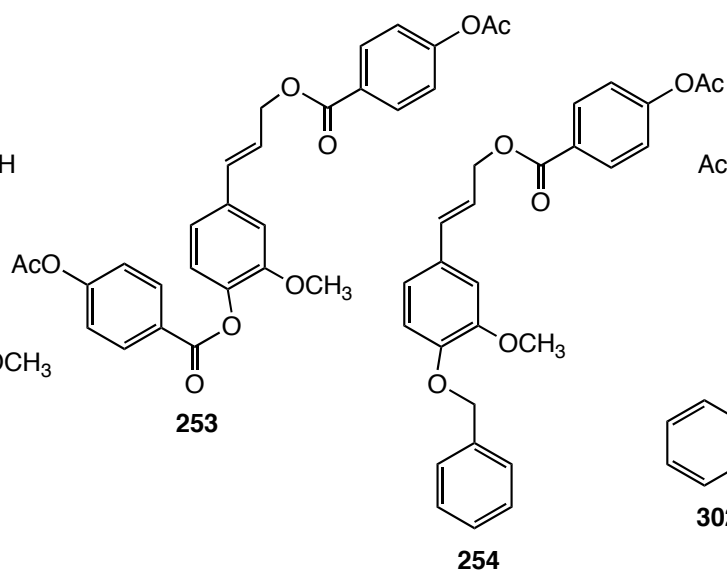
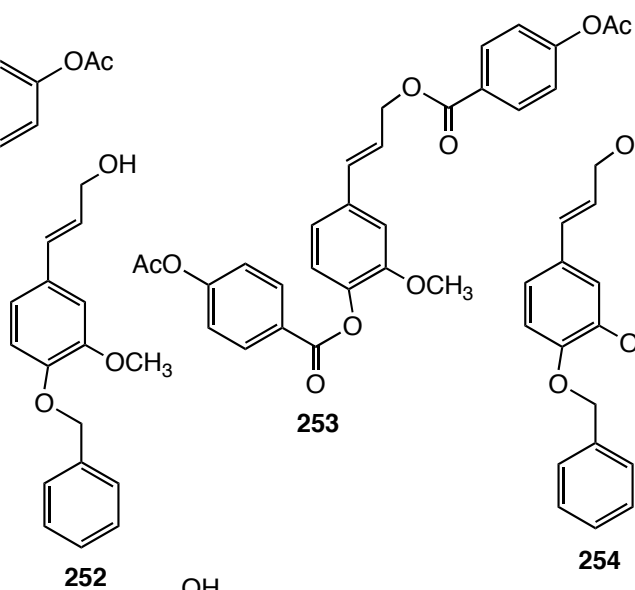
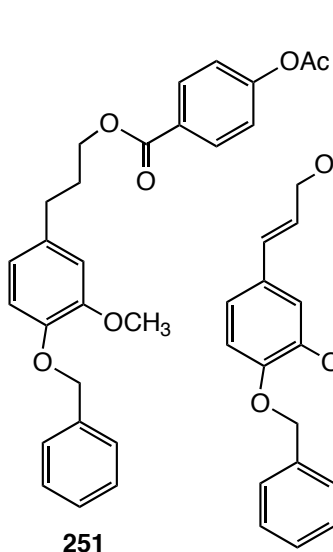




## Misc. Compounds

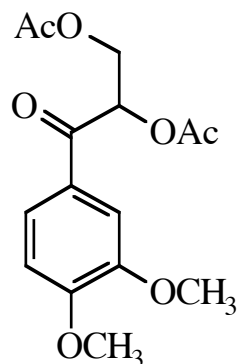


## Misc. Compounds



Compound Number 1

<sup>13</sup>C



2,3-Diacetoxypropioveratrone  
2,3-diacetoxy-3',4'-dimethoxypropiophenone

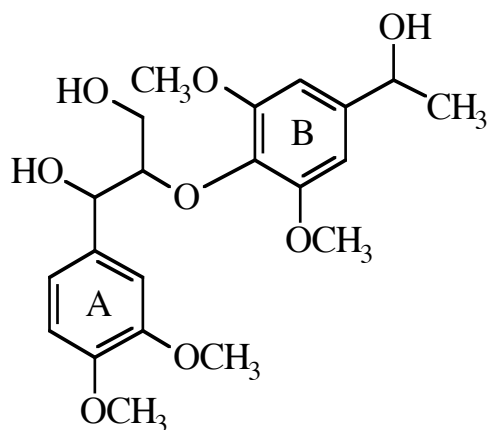
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.08		
Ac Me	2.19		
OMe	3.95		
OMe	3.95		
γ1	4.25	dd	12.1, 7.9
γ2	4.68	dd	12.1, 3.1
β	6.18	dd	7.9, 3.1
A2	7.56	d	8.4
A5	6.93	dd	2.0
A6	7.71	dd	8.4, 2.0

**Notes:**

M. Mozuch #36/46/Ac  
21 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.67	74	20.49	72	20.30	88
Ac Me	20.72	71	20.58	64	20.42	87
OMe	56.05	98	56.11	98	55.51	95
OMe	56.15	97	56.25	100	55.77	100
γ	63.22	84	63.64	96	62.60	71
β	72.99	98	74.14	96	73.28	85
2	110.32	100	111.60	91	110.35	78
5	110.64	91	111.66	92	111.03	84
6	123.33	98	123.85	98	123.02	88
1	127.41	55	128.35	38	126.67	77
3	149.31	41	150.31	30	148.72	71
4	154.16	40	155.21	30	153.72	63
Ac C=O	170.21	48	170.35	32	169.61	67
Ac C=O	170.75	36	170.88	32	170.03	56
α	191.52	48	192.03	36	191.18	66

**Compound Number 2**
<sup>13</sup>C

*threo*
**1-(3,4-Dimethoxyphenyl)-2-[4-(1-hydroxyethyl)-2,6-dimethoxyphenoxy]propane-1,3-diol**
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	1.45	d	6.4
OMe	3.85	s	
OMe	3.85	s	
OMe	3.87	s	
OMe	3.89	s	
B α	4.81	q	6.4
α	5.02	d	8.7
B2,6	6.63	s	
A2	6.9	m	
A5	6.83	d	8.7
A6	6.9	m	

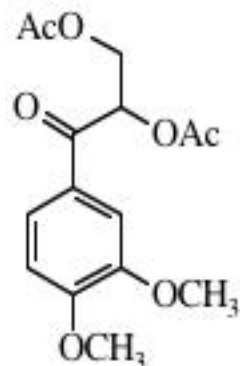
**Notes:**

 S. Ralph III-12  
 60mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.45	34	26.23	49	25.86	44
OMe	55.87	100	55.97	58	55.31	52
OMe	55.87	100	56.03	51	55.43	53
B OMe	56.08	99	56.44	100	55.80	100
B OMe	56.08	99	56.44	100	55.80	100
γ	60.48	29	61.26	38	60.13	25
B α	70.11	43	69.93	51	68.17	43
α	73.98	39	73.89	45	71.36	32
β	88.94	37	89.58	47	87.10	31
B2	102.25	67	103.30	84	102.50	55
B6	102.25	67	103.30	84	102.50	55
A2	110.28	36	111.78	38	110.60	32
A5	111.02	41	112.18	47	111.08	32
A6	119.80	34	120.22	42	118.84	34
A1	132.56	38	134.74	32	134.53	63
B1	134.08	24	135.39	18	134.53	63
B4	143.04	30	144.54	29	143.01	37
A4	148.73	29	149.58	22	147.64	31
A3	148.90	29	149.86	25	148.03	34
B3	152.84	61	153.52	48	152.20	65
B5	152.84	61	153.52	48	152.20	65

Compound Number 1

<sup>13</sup>C



2,3-Diacetoxypropioveratrone  
2,3-diacetoxy-3',4'-dimethoxypropiophenone

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.08		
Ac Me	2.19		
OMe	3.95		
OMe	3.95		
γ1	4.25	dd	12.1, 7.9
γ2	4.68	dd	12.1, 3.1
β	6.18	dd	7.9, 3.1
A2	7.56	d	8.4
A5	6.93	dd	2.0
A6	7.71	dd	8.4, 2.0

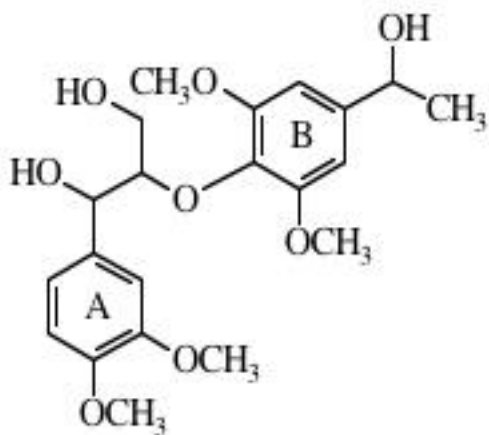
**Notes:**

M. Mozuch #36/46/Ac  
21 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.67	74	20.49	72	20.30	88
Ac Me	20.72	71	20.58	64	20.42	87
OMe	56.05	98	56.11	98	55.51	95
OMe	56.15	97	56.25	100	55.77	100
γ	63.22	84	63.64	96	62.60	71
β	72.99	98	74.14	96	73.28	85
2	110.32	100	111.60	91	110.35	78
5	110.64	91	111.66	92	111.03	84
6	123.33	98	123.85	98	123.02	88
1	127.41	55	128.35	38	126.67	77
3	149.31	41	150.31	30	148.72	71
4	154.16	40	155.21	30	153.72	63
Ac C=O	170.21	48	170.35	32	169.61	67
Ac C=O	170.75	36	170.88	32	170.03	56
α	191.52	48	192.03	36	191.18	66

Compound Number 2

<sup>13</sup>C



*threo*

1-(3,4-Dimethoxyphenyl)-2-[4-(1-hydroxyethyl)-2,6-dimethoxyphenoxy]propane-1,3-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	1.45	d	6.4
OMe	3.85	s	
OMe	3.85	s	
OMe	3.87	s	
OMe	3.89	s	
B α	4.81	q	6.4
α	5.02	d	8.7
B2,6	6.63	s	
A2	6.9	m	
A5	6.83	d	8.7
A6	6.9	m	

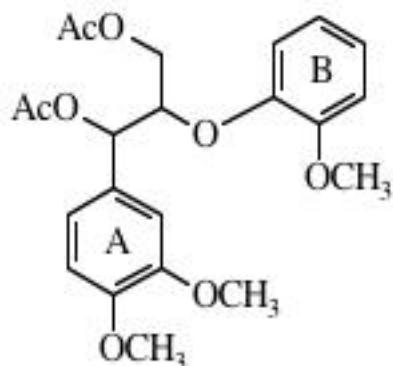
**Notes:**

S. Ralph III-12  
60mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.45	34	26.23	49	25.86	44
OMe	55.87	100	55.97	58	55.31	52
OMe	55.87	100	56.03	51	55.43	53
B OMe	56.08	99	56.44	100	55.80	100
B OMe	56.08	99	56.44	100	55.80	100
γ	60.48	29	61.26	38	60.13	25
B α	70.11	43	69.93	51	68.17	43
α	73.98	39	73.89	45	71.36	32
β	88.94	37	89.58	47	87.10	31
B2	102.25	67	103.30	84	102.50	55
B6	102.25	67	103.30	84	102.50	55
A2	110.28	36	111.78	38	110.60	32
A5	111.02	41	112.18	47	111.08	32
A6	119.80	34	120.22	42	118.84	34
A1	132.56	38	134.74	32	134.53	63
B1	134.08	24	135.39	18	134.53	63
B4	143.04	30	144.54	29	143.01	37
A4	148.73	29	149.58	22	147.64	31
A3	148.90	29	149.86	25	148.03	34
B3	152.84	61	153.52	48	152.20	65
B5	152.84	61	153.52	48	152.20	65

Compound Number 3

<sup>13</sup>C



*erythro*

Veratrylglycerol- $\beta$ -guaiacyl ether diacetate  
1,3-diacetoxy-1-(3,4-dimethoxyphenyl)-2-(2-methoxyphenoxy)  
propane

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.03	s	
Ac Me	2.07	s	
OMe	3.79	s	
OMe	3.83	s	
OMe	3.86	s	
$\gamma$ 1	4.23	dd	11.0, 4.0
$\gamma$ 2	4.43	dd	11.9, 5.9
$\alpha$	6.03	d	5.3
$\beta$	4.71	m	

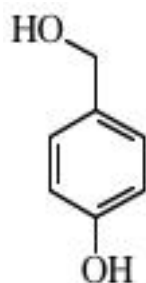
**Notes:**

L. Landucci  
51mg  
threo data in acetone  
 $\gamma$  63.8  $\alpha$  75.7  $\beta$  80.8

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.78	34	20.61	38	20.41	22
Ac Me	21.05	38	20.89	40	20.65	27
OMe	55.78	55	56.02	63	55.38	100
OMe	55.88	100	56.08	57	55.38	100
OMe	55.88	100	56.15	54	55.54	64
$\gamma$	62.82	38	63.23	44	62.10	33
$\alpha$	74.12	42	74.77	49	73.35	17
$\beta$	80.10	45	80.28	48	78.39	41
A2	110.86	51	112.24	100	110.87	20
A5	110.89	45	112.24	100	111.27	39
B2	112.55	44	113.68	57	112.80	39
B5	119.18	46	119.51	52	117.70	36
A6	120.08	44	120.79	54	119.63	38
B6	120.93	48	121.56	57	120.62	62
B1	123.41	46	123.82	64	122.70	41
A1	128.98	30	130.15	31	128.71	58
B4	147.32	24	148.36	20	146.74	50
A4	148.84	26	150.10	23	148.43	52
A3	149.09	25	150.29	19	148.65	47
B3	151.04	22	151.93	20	150.27	56
Ac C=O	169.67	24	169.85	23	169.18	45
Ac C=O	170.75	21	170.71	20	170.00	45

Compound Number 4

<sup>13</sup>C



p-Hydroxybenzyl alcohol  
4-hydroxybenzyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			64.54	34	62.68	43
3			115.69	99	114.66	100
5			115.69	99	114.66	100
2			129.05	100	127.92	100
6			129.05	100	127.92	100
1			133.96	13	132.61	31
4			157.23	18	156.03	35

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
α	4.62	s	
3,5	6.82	m	
2,6	7.22	m	

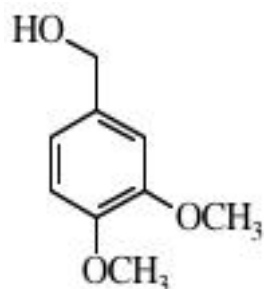
**Notes:**

J. Ralph: JR A91.11  
50mg  
Not very soluble in CDCL3



Compound Number 5

<sup>13</sup>C



3,4-Dimethoxybenzyl alcohol  
3,4-dimethoxybenzyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.78	100	55.93	100	55.27	100
OMe	55.90	84	56.11	97	55.47	94
α	65.04	79	64.58	70	62.79	88
2	110.45	86	111.69	82	110.51	74
5	111.04	96	112.54	88	111.48	73
6	119.33	95	119.62	78	118.50	81
1	133.66	38	135.95	21	135.03	58
4	148.43	25	149.32	16	147.60	36
3	149.00	27	150.19	18	148.54	41

<sup>1</sup>H (chloroform)

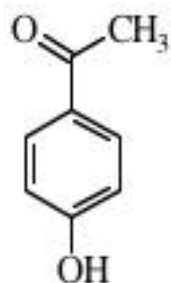
Atom	H Shifts	Mult	J
OMe	3.85	s	
OMe	3.85	s	
α	4.56	s	
2	6.82	m	
5	6.86	m	
6	6.86	m	

**Notes:**

J. Ralph: JR A91.14  
50mg

Compound Number 6

<sup>13</sup>C



p-Hydroxyacetophenone  
4-hydroxyacetophenone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.28	51	26.25	39	26.16	39
3	115.66	100	115.89	98	115.11	100
5	115.66	100	115.89	98	115.11	100
1	129.16	17	130.38	11	128.56	23
2	131.35	97	131.48	100	130.64	91
6	131.35	97	131.48	100	130.64	91
4	161.90	19	162.54	20	161.98	35
α	199.32	12	196.40	93	195.89	21

<sup>1</sup>H (chloroform)

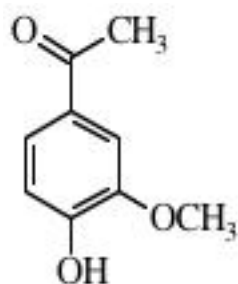
Atom	H Shifts	Mult	J
β	2.60	s	
3,5	7.92	m	8.8
2,6	7.00	m	8.8

**Notes:**

J.Ralph: JR A95.11  
50mg

Compound Number 7

<sup>13</sup>C



Acetovanillone  
4-hydroxy-3-methoxyacetophenone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.16	82	26.22	74	26.14	77
OMe	56.01	81	56.17	91	55.52	92
2	109.89	62	111.40	65	111.04	76
5	113.97	85	115.26	85	114.85	100
6	124.06	100	124.22	100	123.34	98
1	130.02	20	130.65	22	128.84	59
3	146.77	29	148.16	23	147.45	61
4	150.66	34	152.12	28	151.65	82
α	197.14	23	196.30	19	195.98	57

<sup>1</sup>H (chloroform)

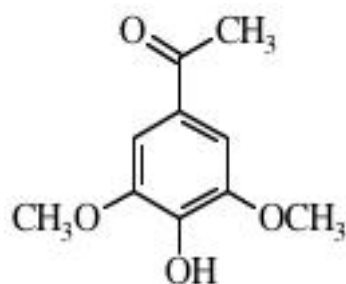
Atom	H Shifts	Mult	J
β	2.56	s	
OMe	3.91	s	
2	7.53	m	
5	6.95	d	8.7
6	7.53	m	

**Notes:**

J. Ralph: JR A95.12  
50mg

Compound Number 8

<sup>13</sup>C



Acetosyringone  
3,5-dimethoxy-4-hydroxyacetophenone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.21	44	26.30	41	26.22	45
OMe	56.45	100	56.63	100	56.02	100
OMe	56.45	100	56.63	100	56.02	100
2	105.81	90	106.97	84	106.13	84
6	105.81	90	106.97	84	106.13	84
1	128.21	22	129.13	16	127.33	29
4	139.89	21	141.75	16	140.86	29
3	146.79	41	148.29	34	147.44	65
5	146.79	41	148.29	34	147.44	65
α	196.64	16	196.31	14	196.06	30

<sup>1</sup>H (chloroform)

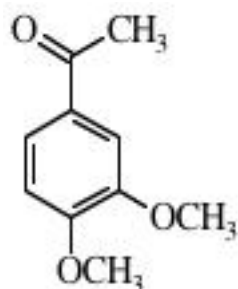
Atom	H Shifts	Mult	J
β	2.57	s	
OMe	3.94	s	
OMe	3.94	s	
2,6	7.24	s	

**Notes:**

J. Ralph: JR A95.13  
46mg

Compound Number 9

<sup>13</sup>C



Acetoveratrone  
3,4-dimethoxyacetophenone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.17	63	26.25	72	26.23	78
OMe	55.95	92	55.96	91	55.43	100
OMe	56.04	100	56.10	100	55.68	90
2	109.99	86	111.17	56	110.17	91
5	110.09	70	111.30	77	110.74	87
6	123.27	95	123.73	94	123.04	98
1	130.48	30	131.24	17	129.88	55
3	148.99	26	150.00	17	148.55	41
4	153.30	27	154.38	17	153.06	43
α	196.70	23	196.34	17	196.22	33

<sup>1</sup>H (chloroform)

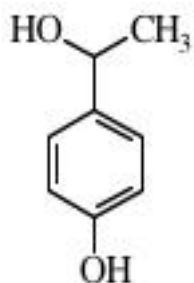
Atom	H Shifts	Mult	J
β	2.56	s	
OMe	3.93	s	
OMe	3.94	s	
2	7.52	d	2.0
5	6.90	d	8.4
6	7.57	dd	8.4, 2.0

**Notes:**

J. Ralph: JR A95.14  
55mg

Compound Number 10

<sup>13</sup>C



1-(4-Hydroxyphenyl)ethanol  
1-(4-hydroxyphenyl)ethanol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			26.10	54	25.83	91
α			69.61	28	67.70	101
3	115.28	100	115.55	89	114.54	180
5	115.28	100	115.55	89	114.54	180
2	126.91	95	127.31	100	126.31	180
6	126.91	95	127.31	100	126.31	180
1			138.90	12	137.56	61
4			156.98	15	155.86	75

<sup>1</sup>H (chloroform)

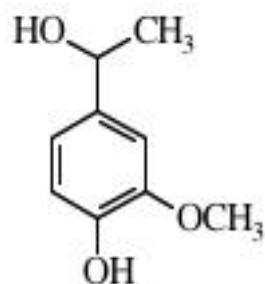
Atom	H Shifts	Mult	J
β	1.48	d	6.5
α	4.85	q	6.5
3,5	6.81	m	8.6
2,6	7.25	m	8.6

**Notes:**

J. Ralph: JR A97.11  
34mg Almost insoluble in CDCl<sub>3</sub>

Compound Number 11

<sup>13</sup>C



Apocynol

1-(4-hydroxy-3-methoxyphenyl)ethanol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
β Me	1.46	d	
OMe	3.87	s	
α	4.81	q	6.5
5	6.81	m	
2	6.91	m	
6	6.84	m	

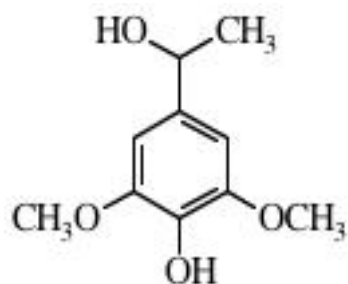
**Notes:**

J. Ralph: JR A97.12

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	25.07	95	26.22	87	25.88	78
OMe	55.88	99	56.09	87	55.42	98
α	70.30	89	69.81	78	67.89	100
2	108.05	80	109.76	76	109.54	71
5	114.20	94	115.21	87	114.80	82
6	118.31	100	118.65	100	117.47	77
1	137.91	40	139.67	31	138.35	64
4	144.96	32	146.13	31	144.98	69
3	146.62	33	147.97	22	147.11	52

Compound Number 12

<sup>13</sup>C



1-(4-Hydroxy-3,5-dimethoxyphenyl)ethanol

1-(4-hydroxy-3,5-dimethoxyphenyl)ethanol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	25.22	52	26.28	45	25.94	56
OMe	56.25	100	56.49	100	55.79	100
OMe	56.25	100	56.49	100	55.79	100
α	70.50	51	70.07	43	68.16	62
2	102.15	94	103.61	87	102.65	85
6	102.15	94	103.61	87	102.65	85
1	133.90	22	135.46	14	133.93	35
4	137.22	32	138.70	20	137.53	39
3	147.01	43	148.36	24	147.56	75
5	147.01	43	148.36	24	147.56	75

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
β	1.46	d	6.4
OMe	3.85	s	
OMe	3.85	s	
α	4.79	q	6.4
2,6	6.58		

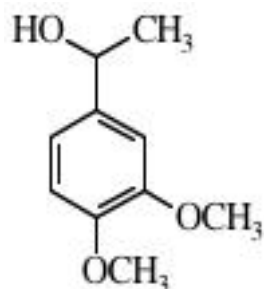
**Notes:**

J. Ralph: JR A97.13



Compound Number 13

<sup>13</sup>C



1-(3,4-Dimethoxyphenyl)ethanol

1-(3,4-dimethoxyphenyl)ethanol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
β	1.46	d	6.4
OMe	3.85	s	
OMe	3.87	s	
α	4.81	q	6.4
5	6.82		
6	6.85		
2	6.92	d	1.7

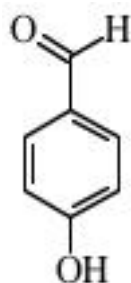
**Notes:**

J. Ralph: JR A97.14

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	25.12	99	26.25	92	25.92	88
OMe	55.80	94	55.99	100	55.29	99
OMe	55.91	87	56.15	89	55.48	94
α	70.08	94	69.72	86	67.82	100
2	108.68	67	110.38	59	109.24	72
5	110.98	78	112.56	62	111.43	82
6	117.50	100	118.18	95	117.10	85
1	138.65	40	140.97	19	139.99	62
4	148.26	27	149.17	14	147.40	39
3	148.99	28	150.14	11	148.43	45

Compound Number 14

<sup>13</sup>C



p-Hydroxybenzaldehyde  
4-hydroxybenzaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
3	116.01	100	116.62	100	115.80	100
5	116.01	100	116.62	100	115.80	100
1	129.81	14	130.34	11	128.40	25
2	132.54	97	132.77	85	132.04	83
6	132.54	97	132.77	85	132.04	83
4	161.65	19	163.80	15	163.28	31
α	191.28	39	191.02	35	190.80	42

<sup>1</sup>H (chloroform)

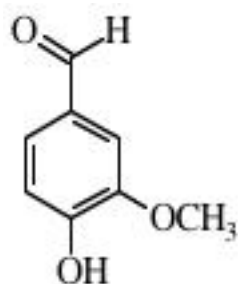
Atom	H Shifts	Mult	J
3,5	7.00	m	8.6
2,6	7.82	m	8.6
α	9.85	s	
<u>acetone</u>			
3,5	7.00		
2,6	7.79		
α	9.84		
OH	9.40		

**Notes:**

J. Ralph: JR A87.11  
52mg

Compound Number 15

<sup>13</sup>C



Vanillin

4-hydroxy-3-methoxybenzaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.07	100	56.24	100	55.52	100
2	109.02	50	110.82	72	110.63	69
5	114.59	67	115.87	97	115.36	100
6	127.57	89	126.98	83	126.04	81
1	129.70	22	130.62	29	128.70	64
3	147.34	20	148.86	23	148.12	53
4	151.99	20	153.45	32	153.00	61
α	191.16	47	191.07	85	190.89	82

<sup>1</sup>H (chloroform)

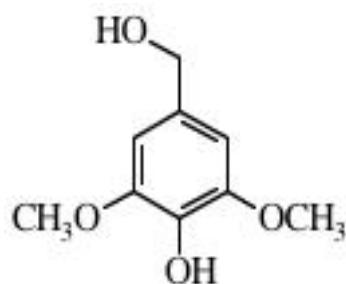
Atom	H Shifts	Mult	J
OMe	3.92	s	
2	7.41	m	8.6
5	7.04	d	
6	7.44	m	
α	9.81	s	
<u>acetone</u>			
OMe	3.91	s	
2	7.46	d	1.8 8.6
5	7.00	d	
6	7.43	m	
α	9.81	s	
OH	8.30	bs	

**Notes:**

J. Ralph: JR A87.12  
66mg

Compound Number 16

<sup>13</sup>C



Syringyl alcohol

4-hydroxy-3,5-dimethoxybenzyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.29	100	56.54	100	55.77	100
OMe	56.29	100	56.54	100	55.77	100
α	65.68	39	64.98	26	63.09	40
2	103.88	82	105.08	75	103.91	72
6	103.88	82	105.08	75	103.91	72
1	132.06	21	133.80	12	132.48	26
4	134.19	15	135.75	9	134.03	26
3	147.10	35	148.54	23	147.67	52
5	147.10	35	148.54	23	147.67	52

<sup>1</sup>H (chloroform)

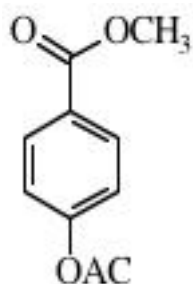
Atom	H Shifts	Mult	J
OMe	3.88		
OMe	3.88		
α	4.60	s	
2,6	6.60	s	
<u>acetone</u>			
OMe	3.79	s	
OMe	3.79	s	
OH-α	4.07	bt	
α	4.50	bd	
2,6	6.63	s	
ph-OH	7.08	bs	

Notes:

J. Ralph: JR A91.13  
20mg Almost insoluble in acetone.

Compound Number 17

<sup>13</sup>C



Methyl 4-acetoxybenzoate  
4-acetoxybenzoic acid methyl ester

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.12	29	20.97	37	20.82	50
OMe	52.16	38	52.37	44	52.13	50
3	121.60	94	122.82	100	122.21	92
5	121.60	94	122.82	100	122.21	92
1	127.70	14	128.46	13	127.08	21
2	131.14	100	131.60	100	130.70	100
6	131.14	100	131.60	100	130.70	100
4	154.30	14	155.56	14	154.20	25
α	166.25	10	166.47	11	165.49	17
Ac C=O	168.79	11	169.23	11	168.72	20

<sup>1</sup>H (chloroform)

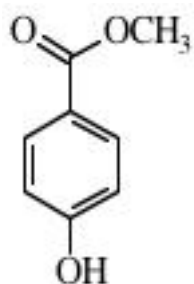
Atom	H Shifts	Mult	J
Ac Me	2.30	s	
OMe	3.90	s	
3,5	7.16	m	8.9
2,6	8.06	m	8.9

**Notes:**

L. Landucci  
53mg

Compound Number 18

<sup>13</sup>C



Methyl 4-hydroxybenzoate  
4-hydroxybenzoic acid methyl ester

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	52.12	43	51.86	29	51.55	32
3	115.31	97	116.00	100	115.31	100
5	115.31	97	116.00	100	115.31	100
1	122.22	15	122.33	12	120.29	15
2	131.97	100	132.37	83	131.40	100
6	131.97	100	132.37	83	131.40	100
4	160.36	23	162.58	25	161.97	24
α	167.53	10	167.07	5	166.05	14

<sup>1</sup>H (chloroform)

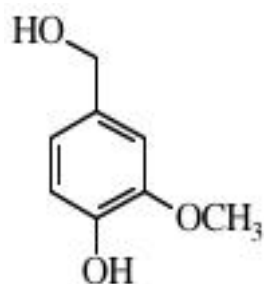
Atom	H Shifts	Mult	J
OMe	3.90	s	
3,5	6.89	m	8.9
2,6	7.95	m	8.9

**Notes:**

Aldrich  
62mg

Compound Number 19

<sup>13</sup>C



4-Hydroxy-3-methoxybenzyl alcohol  
4-hydroxy-3-methoxybenzyl alcohol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.89	s	
α	4.60	s	

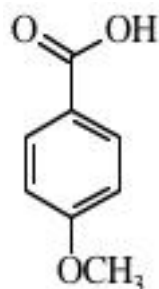
**Notes:**

Aldrich  
54mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.90	100	56.11	100	55.38	100
α	65.44	79	64.76	76	62.93	95
2	109.94	90	111.37	78	110.91	72
5	114.27	92	115.37	87	114.93	83
6	120.22	100	120.29	95	119.00	93
1	132.93	31	134.62	33	133.37	62
4	145.26	33	146.37	31	145.17	64
3	146.65	23	148.10	25	147.24	49

Compound Number 20

<sup>13</sup>C



p-Anisic acid  
4-methoxybenzoic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.48	45	55.86	46	55.36	51
3	113.75	97	114.50	88	113.74	99
5	113.75	97	114.50	88	113.74	99
1	121.67	11	123.67	12	122.97	22
2	132.35	100	132.48	100	131.32	100
6	132.35	100	132.48	100	131.32	100
4	164.04	18	164.39	13	162.80	26
α	171.45	16	167.54	13	167.00	29

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.89	s	
3,5	6.96	m	9.0
2,6	8.07	m	9.0

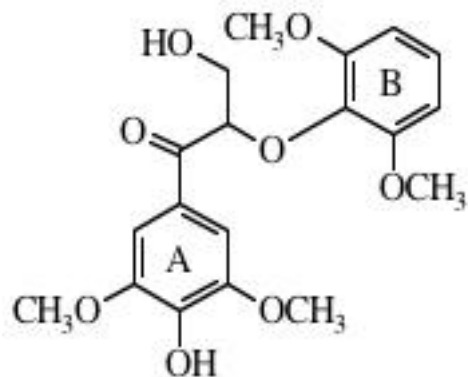
**Notes:**

Aldrich  
52mg



Compound Number 21

<sup>13</sup>C



□ 2-(2,6-Dimethoxyphenoxy)-3-hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)propan-1-one

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.74	s	
OMe	3.92	s	
β	5.10	dd	6.4, 2.7
A2,6	7.42	s	
B2,6	6.59	d	8.4
B1	7.03	t	8.4

**Notes:**

Has acetyl piperidine in sample.

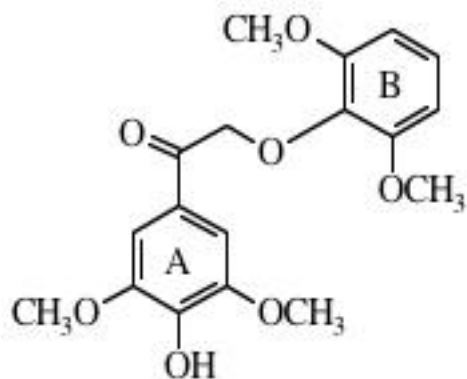
J. Ralph JRA127.P1

27mg γ - protons coupled to OH's, shifts not determined.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.97	100	56.35	92	55.73	100
OMe	55.97	100	56.35	92	55.73	100
OMe	56.49	86	56.71	100	55.97	98
OMe	56.49	86	56.71	100	55.97	98
γ	63.48	39	63.66	47	61.95	34
β	87.16	48	86.21	51	82.80	31
B2	105.27	88	106.32	91	105.46	81
B6	105.27	88	106.32	91	105.46	81
A2	106.35	82	107.69	63	106.56	63
A6	106.35	82	107.69	63	106.56	63
B1	124.34	49	124.78	46	123.51	37
A1	126.98	30	127.86	23	126.22	35
B4	136.46	18	137.37	10	135.80	27
A4	140.05	29	141.99	14	140.92	37
A3	146.79	58	148.31	37	147.30	68
A5	146.79	58	148.31	37	147.30	68
B3	152.73	49	153.86	38	152.43	73
B5	152.73	49	153.86	38	152.43	73
α	194.84	28	195.15	20	194.71	35

Compound Number 22

<sup>13</sup>C



□ 2-(2,6-Dimethoxyphenoxy)-1-(4-hydroxy-3,5-dimethoxyphenyl)ethanone

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.82	s	
OMe	3.94	s	
β	5.11	s	
A2,6	7.43	s	
B2,6	6.59	d	8.4
B1	7.03	t	8.4

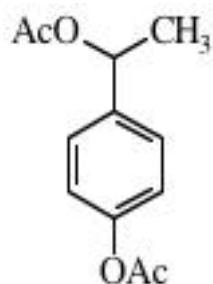
**Notes:**

J. Ralph JRA127.P2  
23mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	56.09	100	56.42	100	55.82	100
B OMe	56.09	100	56.42	100	55.82	100
A OMe	56.48	98	56.72	94	56.03	98
A OMe	56.48	98	56.72	94	56.03	98
β	75.45	41	75.90	47	74.39	30
B2	105.33	89	106.47	98	105.52	80
B6	105.33	89	106.47	98	105.52	80
A2	106.07	84	107.45	97	105.97	63
A6	106.07	84	107.45	97	105.97	63
B1	124.20	48	124.87	53	123.84	35
A1	126.68	25	127.09	19	124.92	34
B4	136.48	11	137.55	11	135.85	21
A4	139.89	22	142.15	13	141.14	33
A3	146.74	48	148.39	27	147.50	71
A5	146.74	48	148.39	27	147.50	71
B3	153.30	42	154.43	32	152.85	61
B5	153.30	42	154.43	32	152.85	61
α	193.61	24	193.69	23	192.75	29

Compound Number 23

<sup>13</sup>C



Hydroxyphenylethanol diacetate  
1-acetoxy-1-(4-acetoxyphenyl)ethane

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.10	33	20.91	39	20.74	45
Ac Me	21.30	28	21.08	31	20.89	40
β	22.14	41	22.48	55	21.95	46
α	71.68	42	72.03	51	71.01	53
3	121.57	100	122.53	99	121.70	100
5	121.57	100	122.53	99	121.70	100
2	127.31	100	127.84	100	126.99	96
6	127.31	100	127.84	100	126.99	96
1	139.18	18	140.39	18	139.13	31
4	150.16	15	151.29	14	149.79	25
A4 Ac C=O	169.41	14	169.58	14	169.11	16
α Ac C=O	170.21	13	170.16	11	169.54	15

<sup>1</sup>H (acetone)

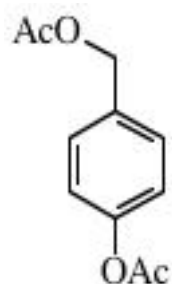
Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.24	s	
β	1.48	d	6.6
α	5.84	q	6.6
3,5	7.09	m	8.6
2,6	7.40	m	8.6

**Notes:**

J. Ralph JRA93.5  
22mg

Compound Number 24

<sup>13</sup>C



p-Hydroxybenzyl alcohol diacetate  
4-acetoxybenzyl acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.95	24	20.76	25	20.62	32
Ac Me	21.08	31	20.92	35	20.75	40
α	65.58	38	65.80	40	64.83	37
3	121.70	100	122.59	100	121.78	94
5	121.70	100	122.59	100	121.78	94
2	129.50	97	130.02	93	129.25	100
6	129.50	97	130.02	93	129.25	100
1	133.56	22	134.84	18	133.67	29
4	150.53	16	151.60	12	150.15	21
A4 Ac C=O	169.31	15	169.53	7	169.08	18
α Ac C=O	170.72	11	170.77	6	170.14	12

<sup>1</sup>H (chloroform)

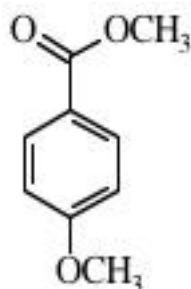
Atom	H Shifts	Mult	J
Ac Me	2.08	s	
Ac Me	2.29	s	
α	5.08	s	
3,5	7.08	m	8.6
2,6	7.37	m	

**Notes:**

S. Ralph SR111-20  
52mg

Compound Number 25

<sup>13</sup>C



Methyl-p-anisate  
methyl 4-methoxybenzoate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
4 OMe	51.82	31	51.94	32	51.73	48
α OMe	55.39	41	55.83	50	55.45	44
3	113.59	100	114.51	98	113.95	100
5	113.59	100	114.51	98	113.95	100
1	122.60	10	123.36	9	121.88	16
2	131.57	81	132.12	100	131.20	93
6	131.57	81	132.12	100	131.20	93
4	163.33	13	164.35	11	163.12	18
α	166.82	8	166.84	6	165.88	14

<sup>1</sup>H (chloroform)

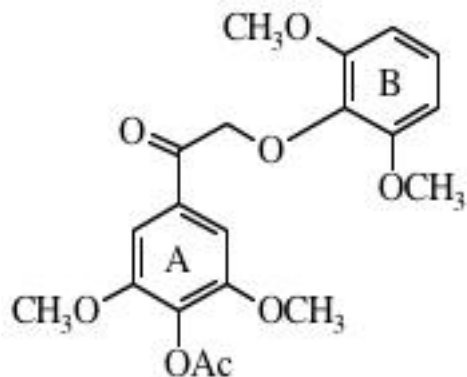
Atom	H Shifts	Mult	J
4 OMe	3.83	s	
α OMe	3.86	s	
3,5	6.89	m	8.8
2,6	7.99	m	8.8

**Notes:**

S. Ralph SRIII-21  
50mg

Compound Number 26

<sup>13</sup>C



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(2,6-dimethoxyphenoxy)ethanone

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
A $\chi$ Me	2.34	s	
B OMe	3.80	s	
A OMe	3.87	s	
$\beta$	5.13	s	
A2,6	7.40	s	
B2,6	6.58	d	8.4
B1	7.02	t	8.4

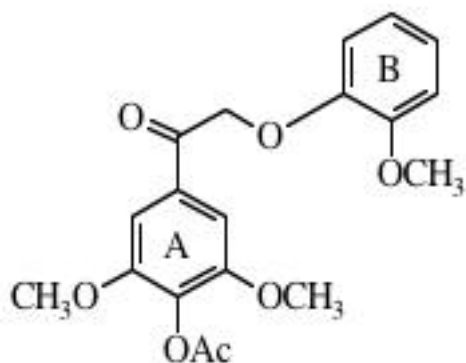
**Notes:**

J. Ralph GV 49.1  
25mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	37	20.23	35	20.02	40
B OMe	56.08	93	56.44	100	55.82	100
B OMe	56.08	93	56.44	100	55.82	100
A OMe	56.37	100	56.71	98	56.18	100
A OMe	56.37	100	56.71	98	56.18	100
$\beta$	75.54	39	75.99	39	74.59	32
B2	105.35	90	106.34	94	104.87	80
B6	105.35	90	106.34	94	104.87	80
A2	105.54	90	106.50	96	105.53	94
A6	105.54	90	106.50	96	105.53	94
B1	124.26	49	124.95	50	123.88	45
A1	133.12	30	133.94	7	132.10	24
A4	133.12	30	134.21	19	132.64	38
B4	136.45	14	137.50	11	135.81	28
A3	152.26	52	153.30	33	151.80	72
A5	152.26	52	153.30	33	151.80	72
B3	153.27	43	154.36	31	152.74	69
B5	153.27	43	154.36	31	152.74	69
Ac C=O	168.11	23	168.15	16	167.60	32
$\alpha$	194.03	28	194.58	24	193.75	40

Compound Number 27

<sup>13</sup>C



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(2-methoxyphenoxy)ethanone

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.35	s	
B OMe	3.87	s	
A OMe	3.87	s	
β	5.26	s	
A2,6	7.34	s	

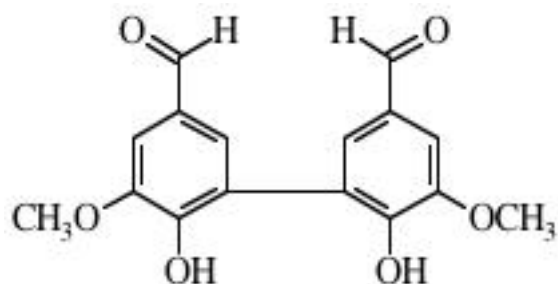
**Notes:**

J. Ralph GV 35.1  
25mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	41	20.23	36	20.03	47
B OMe	55.85	47	56.25	48	55.51	60
A OMe	56.34	100	56.73	92	56.24	100
A OMe	56.34	100	56.73	92	56.24	100
β	72.53	35	72.65	40	70.85	32
A2	105.25	84	105.90	100	104.78	84
A6	105.25	84	105.90	100	104.78	84
B2	112.26	48	113.68	56	112.48	44
B5	114.95	49	115.73	48	113.80	39
B6	120.89	51	121.56	56	120.45	48
B1	122.64	49	122.80	56	121.37	43
A1	133.41	12	134.14	8	132.32	17
A4	132.58	27	133.81	20	132.38	39
B3	147.37	16	148.96	16	147.33	34
B4	149.79	17	150.90	16	148.96	29
A3	152.41	49	153.45	36	151.90	74
A5	152.41	49	153.45	36	151.90	74
Ac C=O	168.06	20	168.14	20	167.59	35
α	193.77	25	194.35	20	193.70	42

Compound Number 28

<sup>13</sup>C



Dehydrodivanillin

6,6'-Dihydroxy-5,5'-dimethoxybiphenyl-3,3'-dicarbaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe					55.94	100
2					109.08	53
6					124.54	47
5					127.61	75
1					128.05	53
4					148.12	59
3					152.93	16
α					190.97	72

<sup>1</sup>H (DMSO)

Atom	H Shifts	Mult	J
OMe	3.94	s	
2	7.44	s	
6	7.44	s	
α	9.81	s	
<u>Acetone</u>			
OMe	3.95	s	
2	7.42	d	J = 1.84
6	7.55	d	J = 1.84
α	9.84	s	

**Notes:**

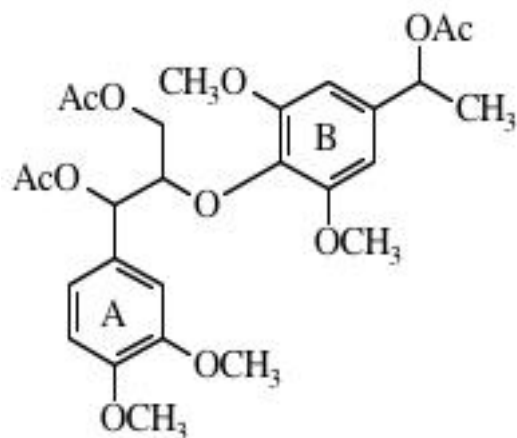
J. Ralph KM 77.1

25mg contains impurities As this compound has a plane of symmetry the shifts for the other half are identical.



**Compound Number 29**

<sup>13</sup>C



*threo*

**Veratrylglycerol-β-syringol ether triacetate**  
**1,3-diacetoxy-1-(3,4-dimethoxyphenyl)-2-(4-(1-acetoxyethyl)-**  
**2,6-dimethoxyphenoxy)propane**

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.92	s	
Ac Me	2.00	s	
Ac Me	2.07	s	
B β	1.51	d	6.6
OMe	3.86	s	
OMe	3.86	s	
B OMe	3.80	s	
γ1	-	-	
γ2	4.29	dd	11.7, 3.6
B α	5.79	q	6.6
α	6.11	d	7.1
β	4.59	m	
B2,6	6.55	s	
A2	6.94	m	
A5	6.81	d	8.8
A6	6.95	m	

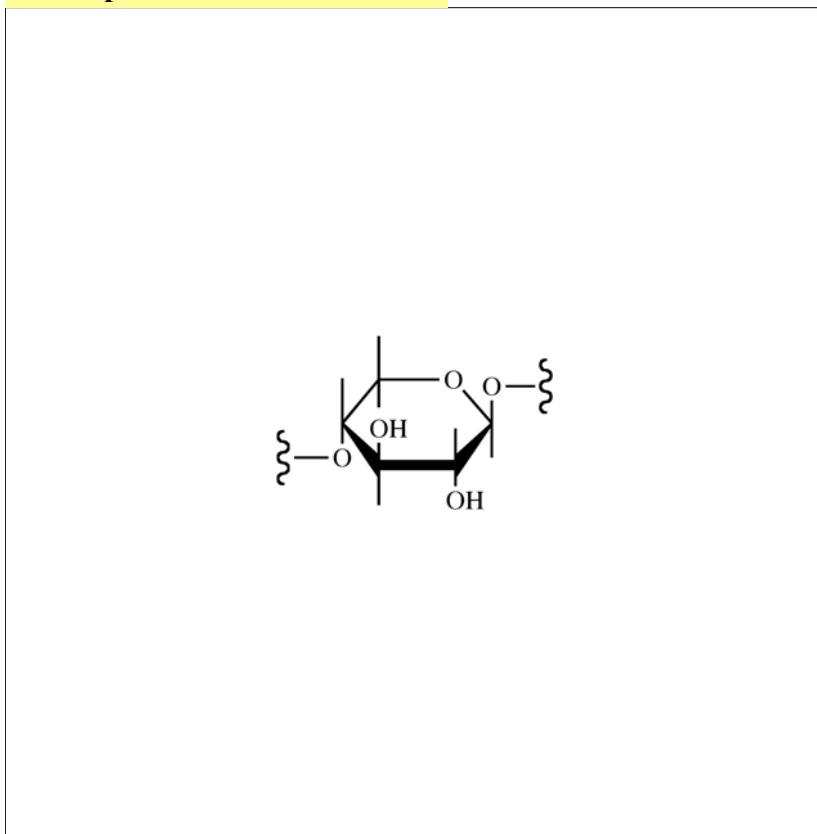
**Notes:**

S. Ralph III-14  
 65mg sample has impurities  
 γ1 proton hidden by OMe's

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.75	41	20.62	51	20.36	40
Ac Me	21.01	32	20.96	52	20.62	35
Ac Me	21.34	34	21.14	41	20.96	38
B β	22.22	34	22.58	52	22.03	27
A OMe	55.88	63	56.02	71	55.43	52
A OMe	55.97	61	56.02	71	55.50	58
B OMe	56.08	100	56.33	100	55.80	100
B OMe	56.08	100	56.33	100	55.80	100
γ	63.84	26	64.43	48	63.36	21
B α	72.38	29	72.70	49	71.70	33
α	76.01	45	76.69	51	75.65	22
β	80.76	46	81.52	52	80.30	26
B2	103.29	77	103.91	86	102.90	50
B6	103.29	77	103.91	86	102.90	50
A2	110.70	28	112.03	44	110.80	29
A5	111.02	45	112.31	51	111.51	31
A6	119.92	49	120.59	48	119.58	30
A1	129.64	40	130.68	32	129.28	39
B1	136.22	14	137.06	19	135.43	22
B4	137.37	41	138.53	25	137.28	33
A3	148.89	35	150.05	29	148.53	46
A4	149.10	33	150.25	22	148.74	38
B3	152.88	60	153.68	51	152.27	66
B5	152.88	60	153.68	51	152.27	66
Ac C=O	169.76	22	169.78	25	169.11	37
Ac C=O	170.15	24	170.14	19	169.52	34
Ac C=O	170.57	31	170.59	24	169.89	40

Compound Number 30

<sup>13</sup>C



Xylan  
Xylan, Birch

<sup>1</sup>H (DMSO)

Atom	H Shifts	Mult	J

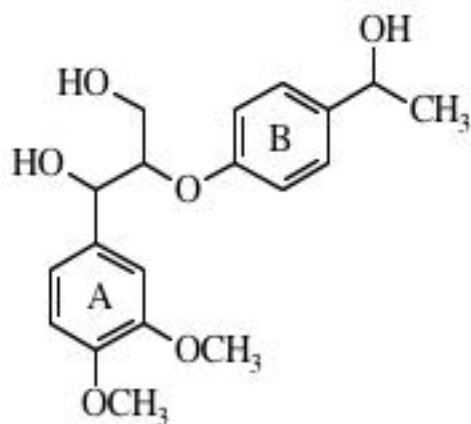
**Notes:**

IPC Xylan 79-7  
60mg 147- Quantitative run 148- Run at 363K  
shifts at 58.94 and 101.14 are for end groups

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
					58.94	35
					63.09	73
					72.56	96
					73.83	92
					75.40	92
					101.14	54
					101.65	100

Compound Number 31

<sup>13</sup>C



*threo*

1-(3,4-Dimethoxyphenyl)-2-[4-(1-hydroxyethyl) phenoxy] propane-1,3-diol

<sup>1</sup>H (DMSO)

Atom	H Shifts	Mult	J
B β	1.28	d	
OMe	3.71	s	
OMe	3.71	s	
α	5.36	d	5.1

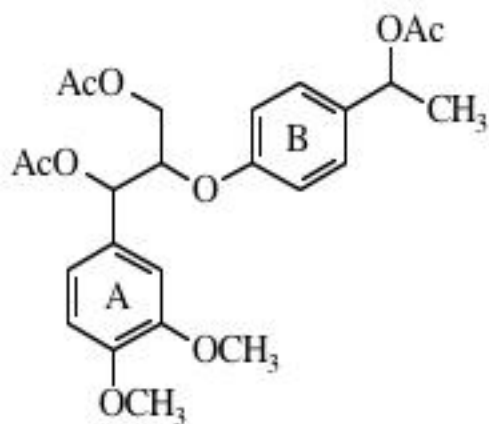
**Notes:**

S. Ralph SR111-7 28mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.03	34	26.15	33	25.81	39
OMe	55.88	88	55.99	41	55.30	44
OMe	55.88	88	56.04	41	55.40	44
γ	61.06	32	61.60	37	59.92	24
B α	69.74	34	69.48	33	67.57	44
α	73.47	27	73.18	41	70.77	41
β	82.92	34	84.04	41	82.98	34
A2	110.00	34	111.73	37	110.57	41
A5	111.00	34	112.18	33	111.17	34
B3	116.35	88	116.61	90	115.34	93
B5	116.35	88	116.61	90	115.34	93
A6	119.26	41	119.84	43	118.62	39
B2	126.84	100	127.14	100	126.15	100
B6	126.84	100	127.14	100	126.15	100
A1	132.46	27	135.41	24	134.78	44
B1	139.26	29	140.44	20	139.27	29
A3	148.81	27	149.53	12	147.69	29
A4	148.98	29	149.91	12	148.13	29
B4	157.45	29	158.87	20	157.62	49
erythro isomer						
γ	61.46		61.94		59.92	
α	73.88		73.81		71.37	
β	82.00		83.67		82.98	

Compound Number 32

<sup>13</sup>C



*threo*

1,3-diacetoxy-1-(3,4-dimethoxyphenyl)-2-[4-(1-acetoxyethyl)phenoxy] propane

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.03	s	
Ac Me	2.03	s	
Ac Me	2.05	s	
B β	1.51	d	6.6
OMe	3.87	s	
OMe	3.87	s	
γ1	4.00	dd	11.8, 6.2
γ2	4.24	dd	11.9, 4.0
B α	5.84	q	6.6
α	6.02	d	6.6
β	4.70	m	

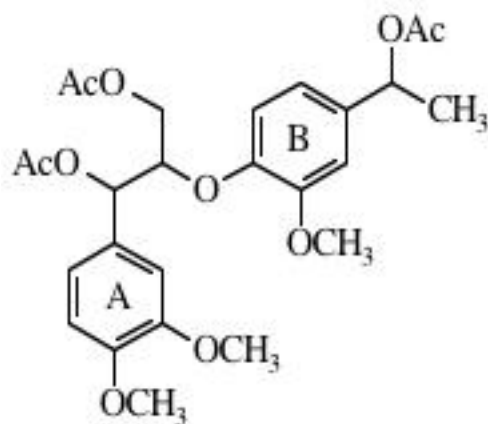
Notes:

S. Ralph SR III-17AC  
28mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.69	35	20.56	26	20.38	67
Ac Me	21.04	43	20.89	34	20.64	64
Ac Me	21.35	39	21.13	28	20.93	69
B β	22.01	38	22.35	38	21.78	51
OMe	55.91	58	56.06	54	55.41	82
OMe	55.99	49	56.17	56	55.51	72
γ	62.91	42	63.46	30	62.32	28
B α	71.86	22	72.17	38	71.14	49
α	74.34	20	75.35	34	74.25	41
β	78.43	41	79.30	34	77.67	39
A2	110.51	38	112.16	33	110.85	41
A5	111.20	42	112.54	38	111.52	38
B3	116.40	84	117.10	67	115.98	100
B5	116.40	84	117.10	67	115.98	100
A6	119.92	39	120.84	49	119.82	41
B2	127.62	100	128.22	100	127.29	95
B6	127.62	100	128.22	100	127.29	95
A1	128.58	32	130.00	25	128.62	44
B1	135.13	27	136.10	20	134.59	44
A3	149.10	27	150.34	18	148.60	46
A4	149.41	23	150.61	16	148.87	44
B4	158.17	20	159.27	20	157.76	41
Ac C=O	169.81	26	169.90	16	169.28	41
Ac C=O	170.27	18	170.11	16	169.51	46
Ac C=O	170.55	24	170.58	16	169.92	38
erythro isomer:						
γ	62.59		63.11		61.88	
α	73.95		74.41		72.92	
β	78.43		78.93		76.96	

**Compound Number 33**

<sup>13</sup>C



*threo*

**1,3-diacetoxy-1-(3,4-dimethoxyphenyl)-2-[4-(1-acetoxyethyl)-2-methoxyphenoxy] propane**

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.02	s	
Ac Me	2.06	s	
B β	1.52	d	6.5
OMe	3.85	s	
OMe	3.86	s	
OMe	3.87	s	
γ2	4.27	dd	11.9, 4.0
γ1	3.99	dd	11.9, 5.8
B α	4.82	q	6.5
α	6.07	d	6.7
β	4.63	m	

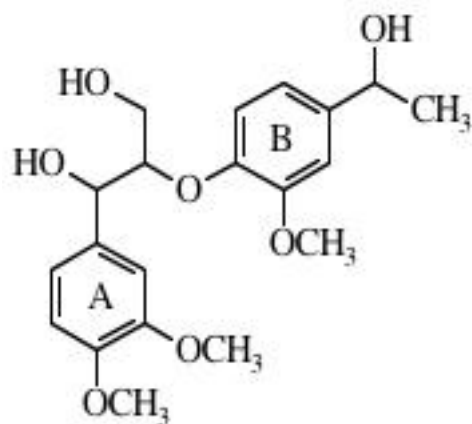
**Notes:**

S. Ralph SR III-15AC  
35mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.71	40	20.59	64	20.36	70
Ac Me	21.05	41	20.95	52	20.64	55
Ac Me	21.35	45	21.14	48	20.94	77
B β	22.09	44	22.45	70	21.87	45
OMe	55.91	97	56.06	100	55.41	100
OMe	55.95	100	56.14	76	55.46	57
OMe	55.95	100	56.32	79	55.66	68
γ	63.26	32	63.80	61	62.61	29
B α	72.06	41	72.39	76	71.36	54
α	74.87	33	75.67	64	74.54	36
β	80.44	40	80.88	70	79.23	36
B2	110.58	35	111.79	70	110.64	34
A2	110.75	29	112.17	64	110.84	38
A5	111.12	41	112.49	73	111.48	39
B5	118.23	40	118.74	67	117.02	39
B6	118.66	47	119.19	76	118.08	43
A6	119.88	42	120.73	76	119.74	39
A1	128.93	45	130.22	55	128.75	45
B1	136.59	31	137.61	45	135.92	36
B4	147.72	18	148.68	36	147.12	36
A3	149.04	29	150.28	33	148.57	46
A4	149.30	27	150.51	39	148.83	43
B3	150.65	23	151.56	30	149.86	38
Ac C=O	170.54	26	169.88	30	169.22	39
Ac C=O	170.23	21	170.14	30	169.52	41
Ac C=O	169.76	27	170.59	36	169.91	45
erythro isomer:						
γ	62.74		63.25		62.04	
α	74.08		74.76		73.25	
β	79.98		80.23		78.29	

Compound Number 34

<sup>13</sup>C



*threo*

1-(3,4-dimethoxyphenyl)-2-[4-(1-hydroxyethyl)-2-methoxyphenoxy] propane-1,3-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	1.46	d	6.4
OMe	3.86	s	
OMe	3.86	s	
OMe	3.86	s	
B α	4.83	q	6.4
α	4.94	d	7.7
β	4.01	m	
γ1	3.46	mm	
γ2	3.60	dd	

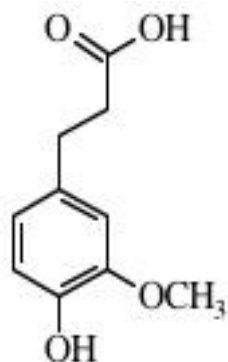
**Notes:**

S. Ralph SR III-15  
28mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.22	35	26.10	95	25.83	91
OMe	55.92	100	55.93	100	55.20	92
OMe	55.92	100	56.01	90	55.41	83
OMe	55.92	100	56.17	88	55.52	100
γ	61.08	28	61.68	67	59.96	55
B α	69.98	38	69.66	90	67.79	86
α	73.84	32	73.62	67	70.72	50
β	89.01	19	88.12	52	84.56	38
B2	109.33	28	110.46	60	109.79	44
A2	110.03	32	111.67	67	110.65	47
A5	111.10	38	112.14	71	111.08	71
B5	118.40	32	118.58	64	115.57	35
B6	119.56	34	119.22	52	117.24	62
A6	120.22	17	119.99	69	118.59	56
A1	132.23	26	134.87	40	134.50	58
B1	141.94	21	142.61	33	140.50	61
B4	146.76	21	148.03	36	146.78	56
A3	148.90	22	149.54	33	147.68	55
A4	149.08	25	149.87	36	148.07	79
B3	151.00	15	151.20	33	149.33	64
erythro isomer:						
γ	60.82		61.68		59.96	
α	72.78		73.62		71.51	
b	87.01		86.50		83.82	

Compound Number 35

<sup>13</sup>C



Dihydroferulic Acid

3-(4-hydroxy-3-methoxyphenyl)propanoic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	30.38	96	31.24	100	30.00	93
β	36.01	88	36.38	95	35.68	100
OMe	55.92	96	56.22	94	55.52	96
2	111.10	96	112.81	91	112.52	82
5	114.52	100	115.64	85	115.25	98
6	120.89	95	121.47	93	120.21	95
1	132.15	44	133.23	36	131.62	67
4	144.16	51	145.76	36	144.68	73
3	146.55	37	148.17	25	147.34	60
γ	178.88	40	174.26	18	173.77	61

<sup>1</sup>H (chloroform)

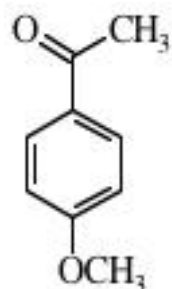
Atom	H Shifts	Mult	J
α	2.64	t	7.4
β	2.88	t	7.4
OMe	3.84	s	
2	6.71	m	
5	6.82	d	7.6
6	6.69	m	

**Notes:**

J. Obst  
35mg

Compound Number 36

<sup>13</sup>C



4-Methoxyacetophenone  
4-methoxyacetophenone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.28	30	26.33	31	26.29	34
OMe	55.43	60	55.85	47	55.44	50
3	113.68	86	114.45	95	113.75	100
5	113.68	86	114.45	95	113.75	100
1	130.35	15	131.28	12	129.89	18
2	130.55	100	131.18	100	130.40	97
6	130.55	100	131.18	100	130.40	97
4	163.48	11	164.31	11	163.06	20
α	196.62	12	196.23	8	196.14	14

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
β	2.53	s	
OMe	3.85	s	
3,5	6.90	m	8.8
2,6	7.90	m	8.8

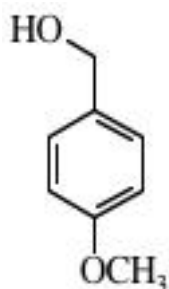
**Notes:**

Aldrich  
57mg



Compound Number 37

<sup>13</sup>C



p-Methoxybenzyl alcohol  
4-methoxybenzyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.23	49	55.39	58	54.94	56
α	64.68	35	64.34	45	62.59	46
3	113.87	<b>100</b>	114.27	<b>100</b>	113.40	<b>100</b>
5	113.87	100	114.27	100	113.40	100
2	128.56	97	128.82	92	127.86	99
6	128.56	97	128.82	92	127.86	99
1	133.21	16	135.23	13	134.49	27
4	159.05	13	159.64	12	158.14	19

<sup>1</sup>H (chloroform)

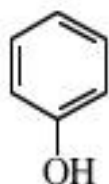
Atom	H Shifts	Mult	J
OMe	3.75	s	
α	4.51	s	
3,5	6.86	m	8.7
2,6	7.20	m	8.7

**Notes:**

Aldrich  
65mg

Compound Number 38

<sup>13</sup>C



Phenol  
phenol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
3	115.41	100	116.03	100	115.18	100
5	115.41	100	116.03	100	115.18	100
1	120.89	47	120.13	54	118.70	49
2	129.71	85	130.16	94	129.26	89
6	129.71	85	130.16	94	129.26	89
4	155.25	18	158.16	15	157.29	23

<sup>1</sup>H (chloroform)

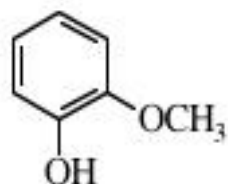
Atom	H Shifts	Mult	J
3,5	6.84	m	
1	6.93	m	
2,6	7.22	m	

**Notes:**

Aldrich JR 85-11  
54mg

Compound Number 39

<sup>13</sup>C



Guaiacol  
2-methoxyphenol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.86	100	56.16	94	55.47	99
2	110.81	95	112.48	99	112.30	97
5	114.60	83	115.84	94	115.51	85
1	120.15	94	120.39	100	119.09	91
6	121.47	85	121.94	92	120.83	100
3	145.70	21	147.48	21	146.52	49
4	146.63	17	148.33	19	147.59	37

<sup>1</sup>H (chloroform)

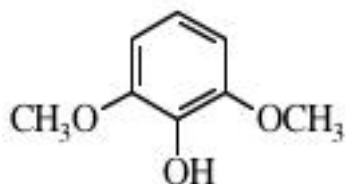
Atom	H Shifts	Mult	J
OMe	3.83	s	
OH	5.72	s	

**Notes:**

Aldrich JR A85.12  
54mg

Compound Number 40

<sup>13</sup>C



Syringol  
2,6-dimethoxyphenol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.27	100	56.55	100	55.89	100
OMe	56.27	100	56.55	100	55.89	100
2	105.03	100	106.57	100	105.70	95
6	105.03	100	106.57	100	105.70	95
1	119.06	49	119.16	44	118.06	42
4	134.97	12	137.08	8	135.70	21
3	147.31	23	148.86	16	148.16	39
5	147.31	23	148.86	16	148.16	39

<sup>1</sup>H (chloroform)

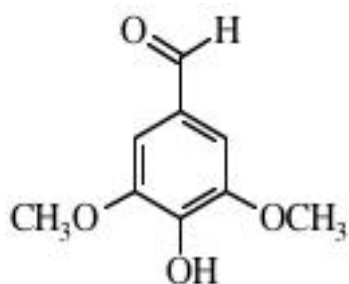
Atom	H Shifts	Mult	J
OMe	3.86	s	
OMe	3.86	s	
2,6	6.56	d	8.1
1	6.78	t	8.1

**Notes:**

Aldrich JR A 85.13  
56mg

Compound Number 41

<sup>13</sup>C



Syringaldehyde

3,5-dimethoxy-4-hydroxybenzaldehyde

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.95	s	
2,6	7.15	s	
α	9.81	s	
<u>acetone</u>			
OMe	3.91	s	
2,6	7.23	s	
α	9.81	s	
OH	8.20	bs	

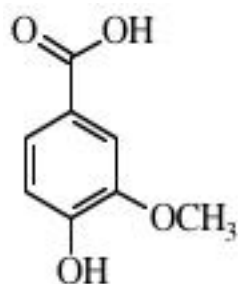
**Notes:**

J. Ralph JRA87.13  
62mg  
Poor solubility

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.48	100	56.64	100	56.02	100
OMe	56.48	100	56.64	100	56.02	100
2	106.81	80	107.74	80	107.05	67
6	106.81	80	107.74	80	107.05	67
1	128.34	24	129.02	19	127.14	34
4	141.03	20	142.92	15	142.11	28
3	147.44	30	148.94	25	148.09	56
5	147.44	30	148.94	25	148.09	56
α	190.79	52	191.05	45	190.99	38

Compound Number 42

<sup>13</sup>C



Vanillic acid

4-hydroxy-3-methoxy benzoic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.28	95	55.50	100
2			113.46	87	112.73	83
5			115.43	87	115.00	84
1			122.70	33	121.62	52
6			124.90	100	123.46	83
3			147.96	31	147.17	71
4			152.03	28	151.05	69
α			167.84	33	167.16	53

<sup>1</sup>H (chloroform)

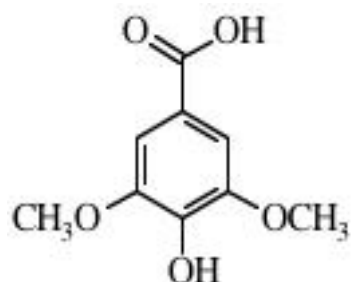
Atom	H Shifts	Mult	J
OMe	3.96	s	
2	7.59	d	1.9
5	6.97	d	8.3
6	7.72	dd	8.3, 1.9

**Notes:**

J. Ralph JRA89.12  
55mg  
not very soluble in CDCl<sub>3</sub>

Compound Number 43

<sup>13</sup>C



Syringic acid  
3,5-dimethoxy-4-hydroxybenzoic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.66	98	55.92	100
OMe			56.66	98	55.92	100
2			108.20	100	106.85	82
6			108.20	100	106.85	82
1			121.40	19	120.32	29
4			141.61	14	140.17	43
3			148.30	29	147.37	81
5			148.30	29	147.37	81
α			167.68	19	167.14	38

<sup>1</sup>H (chloroform)

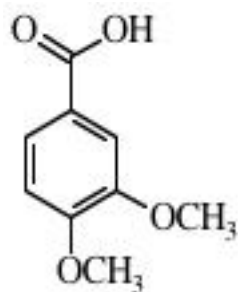
Atom	H Shifts	Mult	J
OMe	3.96	s	
2,6	7.40	s	

**Notes:**

J. Ralph JRA 89-13  
55mg not very soluble in CDCl<sub>3</sub>

Compound Number 44

<sup>13</sup>C



Veratric acid  
3,4-dimethoxybenzoic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.02	100	56.08	100	55.41	100
OMe	56.06	86	56.12	91	55.58	93
2	110.36	87	111.64	81	110.93	85
5	112.38	87	113.34	72	111.93	73
1	121.77	46	123.64	25	122.98	43
6	124.61	94	124.42	78	123.16	85
3	148.72	56	149.89	22	148.30	54
4	153.78	46	154.37	19	152.60	42
α	172.08	50	167.53	28	167.08	55

<sup>1</sup>H (chloroform)

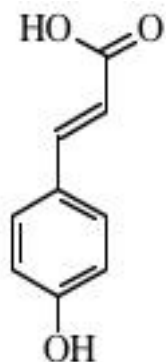
Atom	H Shifts	Mult	J
OMe	3.94	s	
OMe	3.95	s	
2	7.60	d	1.9
5	6.92	d	8.5
6	7.78	dd	8.5, 1.9

**Notes:**

J. Ralph JRA 89-14  
55mg



Compound Number 45

<sup>13</sup>C*trans*

p-Coumaric acid  
4-hydroxycinnamic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			115.51	45	115.30	38
3			116.66	100	115.72	100
5			116.66	100	115.72	100
1			126.95	22	125.24	34
2			130.90	91	129.98	99
6			130.90	91	129.98	99
α			145.95	45	144.11	43
4			160.49	26	159.54	43
γ			169.03	19	167.90	39

<sup>1</sup>H (DMSO)

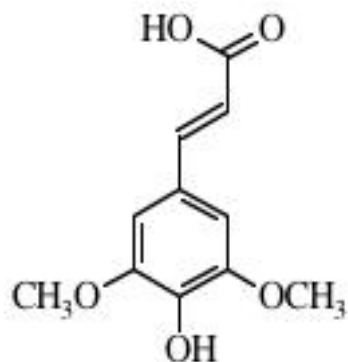
Atom	H Shifts	Mult	J
α	7.54	d	16.0
3,5	6.83	d	8.6
2,6	7.53	d	8.6
β	6.32	d	16.0

**Notes:**

Fluka  
60mg  
\*not soluble in CDCl<sub>3</sub>

Compound Number 46

<sup>13</sup>C



*trans*

Sinapinic acid

3,5-dimethoxy-4-hydroxycinnamic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.68	100	56.04	100
OMe			56.68	100	56.04	100
2			106.84	100	106.04	74
6			106.84	100	106.04	74
β			116.20	50	116.03	37
1			126.19	22	124.59	38
4			139.43	22	138.05	38
α			146.23	58	144.74	39
3			148.90	44	148.00	79
5			148.90	44	148.00	79
γ			168.26	28	167.90	45

<sup>1</sup>H (DMSO)

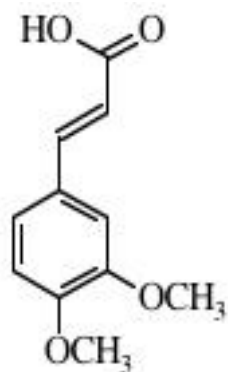
Atom	H Shifts	Mult	J
OMe	3.83	s	
2,6	7.00	s	
α	7.50	d	15.9
β	6.44	d	15.9

**Notes:**

Lancaster Synthesis  
60mg \*not very soluble in CDCl<sub>3</sub>

Compound Number 47

<sup>13</sup>C



*trans*

3,4-Dimethoxycinnamic acid  
3,4-dimethoxycinnamic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.92	98	56.08	90	55.49	94
OMe	55.99	92	56.13	100	55.56	100
2	109.88	94	111.20	84	110.35	74
5	111.09	96	112.40	82	111.50	71
β	114.94	94	116.60	80	116.68	75
6	123.10	100	123.43	94	122.53	76
1	127.08	72	128.31	39	127.05	72
α	146.95	91	145.64	90	144.08	71
3	149.31	53	150.61	29	148.97	68
4	151.56	47	152.48	27	150.77	55
γ	172.53	77	168.11	27	167.83	71

<sup>1</sup>H (chloroform)

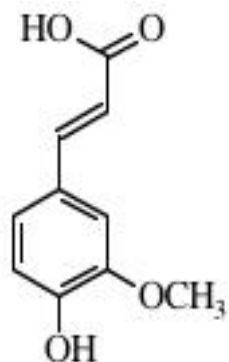
Atom	H Shifts	Mult	J
OMe	3.92	s	
OMe	3.92	s	
2	7.08	d	2.0
5	6.88	d	8.3
6	7.14	dd	8.3, 2.0
α	7.73	d	15.9
β	6.33	d	15.9

**Notes:**

K & K Labs  
60mg

Compound Number 48

<sup>13</sup>C



*trans*

Ferulic acid  
4-hydroxy-3-methoxycinnamic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.28	98	55.64	100
2			111.30	95	111.14	74
β			115.77	87	115.52	77
5			116.00	90	115.60	73
6			123.80	98	122.72	76
1			127.38	51	125.76	62
α			146.16	100	144.44	71
3			148.64	46	147.87	79
4			149.97	51	149.04	81
γ			168.88	60	167.93	76
d4-MeOH	56.44					
	111.71					
	115.89					
	116.46					
	123.94					
	127.77					
	146.89					
	149.30					
	150.43					
	170.93					

<sup>1</sup>H (DMSO)

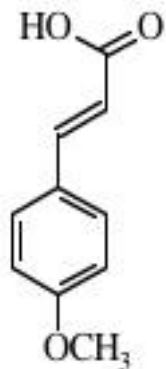
Atom	H Shifts	Mult	J
OMe	3.84	s	
2	7.29	d	1.9
5	6.83	d	8.2
6	7.10	dd	8.2,1.9
α	7.53	d	15.9
β	6.39	d	15.9

**Notes:**

Aldrich  
60mg not very soluble in CDCl<sub>3</sub> Note: .0238 was run in d4-MeOH.

Compound Number 49

<sup>13</sup>C



*trans*

4-Methoxycinnamic acid  
4-methoxycinnamic acid

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.85	s	
3,5	6.92	m	8.8
α	7.75	d	15.9
2,6	7.51	m	8.8
β	6.32	d	15.9

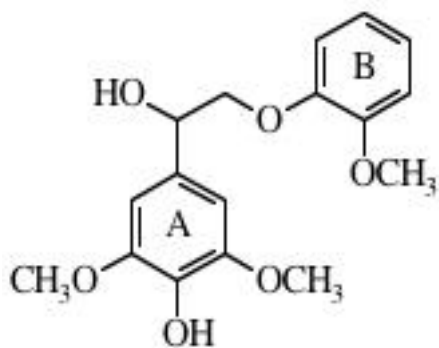
**Notes:**

Aldrich  
66mg not CDCl<sub>3</sub> soluble

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			55.68	51	55.22	52
3			115.14	100	114.30	97
5			115.14	100	114.30	97
β			116.52	44	116.51	41
1			128.02	18	126.82	29
2			130.58	98	129.84	100
6			130.58	98	129.84	100
α			145.19	53	143.65	42
4			162.41	16	160.90	28
γ			168.11	22	167.78	35

Compound Number 50

<sup>13</sup>C



Syringylglycol- $\beta$ -guaiacyl ether

1-(3,5-dimethoxy-4-hydroxyphenyl)-2-(2-methoxyphenoxy) ethanol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	55.84	50	56.24	49	55.41	52
A OMe	56.32	100	56.58	100	55.81	100
A OMe	56.32	100	56.58	100	55.81	100
$\alpha$	72.47	54	72.85	51	70.97	47
$\beta$	76.39	48	76.15	45	73.98	38
A2	103.11	96	104.79	84	103.73	79
A6	103.11	96	104.79	84	103.73	79
B2	112.06	52	113.44	45	112.25	42
B5	115.96	50	115.52	38	113.40	38
B6	121.12	51	121.76	55	120.66	48
B1	122.50	56	122.29	55	120.79	47
A1	130.84	36	133.07	27	132.54	40
A4	134.46	31	136.13	24	134.51	36
A3	147.12	56	148.46	51	147.57	77
A5	147.12	56	148.46	51	147.57	77
B3	148.06	27	149.62	22	148.11	33
B4	150.11	23	150.84	18	148.94	37

<sup>1</sup>H (chloroform)

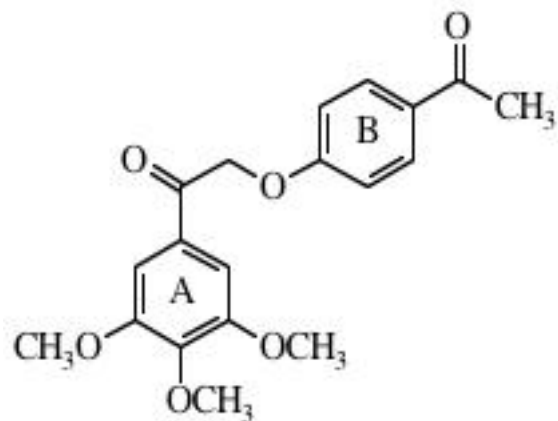
Atom	H Shifts	Mult	J
B OMe	3.85	s	
A OMe	3.87	s	
$\alpha$	5.00	dd	9.9, 3.0
$\beta$ 1	3.94	t	9.9
$\beta$ 2	4.14	dd	9.9, 3.0
A2,6	6.66	s	

**Notes:**

S. Ralph SG 100mg  
33mg

Compound Number 51

<sup>13</sup>C



□2-(4-Acetylphenoxy)-1-(3,4,5-trimethoxyphenyl)ethanone

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	2.54	s	
A3,5 OMe	3.92	s	
A4 OMe	3.94	s	
β	5.32	s	
A2,6	7.26	s	
B3,5	6.96	m	8.9
B2,6	7.92	m	8.9

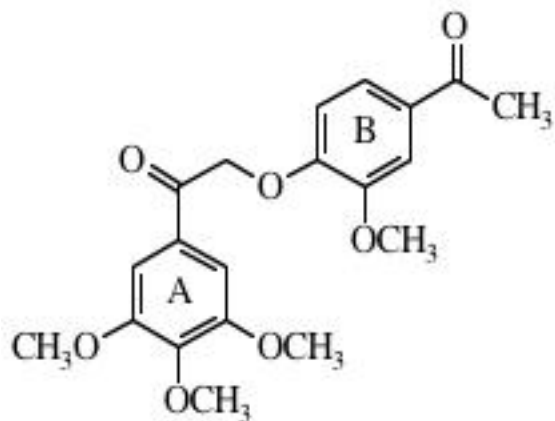
**Notes:**

L. Landucci LLL XVII 9A  
26mg contains trace impurity

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	26.34	46	26.37	43	26.34	60
A3 OMe	56.42	86	56.68	88	56.12	100
A5 OMe	56.42	86	56.68	88	56.12	100
A4 OMe	61.00	35	60.72	33	60.12	52
β	70.62	35	71.10	37	70.11	37
A2	105.84	81	106.60	90	105.47	87
A6	105.84	81	106.60	90	105.47	87
B3	114.44	94	115.27	96	114.45	97
B5	114.44	94	115.27	96	114.45	97
A1	129.36	26	130.72	20	129.38	38
B2	130.62	100	131.11	100	130.26	92
B6	130.62	100	131.11	100	130.26	92
B1	131.16	26	131.70	20	130.11	37
A4	143.65	12	144.27	10	142.41	25
A3	153.32	57	154.41	41	152.88	77
A5	153.32	57	154.41	41	152.88	77
B4	161.77	28	163.09	22	161.79	40
α	192.49	32	193.05	24	192.70	37
B α	196.55	19	196.23	16	196.12	35

Compound Number 52

<sup>13</sup>C



2-(4-Acetyl-2-methoxyphenoxy)-1-(3,4,5-trimethoxyphenyl)ethanone □

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	26.23	55	26.30	53	26.25	49
B OMe	56.01	53	56.28	51	55.58	56
A3 OMe	56.32	100	56.64	100	56.12	100
A5 OMe	56.32	100	56.64	100	56.12	100
A4 OMe	60.96	47	60.70	33	60.13	49
β	71.57	32	71.84	42	70.48	28
A2	105.79	92	106.70	93	105.57	74
A6	105.79	92	106.70	93	105.57	74
B2	110.85	43	112.10	45	110.84	36
B5	112.27	43	113.40	48	112.24	38
B6	122.87	53	123.39	52	122.56	41
A1	129.33	28	130.74	25	129.40	36
B1	131.48	33	131.98	21	130.24	36
A4	143.44	17	144.21	12	142.45	23
B3	149.31	30	150.23	21	148.52	44
B4	151.49	27	152.98	18	151.61	44
A3	153.23	55	154.34	45	152.85	85
A5	153.23	55	154.34	45	152.85	85
α	192.68	25	193.34	22	192.76	36
Bα	196.64	25	196.32	19	196.19	36

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	2.54	s	
B OMe	3.95	s	
A3,5 OMe	3.92	s	
A4 OMe	3.93	s	
β	5.39	s	
A2,6	7.47	s	
B2	7.63	d	1.9
B5	6.80	d	8.3
B6	7.52	dd	8.3, 1.9

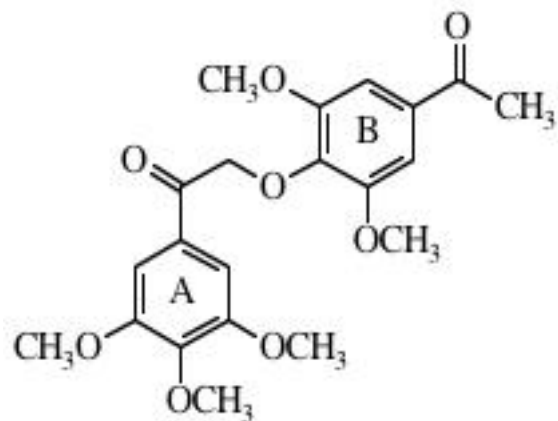
**Notes:**

L. Landucci LLL XVII 9c  
28.5mg trace impurity present



Compound Number 53

<sup>13</sup>C



2-(4-Acetyl-2,6-dimethoxyphenoxy)-1-(3,4,5-trimethoxyphenyl)ethanone □ □

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	2.59	s	
A3,5 OMe	3.92	s	
B3,5 OMe	3.88	s	
A4 OMe	3.91	s	
β	5.29	s	
A2,6	7.31	s	
B2,6	7.22	s	

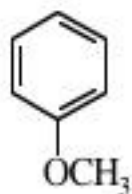
**Notes:**

L. Landucci LLL XVII 9d  
37mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	26.43	26	26.55	43	26.52	47
A3 OMe	56.33	100	56.61	100	56.04	100
A5 OMe	56.33	100	56.61	100	56.04	100
B3 OMe	56.33	100	56.66	75	56.09	95
B5 OMe	56.33	100	56.66	75	56.09	95
A4 OMe	60.94	22	60.67	32	60.08	43
β	74.82	22	75.43	45	74.15	28
A2	105.87	100	106.81	86	105.52	70
A6	105.87	100	106.81	86	105.52	70
B2	105.87	100	106.95	91	105.84	70
B6	105.87	100	106.95	91	105.84	70
A1	129.99	15	131.21	20	129.69	30
B1	132.67	15	133.62	19	132.05	33
B4	140.75	10	141.68	13	140.24	27
A4	142.94	8	143.88	10	142.15	20
B3	152.53	33	153.61	38	152.04	65
B5	152.53	33	153.61	38	152.04	65
A3	153.12	33	154.23	36	152.80	70
A5	153.12	33	154.23	36	152.80	70
α	193.28	15	193.81	22	193.11	35
B α	196.71	14	196.70	19	196.61	28

Compound Number 54

<sup>13</sup>C



Anisole  
Methoxybenzene

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.08	70	55.28	73	54.86	54
3	113.92	100	114.62	98	113.84	99
5	113.92	100	114.62	98	113.84	99
1	120.64	61	121.19	64	120.39	43
2	129.52	100	130.14	100	129.39	100
6	129.52	100	130.14	100	129.39	100
4	159.60	12	160.63	14	159.24	10

<sup>1</sup>H (chloroform)

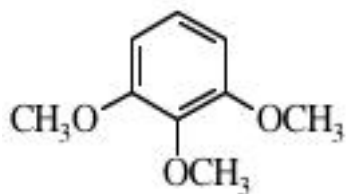
Atom	H Shifts	Mult	J
OMe	3.77	s	
3,5,1	6.90	m	
2,6	7.27	m	

**Notes:**

Aldrich  
40mg

Compound Number 55

<sup>13</sup>C



1,2,3-trimethoxybenzene

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
3,5 OMe	3.85	s	
4 OMe	3.85	s	
2,6	6.57	d	8.3
1	6.98	t	8.3

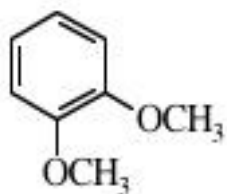
**Notes:**

Aldrich  
40mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
3 OMe	56.09	100	56.35	91	55.77	100
5 OMe	56.09	100	56.35	91	55.77	100
4 OMe	60.80	38	60.43	38	59.90	48
2	105.34	88	106.54	100	105.56	95
6	105.34	88	106.54	100	105.56	95
1	123.61	51	124.30	42	123.57	49
4	138.27	8	139.52	8	137.69	10
3	153.56	23	154.67	19	153.16	33
5	153.56	23	154.67	19	153.16	33

Compound Number 56

<sup>13</sup>C



Veratrole  
1,2-dimethoxybenzene

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.80	100	56.01	100	55.38	100
OMe	55.80	100	56.01	100	55.38	100
2	111.44	76	113.02	89	111.98	99
5	111.44	76	113.02	89	111.98	99
1	120.85	83	121.60	86	120.67	100
6	120.85	83	121.60	86	120.67	100
3	149.08	16	150.50	17	148.88	29
4	149.08	16	150.50	17	148.88	29

<sup>1</sup>H (chloroform)

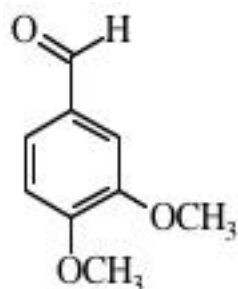
Atom	H Shifts	Mult	J
OMe	3.86	s	
2,5	6.89	m	
1,6	6.89	m	

**Notes:**

Aldrich  
40mg

Compound Number 57

<sup>13</sup>C



Veratraldehyde  
3,4-dimethoxybenzaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.00	100	56.07	100	55.47	100
OMe	56.17	93	56.29	91	55.82	85
2	109.05	65	110.31	80	109.46	66
5	110.46	88	111.85	91	111.22	83
6	126.77	79	126.72	94	126.00	79
1	130.19	37	131.21	27	129.65	49
3	149.66	21	150.77	20	149.17	38
4	154.51	25	155.63	16	154.18	37
α	190.78	70	191.16	79	191.21	84

<sup>1</sup>H (chloroform)

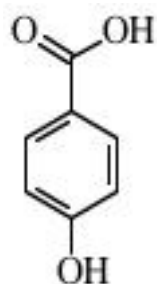
Atom	H Shifts	Mult	J
OMe	3.94	s	
OMe	3.97	s	
2	7.41	d	1.8
5	6.98	d	8.2
6	7.46	dd	8.2, 1.8
α	9.85	s	

**Notes:**

Aldrich  
40mg

Compound Number 58

<sup>13</sup>C



4-hydroxybenzoic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
3			115.99	94	115.06	100
5			115.99	94	115.06	100
1			122.43	14	121.35	27
2			132.78	100	131.47	87
6			132.78	100	131.47	87
4			162.65	21	161.55	39
α			168.24	20	167.11	33

<sup>1</sup>H (DMSO)

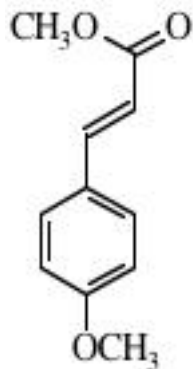
Atom	H Shifts	Mult	J
3,5	6.85	m	8.8
2,6	7.83	m	8.8

**Notes:**

Aldrich  
40mg \*CDCl<sub>3</sub> insoluble

Compound Number 59

<sup>13</sup>C



methyl (4-methoxy)cinnamate

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ OMe	3.79	s	
4 OMe	3.82	s	
2,6	7.46	m	8.8
α	7.65	d	16.0
3,5	6.89	m	8.8
β	6.31	d	16.0

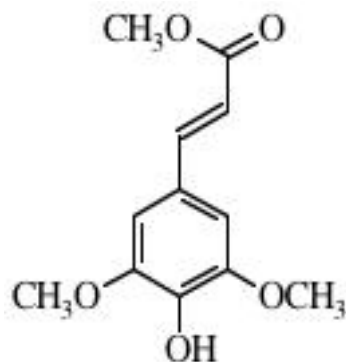
**Notes:**

J. Ralph PS 137x1  
95mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.50	45	51.58	43	51.23	37
4 OMe	55.32	43	55.70	47	55.28	47
3	114.34	98	115.14	98	114.36	<b>100</b>
5	114.34	98	115.14	98	114.36	100
β	115.30	41	115.96	43	115.09	51
1	127.14	21	127.84	17	126.65	36
2	129.71	<b>100</b>	130.63	<b>100</b>	130.08	89
6	129.71	100	130.63	100	130.08	89
α	144.49	49	145.04	45	144.28	45
4	161.42	17	162.42	14	161.17	32
γ	167.68	18	167.81	15	166.90	23

Compound Number 60

<sup>13</sup>C



*trans*

**Methyl Sinapate**  
methyl (3,5-dimethoxy-4-hydroxy)cinnamate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.60	45	51.46	24	51.13	51
3 OMe	56.34	100	56.68	88	56.06	100
5 OMe	56.34	100	56.68	88	56.06	100
2	105.17	86	106.83	100	106.26	85
6	105.17	86	106.83	100	106.26	85
β	115.50	47	115.73	47	114.58	42
1	125.85	30	126.08	22	124.34	43
4	137.30	28	139.46	19	138.36	37
α	145.15	52	145.99	38	145.32	43
3	147.29	53	148.88	43	148.00	82
5	147.29	53	148.88	43	148.00	82
γ	167.58	25	167.78	11	166.98	32

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ OMe	3.79	s	
3,5 OMe	3.90	s	
2,6	6.76	s	
α	7.60	d	15.9
β	6.30	d	15.9

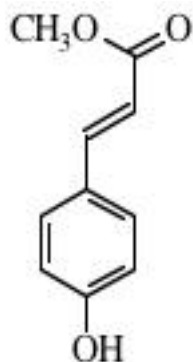
**Notes:**

J. Ralph JRPS 135x1  
52mg



Compound Number 61

<sup>13</sup>C



*trans*

Methyl p-Coumarate  
methyl 4-hydroxycinnamate

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ OMe	3.80	s	
α	7.64	d	16.0
3,5	6.86	m	8.7
2,6	7.42	m	8.7
β	6.28	d	16.0

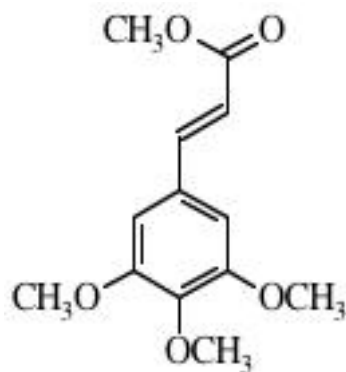
**Notes:**

J. Ralph JRPS 133.2x1  
68mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.71	38	51.49	41	51.13	44
β	114.98	36	115.22	40	113.90	44
3	115.95	91	116.64	100	115.78	99
5	115.95	91	116.64	100	115.78	99
1	126.98	21	126.90	20	125.07	35
2	130.00	100	130.82	94	130.21	100
6	130.00	100	130.82	94	130.21	100
α	144.89	38	145.33	46	144.69	51
4	158.12	24	160.45	28	159.87	46
γ	168.18	14	167.87	14	166.99	30

Compound Number 62

<sup>13</sup>C



*trans*

methyl (3,4,5-trimethoxy)cinnamate

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ OMe	3.74	s	
3,5 OMe	3.82	s	
4 OMe	3.82	s	
2,6	6.70	s	
α	7.54	d	
β	6.29	d	15.9

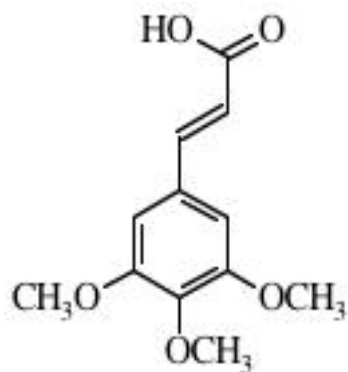
**Notes:**

J. Ralph JRPS 139x1  
92mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.61	43	51.57	41	51.31	48
3 OMe	56.15	100	56.45	100	56.02	100
5 OMe	56.15	100	56.45	100	56.02	100
4 OMe	60.89	39	60.58	42	60.06	46
2	105.36	90	106.58	84	105.99	84
6	105.36	90	106.58	84	105.99	84
β	117.04	46	117.70	50	117.06	46
1	129.90	33	130.70	28	129.61	36
4	140.24	16	141.27	11	139.61	19
α	144.81	52	145.45	49	144.75	45
3	153.46	53	154.51	42	153.11	42
5	153.46	53	154.51	42	153.11	42
γ	167.29	25	167.51	22	166.78	34

Compound Number 63

<sup>13</sup>C



*trans*

3,4,5-trimethoxy cinnamic acid

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
3,5 OMe	3.89	s	
4 OMe	3.89	s	
2,6	6.78	s	
α	7.70	d	15.9
β	6.36	d	15.9

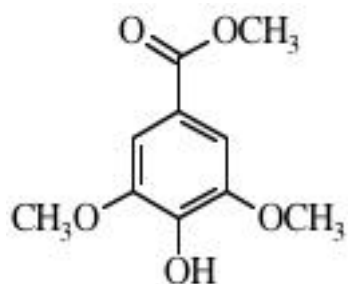
**Notes:**

Aldrich  
100mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
3 OMe	56.19	100	56.49	100	55.98	100
5 OMe	56.19	100	56.49	100	55.98	100
4 OMe	60.96	35	60.60	43	60.05	69
2	105.67	81	106.62	87	105.77	80
6	105.67	81	106.62	87	105.77	80
b	116.55	44	118.15	55	118.51	49
1	129.52	39	130.83	30	129.87	48
4	140.62	18	141.24	12	139.38	27
α	147.02	42	145.87	46	144.14	53
3	153.48	76	154.54	47	153.10	91
5	153.48	76	154.54	47	153.10	91
γ	172.46	32	168.33	28	167.72	52

Compound Number 64

<sup>13</sup>C



Syringic acid methyl ester  
methyl (4-hydroxy-3,5-dimethoxy)benzoate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α OMe	52.07	47	52.11	47	51.78	50
3 OMe	56.41	100	56.67	98	56.04	100
5 OMe	56.41	100	56.67	98	56.04	100
2	106.80	99	107.87	100	106.82	82
6	106.80	99	107.87	100	106.82	82
1	120.96	24	121.07	22	119.28	34
4	139.49	27	141.65	25	140.72	37
3	146.78	54	148.33	46	147.58	66
5	146.78	54	148.33	46	147.58	66
α	166.92	18	167.16	15	166.10	29

<sup>1</sup>H (chloroform)

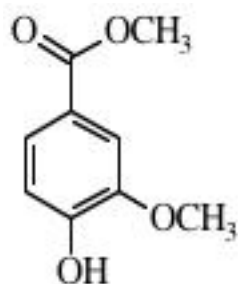
Atom	H Shifts	Mult	J
α OMe	3.89	s	
3,5 OMe	3.90	s	
2,6	7.31	s	

**Notes:**

J. Ralph JRPS 7x1  
93.3mg

Compound Number 65

<sup>13</sup>C



Vanillic acid methyl ester  
methyl (3-methoxy-4-hydroxy)benzoate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α OMe	52.02	83	52.00	79	51.64	89
4 OMe	56.07	100	56.29	91	55.60	100
2	111.98	81	113.20	89	112.54	80
5	114.33	91	115.58	89	115.19	96
1	122.13	37	122.43	38	120.52	53
6	124.23	98	124.53	100	123.44	88
3	146.41	34	148.08	29	147.36	64
4	150.29	45	152.14	46	151.53	78
α	167.12	24	167.15	23	166.06	46

<sup>1</sup>H (chloroform)

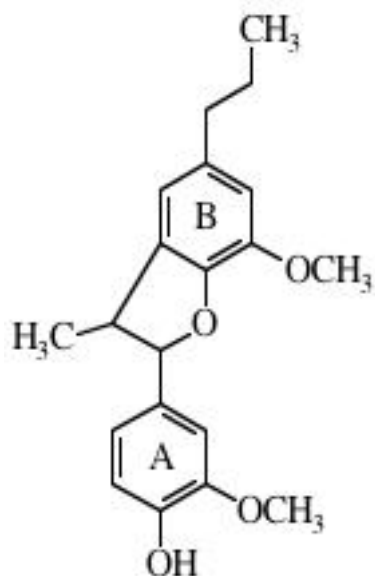
Atom	H Shifts	Mult	J
α OMe	3.88	s	
4 OMe	3.88	s	
2	7.53	d	1.8
5	6.93	d	8.3
6	7.62	dd	8.3, 1.8

**Notes:**

J. Ralph JRPS 3.1  
101mg

Compound Number 66

<sup>13</sup>C



Dihydrodehydrodiisoeugenol

2-Methoxy-4-(7-methoxy-3-methyl-5-propyl-2,3-dihydro benzofuran-2-yl)phenol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B γ	0.96	t	7.3
γ	1.36	d	6.8
B β	1.64	m	7.3
B α	2.55	t	7.3
β	3.44	dd	9.6,6.8
OMe	3.86	s	
OMe	3.87	s	
α	5.07	d	9.6
B2	6.59	s	
B6	6.62	s	
A5	6.89	m	
A6	6.89	m	
A2	6.99	s	

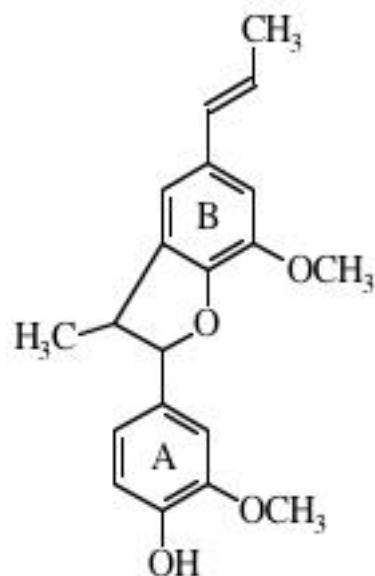
**Notes:**

J. Ralph JRL 109x2  
44mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.90	80	14.08	88	13.65	85
γ	17.44	72	17.83	88	17.17	81
B β	25.07	84	25.74	97	24.52	94
B α	38.09	71	38.54	79	37.27	77
β	45.81	85	46.43	91	44.71	74
OMe	55.99	100	56.28	100	55.59	100
OMe	55.99	100	56.41	97	55.64	100
α	93.61	66	93.80	94	92.37	70
A2	109.04	72	110.69	85	110.56	66
B2	111.91	65	113.63	76	112.24	57
A5	114.11	63	115.55	76	115.20	66
B6	115.46	74	116.39	85	115.35	68
A6	119.94	76	120.22	91	119.25	74
A1	132.28	52	133.03	53	130.82	77
B5	132.98	45	134.12	44	132.91	68
B1	136.29	45	136.62	59	135.32	64
B4	143.86	44	144.78	41	143.30	64
A4	145.41	24	146.59	32	144.93	45
B3	145.77	43	147.52	44	146.67	77
A3	146.71	35	148.39	38	147.59	77

Compound Number 67

<sup>13</sup>C



Dehydrodiisoeugenol

2-Methoxy-4-(7-methoxy-3-methyl-5-propenyl-2,3-dihydro benzofuran-2-yl) phenol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ	1.37	d	6.8
B γ	1.87	dd	5.3, 1.2
β	3.44	dt	9.4, 6.8
OMe	3.85	s	
OMe	3.88	s	
α	5.09	d	9.4
B β	6.11	dq	15.8, 5.3
B α	6.36	dq	15.8, 1.2
B2	6.76	s	
B6	6.78	s	
A5	6.88	m	
A6	6.80	m	
A2	6.97	s	

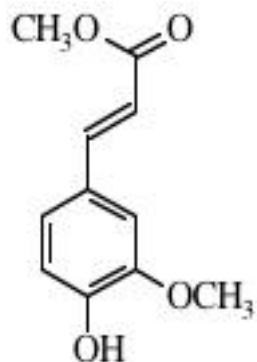
**Notes:**

J. Ralph JRKM 67-1  
150mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	17.60	43	17.86	89	17.25	72
B γ	18.34	41	18.42	93	18.06	78
β	45.62	52	46.21	100	44.51	60
OMe	55.97	100	56.25	93	55.59	100
OMe	55.97	100	56.33	81	55.61	95
α	93.76	47	93.96	84	92.55	60
A2	108.97	48	110.66	86	109.74	50
B2	109.40	41	111.06	77	110.58	58
A5	113.36	46	114.30	87	113.29	58
B6	114.14	47	115.55	84	115.23	55
A6	119.91	47	120.21	93	119.25	60
B β	123.41	47	123.22	97	122.60	60
B α	130.98	51	132.05	93	130.68	52
A1	132.11	26	132.81	67	130.93	65
B5	132.22	34	132.83	61	131.39	62
B1	133.30	32	134.43	54	133.30	65
B4	144.15	28	145.03	26	143.61	60
A4	145.82	31	147.53	53	146.07	45
B3	146.62	30	147.72	20	146.71	55
A3	146.71	32	148.36	44	147.59	60

Compound Number 68

<sup>13</sup>C



*trans*

Methyl ferulate  
methyl 4-hydroxy-3-methoxycinnamate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.60	80	51.47	86	51.12	90
3 OMe	55.93	90	56.32	100	55.68	100
2	109.56	92	111.34	98	111.32	71
β	114.86	96	115.51	100	114.19	72
5	115.09	85	116.03	98	115.54	81
6	123.00	100	123.78	88	122.99	81
1	126.92	58	127.38	50	125.56	66
α	145.03	92	145.65	96	145.02	78
3	146.89	51	148.66	44	147.92	65
4	148.11	58	149.99	50	149.38	72
γ	167.80	47	167.82	40	167.02	62

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ OMe	3.79	s	
3 OMe	3.89	s	
2	7.31	d	1.8
α	7.61	d	15.9
5	6.90	d	8.1
6	7.05	dd	8.1, 1.8
β	6.28	d	15.9

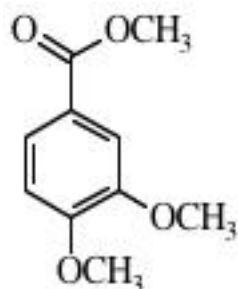
**Notes:**

J. Ralph JRKM 85.1  
54mg



Compound Number 69

<sup>13</sup>C



Methylveratrate  
methyl 3,4-dimethoxybenzoate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α OMe	51.93	45	52.00	68	51.79	86
OMe	55.99	100	56.10	100	55.50	100
OMe	55.99	100	56.10	100	55.66	94
2	110.32	45	111.65	75	111.07	86
5	112.05	46	112.99	70	111.70	82
1	122.71	16	123.37	25	121.84	51
6	123.58	49	124.08	77	123.13	93
3	148.65	17	149.90	23	148.46	51
4	153.00	16	154.38	19	152.98	43
α	166.82	14	166.92	19	165.96	35

<sup>1</sup>H (chloroform)

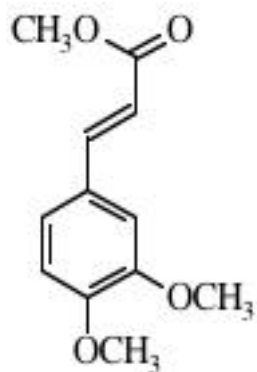
Atom	H Shifts	Mult	J
α OMe	3.89	s	
OMe	3.93	s	
OMe	3.93	s	
2	7.54	d	1.9
5	6.88	d	8.4
6	7.67	dd	8.4, 1.9

**Notes:**

J. Ralph JRPS 5.1  
55mg

Compound Number 70

<sup>13</sup>C



*trans*

methyl 3,4-dimethoxycinnamate

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ OMe	3.79	s	
OMe	3.90	s	
OMe	3.90	s	
2	7.04	d	1.9
5	6.86	d	8.2
6	7.09	dd	8.2, 1.9
α	7.63	d	15.9
β	6.30	d	15.9

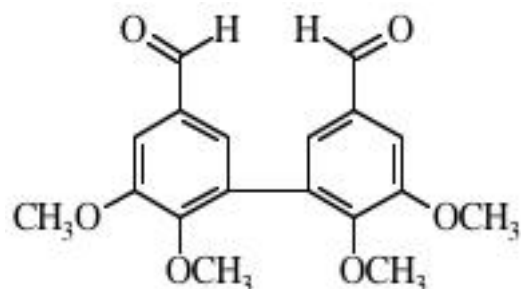
**Notes:**

J. Ralph JRPS 21x1  
52mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.55	79	51.50	77	51.20	96
3 OMe	55.89	92	56.07	100	55.52	97
4 OMe	55.96	100	56.12	96	55.59	100
2	109.77	79	111.23	88	110.49	77
5	111.12	84	112.38	88	111.51	83
β	115.53	78	116.15	89	115.26	83
6	122.56	81	123.46	93	122.81	89
1	127.41	56	128.19	43	126.85	68
α	144.74	85	145.41	88	144.67	80
3	149.27	40	150.59	32	149.00	61
4	151.18	41	152.54	32	151.02	58
γ	167.58	49	167.71	39	166.92	61

Compound Number 71

<sup>13</sup>C



Dehydrodivertraldehyde

5,6,5',6'-Tetramethoxybiphenyl-3,3'-dicarbaldehyde

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
4 OMe	3.77	s	
3 OMe	3.99	s	
2	7.51	d	1.9
6	7.40	d	1.9
α	9.91	s	
<u>acetone</u>			
4 OMe	3.75	s	
3 OMe	4.01	s	
2	7.58	d	
6	7.44	d	
α	9.96	s	

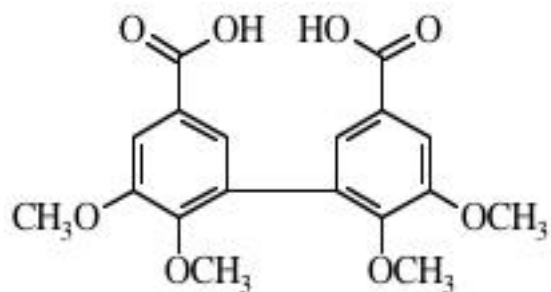
**Notes:**

Obst  
 38 mg contains impurity  
 As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
3 OMe	56.05	100	56.40	90	55.94	100
4 OMe	60.95	79	60.98	73	60.36	93
2	110.43	86	111.92	90	111.39	63
6	127.51	83	127.15	97	125.97	74
5	131.76	48	133.01	33	131.52	58
1	132.06	60	133.21	47	131.76	82
4	152.36	35	153.02	23	151.50	44
3	153.37	50	154.27	40	152.82	72
α	190.87	100	191.51	100	191.60	75

Compound Number 72

<sup>13</sup>C



Dehydrodiveratric acid

5,6,5',6'-Tetramethoxybiphenyl-3,3'-dicarboxylic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
3 OMe					55.81	98
4 OMe					60.19	100
2					112.91	48
6					124.10	65
1					125.84	73
5					131.27	62
4					150.04	67
3					152.11	94
α					166.72	60

<sup>1</sup>H (DMSO)

Atom	H Shifts	Mult	J
3 OMe	3.64	s	
4 OMe	3.93	s	
2	7.42	d	1.9
6	7.71	d	1.9

**Notes:**

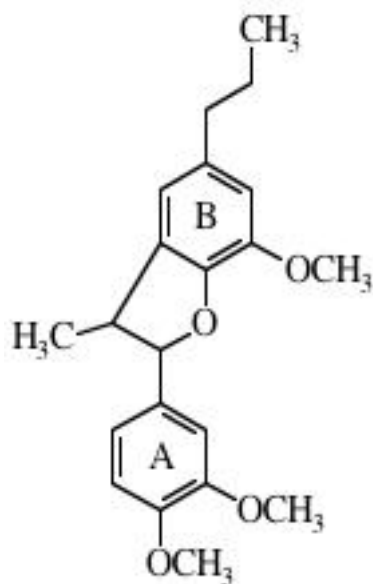
Obst 35 mg

\* only soluble in DMSO \* aldehyde impurity

As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 73

<sup>13</sup>C



2-(3,4-Dimethoxyphenyl)-7-methoxy-3-methyl-5-propyl-2,3-dihydrobenzofuran

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B γ	0.96	t	7.3
γ	1.37	d	6.8
B β	1.64	h	7.3
B α	2.55	t	7.3
β	4.45	dq	9.6, 6.8
OMe	3.86	s	
OMe	3.87	s	
OMe	3.88	s	
α	5.09	d	9.6
B2	6.59	s	
B6	6.62	s	
A5	6.83	d	8.2
A6	6.96	dd	8.2, 1.9
A2	7.00	dd	1.9

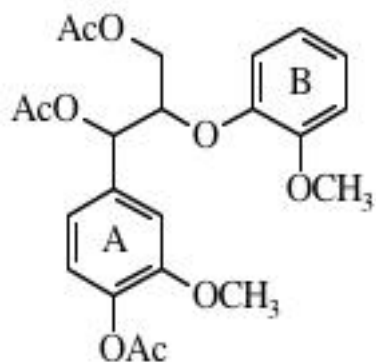
Notes:

Obst  
45mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.90	65	14.08	55	13.66	88
γ	17.47	63	17.90	55	17.18	75
B β	25.06	67	25.74	63	24.53	81
B α	38.09	63	38.53	62	37.28	69
β	45.77	60	46.47	55	44.87	68
OMe	55.92	100	56.12	100	55.47	100
OMe	55.92	100	56.12	100	55.47	100
OMe	56.00	62	56.41	60	55.66	76
α	93.48	61	93.58	62	92.11	62
A2	109.62	57	111.03	53	110.01	60
A5	110.88	58	112.57	58	111.58	60
B2	111.90	56	113.62	53	112.28	51
B6	115.44	52	116.40	55	115.37	60
A6	119.22	63	119.68	55	118.85	64
B5	132.90	25	134.07	33	132.49	55
A1	132.95	44	134.25	33	132.86	57
B1	136.30	38	136.69	32	135.46	61
B4	143.87	32	144.80	28	143.34	54
B3	145.42	25	146.57	18	144.92	37
A3	149.10	33	150.40	22	148.83	93
A4	149.16	32	150.49	23	148.83	93

Compound Number 74

<sup>13</sup>C



*threo*

Guaiacylglycerol- $\beta$ -guaiacyl ether triacetate  
1-(4-acetoxy-3-methoxyphenyl)-1,3-diacetoxy-2-(2-methoxyphenoxy)propane

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.63	86	20.45	89	20.28	94
Ac Me	20.68	78	20.58	84	20.35	100
Ac Me	21.02	88	20.91	61	20.63	82
OMe	55.81	100	56.21	92	55.54	100
OMe	55.96	94	56.30	100	55.76	91
$\gamma$	63.09	75	63.58	79	62.47	52
$\alpha$	74.52	86	75.37	87	74.28	67
$\beta$	80.26	87	80.68	87	79.05	67
A2	111.75	86	112.66	87	111.62	64
B2	112.58	90	113.76	79	112.75	76
B5	118.79	91	119.22	95	117.47	73
A6	119.58	84	120.27	95	119.36	64
B6	121.00	90	121.66	87	120.64	76
A5	122.79	78	123.52	79	122.57	58
B1	123.31	91	123.75	87	122.62	58
A1	135.35	68	136.66	61	135.40	79
A4	139.93	49	140.88	37	139.19	58
B4	147.96	54	149.05	37	147.54	61
B3	150.84	54	151.81	39	150.13	73
A3	151.12	55	152.18	47	150.67	73
A4 Ac C=O	168.71	48	168.83	34	168.31	58
$\alpha$ Ac C=O	169.65	49	169.94	39	169.30	61
$\gamma$ Ac C=O	170.52	51	170.62	42	169.89	67

<sup>1</sup>H (chloroform)

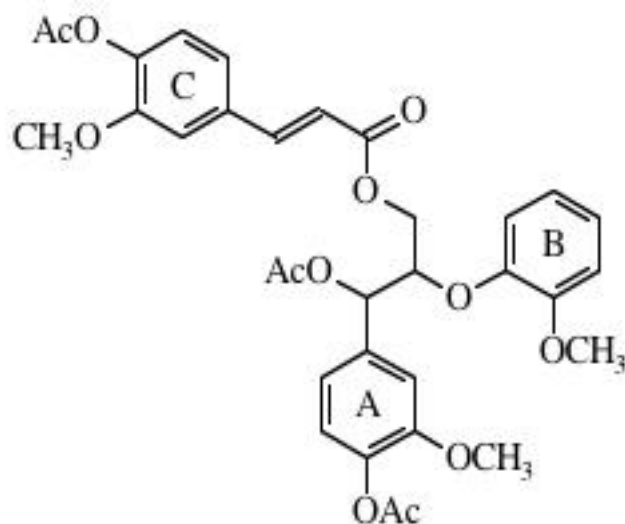
Atom	H Shifts	Mult	J
Ac Me	1.99	s	
Ac Me	2.05	s	
Ac Me	2.29	s	
OMe	3.80	s	
OMe	3.81	s	
$\gamma$ 1	4.06	dd	11.9, 5.7
$\gamma$ 2	4.32	dd	11.9, 4.5
$\alpha$	6.12	d	6.3
$\beta$	4.63	m	

**Notes:**

R. Helm RFH5C  
50mg

Compound Number 75

<sup>13</sup>C



*threo*

3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.28	s	
Ac Me	2.31	s	
Ac Me	2.07	s	
OMe	3.80	s	
OMe	3.80	s	
OMe	3.87	s	
γ1	4.20	dd	11.9, 5.2
γ2	4.42	dd	11.9, 4.2
β	4.70	m	
α	6.20	d	6.5
C β	6.35	d	15.9
C α	7.54	d	15.9

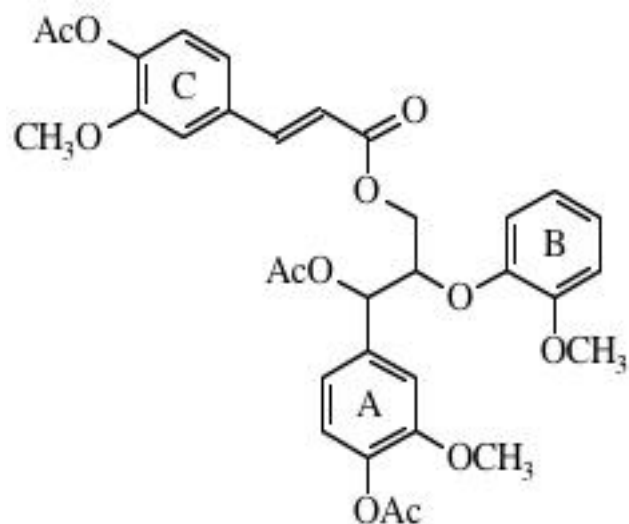
**Notes:**

R. Helm RFH101D1  
40mg Vinyl C's at 124.08 and 145.16 in acetone. In CDCl<sub>3</sub> 123.23 and 144.62  
Acetone 1H data in J. Ag. Food Chem. 41(4) 570-576, 1993

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	93	20.46	100	20.30	100
Ac Me	20.61	93	20.46	100	20.30	100
Ac Me	21.06	42	20.95	48	20.67	58
OMe	55.80	53	56.21	54	55.55	67
OMe	55.95	100	56.29	54	55.75	62
OMe	55.95	100	56.41	54	55.96	71
γ	63.35	28	63.94	39	62.87	21
α	74.64	35	75.54	39	74.44	33
β	80.51	37	80.85	41	79.20	33
C2	111.27	37	112.46	50	111.68	33
A2	111.74	35	112.70	43	111.86	46
B2	112.54	44	113.74	43	112.75	50
C β	117.58	35	118.62	48	117.53	54
B5	119.01	44	119.32	52	117.68	54
A6	119.55	40	120.29	43	119.38	33
B6	120.99	51	121.67	50	120.66	58
C6	121.44	44	122.25	46	121.62	46
A5	122.85	35	123.57	46	122.58	42
B1	123.23	49	123.78	48	122.67	38
C5	123.35	40	124.08	61	123.15	58
C1	133.16	30	134.09	30	132.81	46
A1	135.34	33	136.65	30	135.41	46
A4	139.93	26	140.91	26	139.21	50
C4	141.61	28	142.73	26	141.10	42
C α	144.62	42	145.16	48	144.30	42
B4	147.96	33	149.08	26	147.57	46
B3	150.93	33	151.87	26	150.16	46
A3	151.14	30	152.20	28	150.68	50
C3	151.42	40	152.64	35	151.13	54
C γ	166.24	28	166.62	35	165.74	50
Ac C=O	168.67	37	168.75	35	168.22	54
Ac C=O	168.70	33	168.82	26	168.29	50
Ac C=O	169.70	33	169.99	28	169.34	46

Compound Number 76

<sup>13</sup>C



*erythro*

3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.32	s	
Ac Me	2.29	s	
Ac Me	2.10	s	
OMe	3.77	s	
OMe	3.82	s	
OMe	3.87	s	
γ1	4.44	dd	11.9, 4.2
γ2	4.53	dd	11.9, 5.3
β	4.75	m	
α	6.14	d	5.5
C β	6.35	d	16.0
C α	7.54	d	16.0

**Notes:**

R. Helm RFH101D2

30mg Vinyl C's at 124.09 and 145.13 in acetone

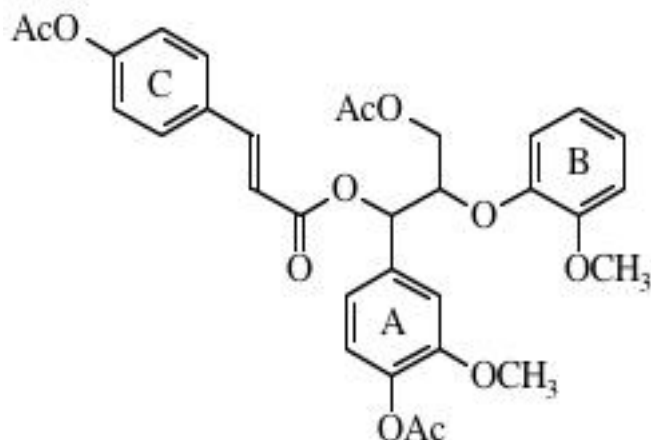
Acetone 1H data in J. Ag. Food Chem. 41(4) 570-576, 1993

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	70	20.46	100	20.32	100
Ac Me	20.64	70	20.46	100	20.32	100
Ac Me	21.05	41	20.90	42	20.66	44
OMe	55.81	48	56.22	48	55.60	76
OMe	55.96	100	56.30	56	55.73	42
OMe	55.96	100	56.41	62	55.97	62
γ	62.88	30	63.34	36	62.26	31
α	73.96	31	74.72	42	73.28	30
β	80.46	38	80.52	44	78.58	41
C2	111.31	38	112.47	46	111.72	23
A2	112.05	33	112.77	46	111.86	34
B2	112.63	39	113.80	46	112.91	58
C β	117.70	36	118.62	40	117.70	41
B5	119.74	75	119.97	50	118.08	54
A6	119.74	75	120.44	44	119.41	32
B6	121.00	45	121.65	48	120.67	54
C6	121.44	38	122.22	48	121.60	31
A5	122.60	38	123.37	44	122.50	44
B1	123.23	44	124.09	86	122.90	44
C5	123.66	42	124.09	86	123.16	55
C1	133.22	31	134.09	32	132.80	56
A1	135.53	34	136.71	38	135.37	52
A4	139.80	30	140.79	28	139.11	44
C4	141.58	20	142.74	20	141.11	49
C α	144.61	34	145.13	48	144.28	48
B4	147.23	33	148.30	30	146.70	61
B3	151.00	30	152.11	36	150.38	38
A3	151.20	34	152.11	32	150.58	61
C3	151.42	31	152.65	32	151.16	39
C γ	166.40	34	166.64	32	165.77	45
Ac C=O	168.68	31	168.75	32	168.20	34
Ac C=O	168.75	28	168.86	28	168.31	45
Ac C=O	169.50	23	169.89	28	169.20	35



Compound Number 77

<sup>13</sup>C



*erythro*

3-(4-Acetoxyphenyl) acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.02	s	
Ac Me	2.28	s	
Ac Me	2.30	s	
OMe	3.77	s	
OMe	3.81	s	
γ1	4.32	dd	11.9, 4.3
γ2	4.48	dd	11.9, 5.9
β	4.77	m	
α	6.20	d	5.0
C β	6.44	d	16.0
C2,6	7.13	m	8.6
C3,5	7.53	m	8.6
C α	7.65	d	16.0

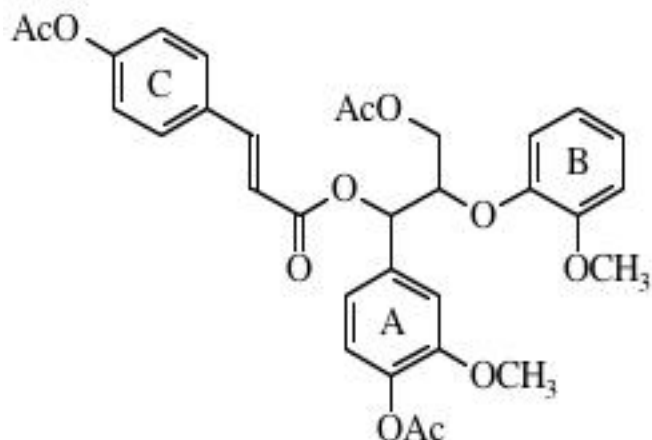
**Notes:**

R. Helm RFH119D1  
47mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	64	20.46	67	20.30	71
Ac Me	20.75	57	20.62	48	20.39	77
Ac Me	21.09	60	20.95	48	20.79	68
OMe	55.82	55	56.24	60	55.61	74
OMe	55.94	64	56.31	54	55.74	74
γ	62.73	34	63.16	38	62.06	29
α	74.12	45	74.97	44	73.50	39
β	80.25	40	80.43	46	78.57	35
A2	111.88	45	112.82	42	111.73	42
B2	112.68	51	113.82	48	112.91	55
C β	117.66	47	118.65	40	117.55	48
B5	119.58	49	119.87	48	118.04	48
A6	119.66	47	120.45	46	119.31	39
B6	121.02	53	121.67	48	120.68	45
C3	122.15	91	123.20	100	122.31	100
C5	122.15	91	123.20	100	122.31	100
A5	122.60	43	123.38	44	122.52	42
B1	123.63	47	124.06	46	122.89	45
C2	129.31	100	130.25	92	129.65	97
C6	129.31	100	130.25	92	129.65	97
C1	131.91	34	132.79	35	131.49	48
A1	135.38	43	136.60	38	135.32	48
A4	139.78	34	140.82	27	139.12	48
C α	144.58	43	145.09	46	144.32	42
B4	147.18	36	148.38	25	146.76	52
B3	151.01	36	152.04	29	150.34	39
A3	151.15	38	152.11	29	150.57	35
C4	152.28	36	153.54	29	152.10	45
C γ	165.33	40	165.76	29	164.86	52
Ac C=O	168.74	32	168.85	29	168.32	55
Ac C=O	168.99	32	169.36	33	168.82	52
Ac C=O	170.72	36	170.71	31	169.95	55

Compound Number 78

<sup>13</sup>C



*threo*

3-(4-Acetoxyphenyl)acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.28	s	
Ac Me	2.30	s	
OMe	3.77	s	
OMe	3.82	s	
γ1	4.14	dd	11.9, 5.8
γ2	4.36	dd	11.9, 4.4
β	4.72	m	
α	6.23	d	6.4
C β	6.37	d	16.0
C2.6	7.12	m	8.6
C3.5	7.49	m	8.6
C α	7.55	d	16.0

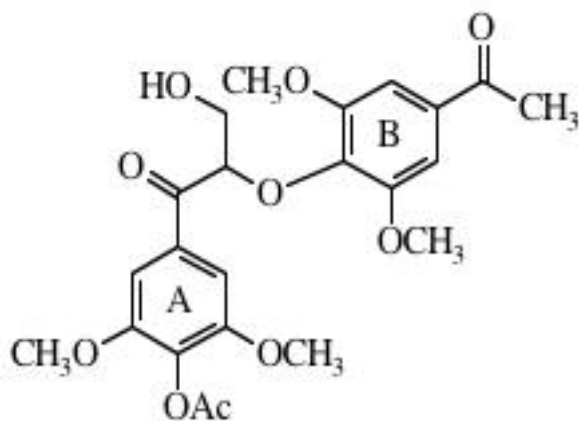
**Notes:**

R. Helm RFH119D2  
44mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	56	20.44	44	20.29	78
Ac Me	20.72	56	20.60	34	20.38	74
Ac Me	21.10	51	20.95	47	20.78	63
OMe	55.77	59	56.17	59	55.53	85
OMe	55.97	59	56.31	51	55.80	74
γ	63.26	36	63.69	30	62.58	33
α	74.96	46	75.78	40	74.61	41
β	80.52	39	80.86	44	79.18	37
A2	111.71	43	112.73	34	111.71	41
B2	112.47	51	113.68	38	112.71	56
C β	117.78	49	118.73	43	117.56	56
B5	118.91	46	119.33	42	117.63	52
A6	119.49	43	120.27	45	119.36	37
B6	120.96	54	121.62	38	120.62	52
C3	122.14	90	123.16	100	122.28	100
C5	122.14	90	123.16	100	122.28	100
A5	122.84	38	123.56	38	122.57	52
B1	123.30	46	123.75	34	122.69	48
C2	129.26	100	130.15	69	129.56	93
C6	129.26	100	132.78	26	129.56	93
C1	131.96	39	132.78	26	131.50	56
A1	135.41	36	136.68	29	135.44	48
A4	139.94	38	140.94	23	139.25	52
C α	144.34	43	144.86	29	144.10	44
B4	148.08	38	149.10	26	147.56	59
B3	150.89	34	151.87	21	150.17	56
A3	151.14	36	152.21	21	150.69	44
C4	152.23	30	153.47	29	152.04	44
C γ	165.46	33	165.84	14	165.03	52
Ac C=O	168.70	30	168.77	19	168.27	37
Ac C=O	169.02	33	169.32	14	168.81	44
Ac C=O	170.56	30	170.62	22	169.90	48

Compound Number 79

<sup>13</sup>C



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(4-acetyl-2,6-dimethoxy phenoxy)-3-hydroxypropan-1-one

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.35	s	
B β	2.58	s	
A3,5 OMe	3.81	s	
B3,5 OMe	3.86	s	
β	5.22	dd	7.2, 3.3
A2,6	7.36	s	
B2,6	7.21	s	

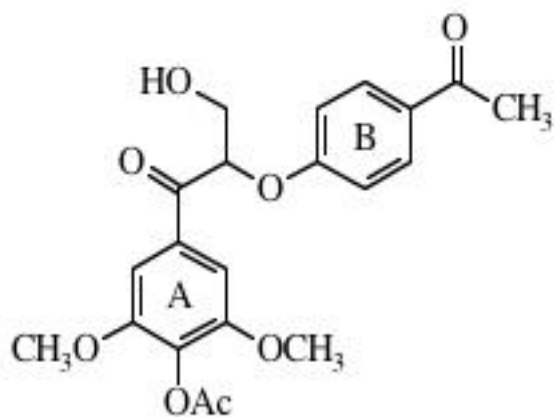
**Notes:**

SR III - 39  
45mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	49	20.22	50	20.06	54
B β	26.41	57	26.54	50	26.48	53
OMe	56.24	100	56.56	82	56.01	100
OMe	56.24	100	56.56	82	56.01	100
OMe	56.39	89	56.70	100	56.18	89
OMe	56.39	89	56.70	100	56.18	89
γ	63.36	33	63.67	32	62.39	37
β	87.06	36	86.08	39	83.67	32
A2	105.72	94	106.52	84	105.44	67
A6	105.72	94	106.52	84	105.44	67
B2	105.75	76	106.62	90	105.85	70
B6	105.75	76	106.62	90	105.85	70
A1	133.17	27	133.66	27	131.79	39
A4	133.27	48	133.80	11	132.05	25
B1	133.27	48	134.87	23	133.69	37
B4	140.52	21	141.29	16	140.22	28
A3	152.33	68	153.21	94	151.62	68
A5	152.33	68	153.21	94	151.62	68
B3	152.36	70	153.21	94	151.71	79
B5	152.36	70	153.21	94	151.71	79
Ac C=O	168.05	27	168.15	21	167.60	33
B α	194.74	29	195.71	23	195.27	35
α	196.50	24	196.65	21	196.51	35

Compound Number 80

<sup>13</sup>C



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(4-acetylphenoxy)-3-hydroxypropan-1-one

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.34	s	
B β	2.51	s	
A3,5 OMe	3.82	s	
γ	4.19	m	
β	5.60	dd	5.8, 4.2
A2,6	7.32	s	
B3,5	6.90	m	8.9
B2,6	7.87	m	8.9

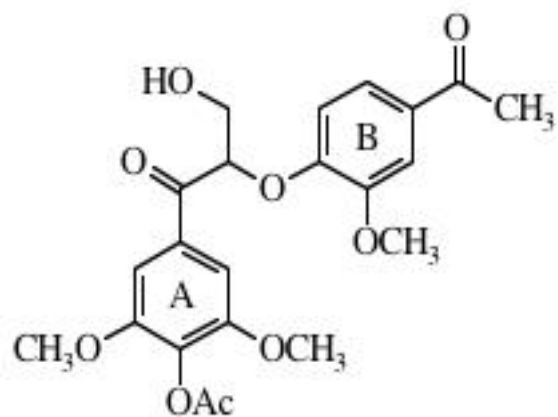
**Notes:**

SR III - 37  
40mg  
B2,6 and A1 shifts changes places in DMSO

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.40	49	20.21	46	20.05	51
B β	26.33	56	26.34	50	26.28	53
OMe	56.36	100	56.76	100	56.31	100
OMe	56.36	100	56.76	100	56.31	100
γ	63.32	38	63.94	37	62.41	29
β	81.33	49	82.26	40	80.64	32
A2	105.67	89	106.40	90	105.42	64
A6	105.67	89	106.40	90	105.42	64
B3	114.83	85	115.68	96	114.78	73
B5	114.83	85	115.68	96	114.78	73
B2	130.78	92	131.20	87	130.36	66
B6	130.78	92	131.20	87	130.36	66
A1	131.38	33	131.80	23	130.19	37
B1	132.25	31	133.97	29	132.74	34
A4	133.87	18	134.34	12	132.55	24
A3	152.55	60	153.47	46	151.98	64
A5	152.55	60	153.47	46	151.98	64
B4	161.00	33	162.44	27	161.22	41
Ac C=O	168.06	24	168.11	19	167.62	34
B α	194.60	29	195.47	19	194.76	34
α	196.64	31	196.21	17	196.08	31

Compound Number 81

<sup>13</sup>C



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(4-acetoxy-2-methoxyphenoxy)-3-hydroxypropan-1-one

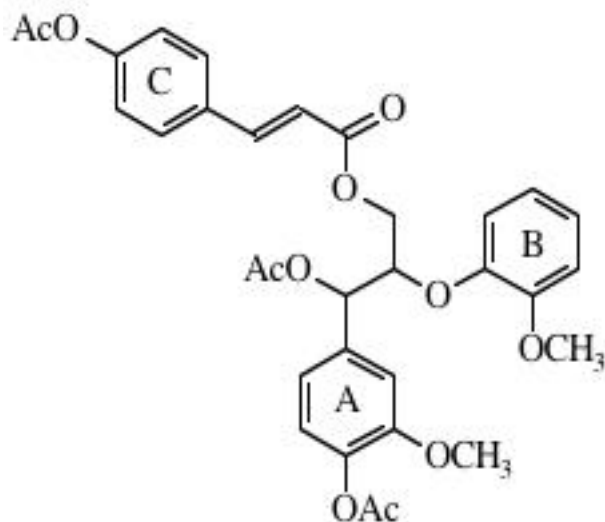
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.34	s	
B β	2.53	s	
B3 OMe	3.89	s	
A3,5 OMe	3.85	s	
γ	4.17	d	5.1
β	5.53	t	5.1
A2,6	7.38	s	
B2	7.53	d	2.0
B5	6.82	d	8.4
B6	7.45	dd	8.4, 2.0

**Notes:**

SR III - 38  
17mg  
B1 and A4 switch places in DMSO A4 has very low intensity and is easy to follow

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.39	38	20.21	45	20.05	38
B β	26.23	67	26.30	55	26.23	71
B OMe	55.91	56	56.28	45	55.55	41
A OMe	56.32	59	56.69	100	56.22	100
A OMe	56.32	59	56.69	100	56.22	100
γ	63.47	27	63.91	42	62.32	32
β	83.63	38	83.76	50	81.51	46
A2	105.80	100	106.56	92	105.45	66
A6	105.80	100	106.56	92	105.45	66
B2	111.17	40	112.34	45	111.05	46
B5	114.89	33	114.72	45	113.02	56
B6	123.01	41	123.46	53	122.65	41
A1	132.23	35	132.37	21	130.46	47
B1	132.38	37	134.04	21	132.75	51
A4	133.75	16	134.22	11	132.46	21
B3	149.76	33	150.40	21	148.67	47
B4	150.76	16	152.27	21	150.96	50
A3	152.47	57	153.35	45	151.87	54
A5	152.47	57	153.35	45	151.87	54
Ac C=O	168.00	16	168.08	24	167.57	24
B α	194.85	17	195.94	24	195.02	50
α	196.57	21	196.27	21	196.14	41

**Compound Number 82**
<sup>13</sup>C

*threo*
**4-Acetylcinnamic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester**
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.07	s	
Ac Me	2.28	s	
Ac Me	2.30	s	
OMe	3.79	s	
OMe	3.80	s	
γ1	4.23	dd	11.9, 5.8
γ2	4.42	dd	11.9, 4.2
β	4.72	m	
α	6.19	d	6.3
C β	6.34	d	16.0
C2,6	7.12	m	8.6
C3,5	7.51	m	8.6
C α	7.55	d	16.0

**Notes:**

R. Helm RFH87D1

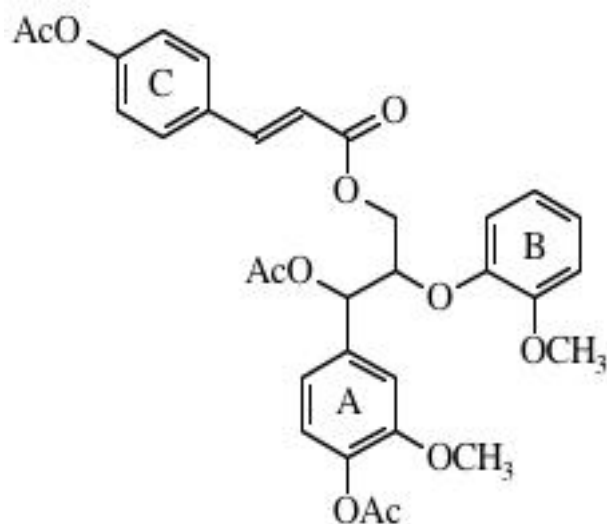
36.6mg

129.85 and 129.57 for Bα and C2,6 change places in DMSO see 1019

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.63	38	20.46	38	20.29	45
Ac Me	21.07	55	20.95	89	20.67	52
Ac Me	21.10	60	20.95	89	20.78	57
OMe	55.81	49	56.21	52	55.55	67
OMe	55.95	44	56.28	52	55.75	52
γ	63.39	28	63.93	33	62.86	21
α	74.62	36	75.53	21	74.43	33
β	80.50	36	80.88	41	79.25	33
A2	111.78	33	112.71	38	111.70	31
B2	112.55	42	113.75	42	112.76	45
C β	117.58	39	118.56	41	117.51	40
B5	118.98	47	119.36	47	117.59	50
A6	119.56	35	120.30	34	119.38	29
B6	121.01	43	121.68	51	120.66	48
C3	122.13	100	123.17	100	122.29	100
C5	122.13	100	123.17	100	122.29	100
A5	122.84	36	123.56	36	122.59	40
B1	123.35	41	123.78	48	129.85	17
C2	129.30	83	130.20	82	129.57	90
C6	129.30	83	130.20	82	129.57	90
C1	131.95	35	132.78	29	131.49	43
A1	135.36	34	136.67	30	135.43	40
A4	139.94	32	140.90	18	139.21	40
C α	144.22	44	144.71	42	143.87	40
B4	148.00	30	149.10	27	147.59	50
B3	150.92	30	151.88	21	150.18	43
A3	151.14	28	152.20	23	150.67	36
C4	152.23	27	153.48	27	152.04	40
C γ	166.28	32	166.56	30	165.66	40
Ac C=O	168.70	25	168.81	22	168.28	33
Ac C=O	169.02	32	169.35	36	168.83	45
Ac C=O	169.68	25	169.96	22	169.32	40

Compound Number 83

<sup>13</sup>C



*erythro*

4-Acetoxy-cinnamic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

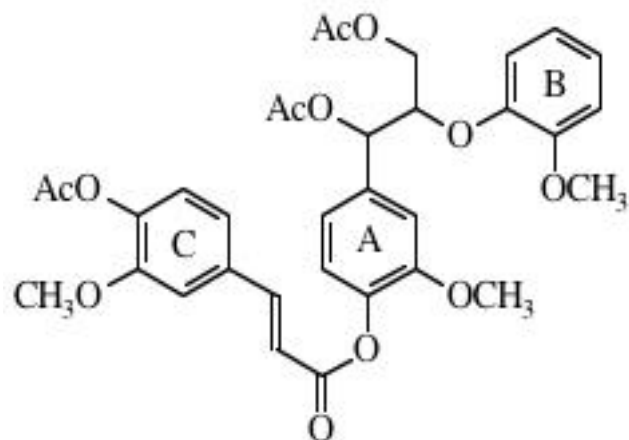
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.10	s	
Ac Me	2.29	s	
Ac Me	2.30	s	
OMe	3.76	s	
OMe	3.81	s	
γ1	4.47	dd	11.9, 4.2
γ2	4.75	dd	11.9, 5.6
β	4.75	m	
α	6.14	d	5.4
C β	6.35	d	16.0
C α	7.56	d	16.0

Notes:

Rich Helm RFH87D2  
38.6mg  
see 1020

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.65	50	20.47	40	20.29	65
Ac Me	21.03	50	20.90	42	20.63	58
Ac Me	21.10	51	20.95	50	20.78	62
OMe	55.80	49	56.21	50	55.58	69
OMe	55.94	54	56.28	48	55.70	58
γ	62.93	32	63.34	34	62.26	23
α	74.01	39	74.73	42	73.28	35
β	80.43	44	80.54	36	78.58	31
A2	112.04	39	112.78	36	111.71	42
B2	112.64	40	113.79	46	112.89	46
C β	117.67	46	118.54	44	117.46	46
B5	119.73	71	120.01	44	118.09	46
A6	119.73	71	120.44	44	119.39	35
B6	121.01	44	121.64	48	120.65	46
C3	122.11	100	123.17	100	122.29	100
C5	122.11	100	123.17	100	122.29	100
A5	122.59	42	123.35	42	122.48	42
B1	123.66	46	124.09	44	122.89	46
C2	129.30	90	130.18	98	129.54	96
C6	129.30	90	130.18	98	129.54	96
C1	132.00	31	132.77	46	131.46	35
A1	135.53	39	136.71	30	135.36	46
A4	139.80	33	140.78	34	139.08	46
C α	144.19	43	144.68	38	143.85	46
B4	147.25	29	148.31	22	146.69	46
B3	151.00	35	152.10	46	150.35	42
A3	151.19	33	152.10	46	150.55	50
C4	152.21	24	153.48	22	152.02	38
C γ	166.42	33	166.57	30	165.67	46
Ac C=O	168.74	25	168.84	24	168.32	46
Ac C=O	169.02	31	169.35	26	168.84	50
Ac C=O	169.50	35	169.87	24	169.21	46

**Compound Number 84**
<sup>13</sup>C

*erythro*
**3-(4-Acetoxy-3-methoxyphenyl)acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy)propyl]phenyl ester**
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.03	s	
Ac Me	2.10	s	
Ac Me	2.32	s	
OMe	3.79	s	
OMe	3.82	s	
OMe	3.86	s	
γ1	4.27	dd	11.9, 4.0
γ2	4.47	dd	11.9, 5.6
β	4.69	m	
α	6.11	d	5.4
C β	6.60	d	15.9
C α	7.80	d	15.9

**Notes:**

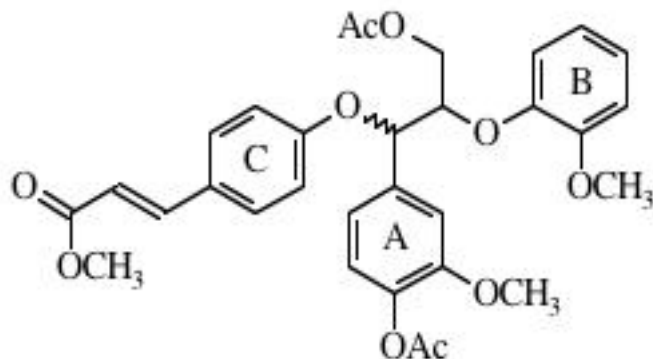
R. Helm RFH9D  
39.4mg  
see 1026

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	77	20.47	92	20.31	81
Ac Me	20.76	68	20.61	79	20.37	88
Ac Me	21.01	70	20.87	74	20.60	81
OMe	55.81	85	56.21	100	55.58	100
OMe	55.94	79	56.28	89	55.72	75
OMe	56.00	100	56.44	89	55.98	100
γ	62.59	57	63.00	68	61.89	44
α	73.84	57	74.61	74	73.17	50
β	80.22	57	80.32	71	78.40	44
C2	111.41	68	112.60	74	111.69	44
A2	112.04	57	112.79	61	112.13	56
B2	112.68	64	113.81	87	112.90	69
C β	117.16	57	118.04	71	117.09	50
B5	119.55	68	119.82	84	117.96	69
A6	119.75	55	120.45	71	119.36	44
B6	121.01	64	121.63	95	120.64	75
C6	121.54	68	122.47	79	121.90	56
A5	122.67	55	123.42	66	122.54	44
B1	123.33	68	124.04	84	122.87	56
C5	123.63	60	124.16	82	123.18	62
C1	133.17	49	134.02	63	132.77	50
A1	135.48	45	136.73	50	135.40	50
A4	139.77	40	140.70	39	139.03	50
C4	141.78	40	142.96	34	141.30	50
C α	145.85	57	146.39	66	145.79	50
B4	147.18	47	148.26	39	146.63	69
B3	151.10	57	152.04	50	150.32	62
A3	151.14	51	152.17	55	150.63	62
C3	151.49	53	152.73	61	151.17	62
C γ	164.57	42	164.96	50	164.22	50
Ac C=O	168.64	51	168.74	58	168.21	56
Ac C=O	169.50	40	169.86	50	169.20	56
Ac C=O	170.74	38	170.70	42	169.96	69



Compound Number 85

<sup>13</sup>C



3-{4-[3-Acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propoxy]phenyl}acrylic acid methyl ester

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.95	s	
Ac Me	2.27	s	
OMe	3.71	s	
OMe	3.76	s	
OMe	3.77	s	
γ	4.61	m	
β	4.46	m	
α	5.51	d	5.0
C β	6.27	d	16.0
C3,5	6.88	m	8.7
C2,6	7.39	m	8.7
C α	7.59	d	16.0

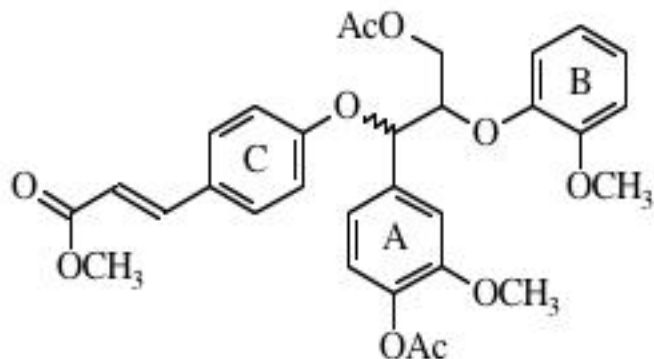
**Notes:**

R. Helm RFH111D1  
39.0 mg  
Isomer of 86

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	54	20.45	55	20.29	77
Ac Me	20.72	51	20.60	48	20.39	71
C γ OMe	51.54	49	51.52	52	51.19	71
OMe	55.72	56	56.17	61	55.53	87
OMe	55.96	52	56.27	61	55.70	81
γ	62.79	41	63.18	42	62.20	39
α	78.84	44	79.69	52	77.75	45
β	82.13	43	81.73	48	79.67	48
A2	110.95	47	112.62	48	111.97	45
B2	112.61	48	113.79	55	112.85	61
C β	115.75	48	116.52	52	115.50	52
C3	116.22	100	117.18	100	116.08	94
C5	116.22	100	117.18	100	116.08	94
B5	119.05	44	119.93	55	117.78	58
A6	119.92	54	120.27	45	119.39	45
B6	121.05	48	121.63	55	120.62	61
A5	122.86	49	123.50	52	122.52	45
B1	123.75	44	123.99	48	122.69	45
C1	127.82	47	128.60	35	127.21	58
C2	129.63	95	130.56	94	129.96	100
C6	129.63	95	130.56	94	129.96	100
A1	136.23	46	137.03	42	135.78	55
A4	139.65	32	140.73	26	139.00	58
C α	144.26	44	144.77	55	143.99	52
B4	147.06	34	148.41	29	146.95	61
B3	151.23	35	152.04	29	150.26	65
A3	151.32	34	152.26	32	150.58	58
C4	159.48	34	160.44	32	158.88	61
A γ C=O	167.59	32	167.59	29	166.74	65
A4 C=O	168.70	30	168.78	29	168.24	42
C γ	170.74	39	170.69	32	169.98	65

Compound Number 86

<sup>13</sup>C



3-{4-[3-Acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propoxy]phenyl}acrylic acid methyl ester

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.99	s	
Ac Me	2.28	s	
C γ OMe	3.75	s	
OMe	3.77	s	
OMe	3.79	s	
γ1	4.13	dd	11.8, 5.9
γ2	4.42	dd	11.7, 4.3
β	4.68	m	
α	5.51	d	5.3
C β	6.27	d	16.0
C2,6	7.37	m	8.7
C α	7.59	d	16.0

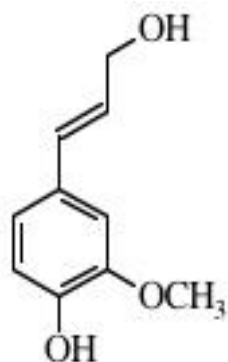
**Notes:**

Rich Helm RFH111D2  
35mg  
Isomer of 85

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	62	20.45	50	20.28	92
Ac Me	20.72	55	20.59	50	20.36	84
C γ OMe	51.53	51	51.52	55	51.17	72
OMe	55.69	55	56.14	50	55.45	92
OMe	55.96	59	56.30	52	55.74	80
γ	63.32	37	63.70	36	62.55	36
α	79.79	43	80.57	43	78.99	44
β	81.51	43	81.71	48	79.91	44
A2	111.00	45	112.61	48	111.77	44
B2	112.43	53	113.68	52	112.70	60
C β	115.68	51	116.43	40	115.36	52
C3	116.25	99	117.12	95	116.02	100
C5	116.25	99	117.12	95	116.02	100
B5	119.13	46	119.33	48	117.27	56
A6	119.23	50	120.27	48	119.42	44
B6	120.95	55	121.61	45	120.58	64
A5	122.93	46	123.67	64	122.35	44
B1	123.40	49	123.67	64	122.70	44
C1	127.72	38	128.47	43	127.02	60
C2	129.58	100	130.52	100	129.90	100
C6	128.58	100	130.52	43	129.90	100
A1	135.56	42	136.80	43	135.66	56
A4	139.86	29	140.88	26	139.12	52
C α	144.28	50	144.80	48	144.02	52
B4	148.03	33	149.21	29	147.68	56
B3	150.94	29	151.85	29	150.07	56
A3	151.42	33	152.37	26	150.75	52
C4	159.50	39	160.59	31	159.19	60
C γ C=O	167.60	39	167.60	29	166.74	64
A4 C=O	168.64	28	168.76	29	168.21	52
A γ	170.50	33	170.62	24	169.91	60

Compound Number 87

<sup>13</sup>C



*trans*

Coniferyl alcohol  
4-hydroxy-3-methoxy cinnamyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.88	100	56.20	100	55.47	100
γ	63.71	87	63.42	80	61.63	86
2	108.52	80	110.06	76	109.66	84
5	114.57	93	115.76	83	115.36	86
6	120.25	87	120.60	91	119.30	86
β	126.22	90	128.07	78	127.38	91
1	129.30	45	130.26	41	128.41	67
α	131.24	82	130.45	72	128.87	81
4	145.63	46	147.14	41	146.06	67
3	146.75	38	148.41	30	147.60	63

<sup>1</sup>H (acetone)

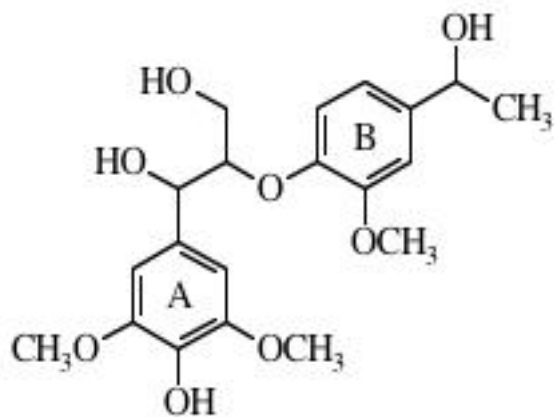
Atom	H Shifts	Mult	J
γ OH	3.78	t	5.6
OMe	3.86	s	
γ's	4.18	td	5.5, 1.5
β	6.22	dt	15.9, 5.5
α	6.49	dt	15.9, 15
5	6.76	d	8.1
6	6.84	dd	8.1, 1.9
2	7.04	d	1.9
4 OH	7.63	s	

**Notes:**

Aldrich  
30mg  
Proton data from 360 MHz spectrum in acetone..S.Q.

Compound Number 88

<sup>13</sup>C



*threo*

1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-[4-(1-hydroxyethyl)-2-methoxyphenoxy]propane-1,3-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B β	1.38	d	6.4
B OMe	3.87	s	
A3,5 OMe	3.80	s	
α OH	4.50	d	3.9
A2,6	6.77	s	

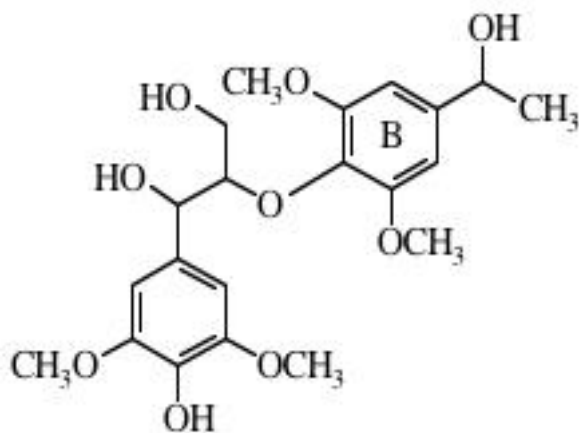
**Notes:**

S Ralph SRIII-43  
30mg Small amount of 4 Ac present.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.24	37	26.23	47	25.84	70
B OMe	55.87	47	56.27	59	55.44	69
A OMe	56.33	100	56.59	100	55.73	100
A OMe	56.33	100	56.59	100	55.73	100
γ	61.04	28	61.94	34	59.99	26
B α	69.95	48	69.73	54	67.80	63
α	74.12	33	74.05	46	70.87	28
β	89.03	30	88.50	32	84.39	21
A2	103.79	66	105.36	95	104.06	53
A6	103.79	66	105.36	95	104.06	53
B2	109.30	36	110.58	39	109.65	27
B5	118.40	35	118.65	44	115.29	27
B6	120.27	22	119.45	34	117.20	36
A1	130.71	28	132.80	22	131.93	34
A4	134.56	25	136.12	20	134.24	29
B1	142.02	29	142.85	6	140.36	31
B4	146.66	25	148.27	29	146.73	33
A3	147.09	52	148.38	43	147.30	73
A5	147.09	52	148.38	43	147.30	73
B3	150.99	18	151.38	21	149.23	37

Compound Number 89

<sup>13</sup>C



*threo*

1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-[4-(1-hydroxyethyl)-2,6-dimethoxyphenoxy]propane-1,3-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B β	1.39	d	6.4
A3,5 OMe	3.80	s	
B3,5 OMe	3.89	s	
B α	4.81	m	
α	4.97	dd	7.3, 2.9
B2,5	6.77	s	
A2,6	6.76	s	
γ 2	3.31	m	
B α OH	4.27	d	4.1
α OH	4.44	d	2.9

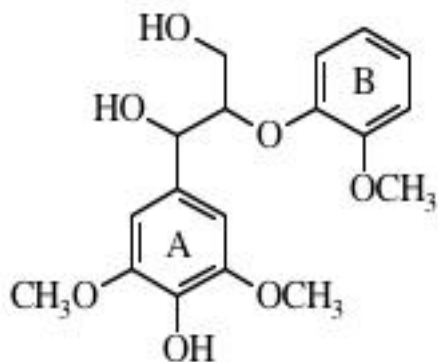
**Notes:**

S Ralph SR111-44  
30mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.43	37	26.27	45	25.84	28
OMe	56.12	94	56.50	100	55.80	100
OMe	56.12	94	56.50	100	55.80	100
OMe	56.31	100	56.57	95	55.80	100
OMe	56.31	100	56.57	95	55.80	100
γ	60.48	31	61.41	29	60.15	12
B α	70.21	43	69.98	41	68.09	26
α	74.34	37	74.22	36	71.54	16
β	88.97	37	89.69	36	87.11	16
B2	102.27	75	103.41	87	102.49	32
B6	102.27	75	103.41	87	102.49	32
A2	104.04	70	105.46	72	104.14	30
A6	104.04	70	105.46	72	104.14	30
A1	130.99	33	132.60	25	131.97	17
B1	134.10	21	135.54	12	134.22	15
A4	134.46	31	136.11	21	134.50	17
B4	142.94	32	144.61	26	142.91	17
A3	147.02	56	148.30	36	147.25	36
A5	147.02	56	148.30	36	147.25	36
B3	152.88	56	153.58	42	152.14	35
B5	152.88	56	153.58	42	152.14	35

Compound Number 90

<sup>13</sup>C



*threo*

Syringylglycerol- $\beta$ -guaiacyl ether

□ 1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-(2-methoxyphenoxy) propane  
-1,3-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B OMe	3.86	s	
A3,5 OMe	3.79	s	
$\alpha$	4.88	dd	6.0, 3.7
$\beta$	4.22	m	
$\alpha$ OH	4.49	d	3.7
A2,6	6.86	s	

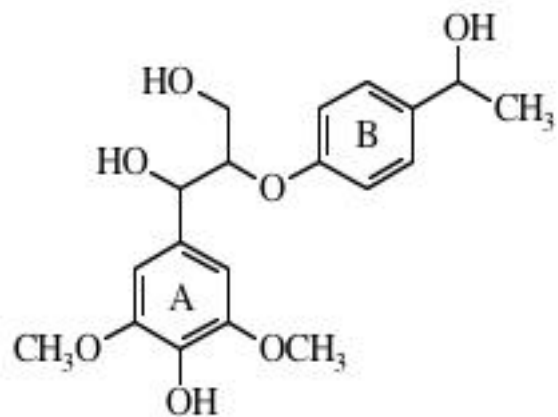
**Notes:**

S. Ralph SRIII-45  
30mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	55.88	56	56.24	62	55.45	75
A OMe	56.32	100	56.54	100	55.72	100
A OMe	56.32	100	56.54	100	55.72	100
$\gamma$	61.02	37	61.89	40	60.01	18
$\alpha$	74.16	39	73.97	40	70.88	36
$\beta$	89.22	34	88.19	46	84.03	32
A2	103.81	64	105.28	74	104.07	59
A6	103.81	64	105.28	74	104.07	59
B2	112.16	50	113.27	39	112.38	51
B5	120.86	40	119.66	4	115.52	33
B6	121.67	53	121.91	52	120.58	51
B1	124.17	40	123.30	56	120.90	37
A1	130.71	24	132.72	23	131.89	39
A4	134.57	19	136.07	16	134.26	30
A3	147.10	49	148.34	36	147.31	72
A5	147.10	49	148.34	36	147.31	72
B4	147.58	17	149.60	18	148.18	26
B3	151.22	23	151.65	15	149.55	33

Compound Number 91

<sup>13</sup>C



1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-[4-(1-hydroxyethyl)phenoxy]propane-1,3-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B β	1.35	d	6.4
A3,5 OMe	3.79	s	
A2,6	6.77	s	
B2,6	7.23	m	8.6

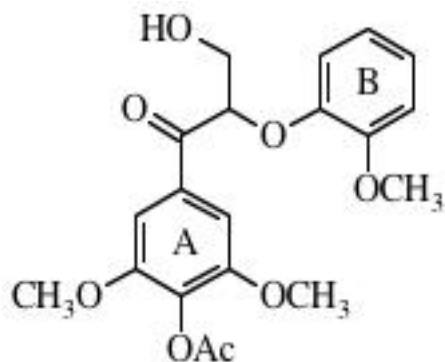
**Notes:**

S. Ralph SRIII-46  
20mg contains 4-AC impurity.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.07	39	26.17	58	25.81	88
A OMe	56.34	<b>100</b>	56.58	94	55.82	<b>100</b>
A OMe	56.34	100	56.58	94	55.82	100
γ	61.14	30	61.73	32	60.01	27
B α	69.75	42	69.50	58	67.57	73
α	73.85	28	73.54	34	71.09	33
β	82.97	24	84.14	32	83.01	33
A2	103.70	52	105.27	64	104.12	58
A6	103.70	52	105.27	64	104.12	58
B3	116.34	64	116.64	<b>100</b>	115.34	100
B5	116.34	64	116.64	100	115.34	100
B2	126.84	84	127.15	90	126.13	85
B6	126.84	84	127.15	90	126.13	85
A1	130.90	23	133.23	26	132.31	39
A4	134.56	23	136.00	14	134.31	30
B1	139.33	23	140.47	20	139.21	39
A3	147.07	44	148.32	44	147.36	76
A5	147.07	44	148.32	44	147.36	76
B4	157.42	19	158.98	18	157.69	42

Compound Number 92

<sup>13</sup>C



1-(4-acetoxy-3,5-dimethoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy)propan-1-one

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.34	s	
B OMe	3.82	s	
A3,5 OMe	3.83	s	
γ	4.09	d	5.2
β	5.38	t	5.2
A2,6	7.36	s	

**Notes:**

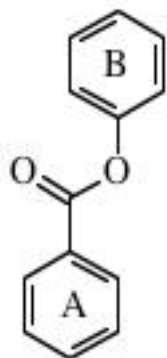
S. Ralph SR111-40  
30mg \*A1 + A4 switch around in CDCl3

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	54	20.21	44	20.04	65
B OMe	55.73	54	56.07	49	55.39	60
A OMe	56.29	100	56.60	100	56.12	100
A OMe	56.29	100	56.60	100	56.12	100
γ	63.39	40	63.88	21	62.35	38
β	84.41	47	84.02	36	81.59	32
A2	105.84	87	106.50	82	105.38	68
A6	105.84	87	106.50	82	105.38	68
B2	112.33	49	113.57	41	112.64	38
B5	117.86	42	116.84	29	114.73	32
B6	121.23	50	121.57	53	120.49	48
B1	123.61	42	123.15	40	121.67	38
A4	133.42	12	133.93	7	132.25	20
A1	132.81	28	134.31	18	132.99	37
B4	146.71	23	148.17	16	146.73	35
B3	150.24	26	150.90	16	149.13	33
A3	152.32	48	153.19	34	151.75	77
A5	152.32	48	153.19	34	151.75	77
Ac C=O	168.06	20	168.10	17	167.58	32
α	195.72	22	196.70	20	195.86	35



Compound Number 93

<sup>13</sup>C



Phenyl benzoate  
Benzoic acid phenyl ester

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
A2,6	8.21	m	8.3

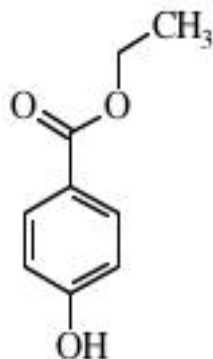
**Notes:**

Aldrich  
60mg  
A1 changes position in DMSO

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3	121.70	90	122.61	89	121.85	85
B5	121.70	90	122.61	89	121.85	85
B1	125.84	52	126.51	51	125.92	43
A2	128.54	100	129.47	100	128.88	100
A6	128.54	100	129.47	100	128.88	100
B2	129.45	100	130.15	96	129.50	100
B6	129.45	100	130.15	96	129.50	100
A1	129.57	15	130.42	19	128.94	25
A3	130.13	95	130.60	98	129.72	99
A5	130.13	95	130.60	98	129.72	99
A4	133.53	48	134.39	54	133.93	42
B4	150.96	12	151.99	14	150.62	27
α	165.11	9	165.32	9	164.51	15

Compound Number 94

<sup>13</sup>C



Ethyl 4-hydroxybenzoate  
ethyl 4-hydroxybenzoate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.30	46	14.63	47	14.24	53
CH2	61.13	44	60.84	42	60.04	44
3	115.34	100	115.92	100	115.27	91
5	115.34	100	115.92	100	115.27	91
1	122.13	21	122.69	10	120.61	20
2	131.94	90	132.30	90	131.35	100
6	131.94	90	132.30	90	131.35	100
4	160.74	26	162.44	22	161.93	40
α	167.45	17	166.49	10	165.56	21

<sup>1</sup>H (chloroform)

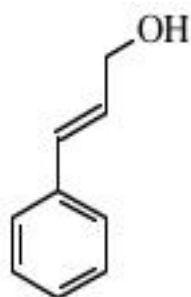
Atom	H Shifts	Mult	J
CH3	1.39	t	7.1
CH2	4.36	q	7.1
A3,5	6.91	m	8.8
A2,6	7.95	m	8.8

**Notes:**

Aldrich  
60mg

Compound Number 95

<sup>13</sup>C



*trans*

Cinnamyl alcohol

(E)-3-phenyl-2-propen-1-ol(E)-cinnamyl alcohol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ	4.25	dd	5.6, 1.1
β	6.30	dt	15.9, 5.6
α	6.54	dt	15.9, 1.1

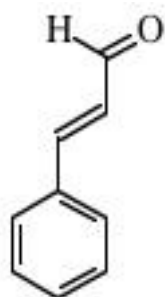
**Notes:**

Fluka  
60mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	63.39	41	63.12	52	61.50	42
2	126.40	72	126.98	100	126.05	88
6	126.40	72	126.98	100	126.05	88
β	127.57	41	127.93	51	127.08	48
3	128.52	100	129.25	95	128.49	100
5	128.52	100	129.25	95	128.49	100
4	128.52	100	129.90	42	128.37	40
α	130.86	34	130.90	49	130.72	47
1	136.66	13	138.08	14	136.87	18

Compound Number 96

<sup>13</sup>C



*trans*

Cinnamaldehyde  
(E)-3-phenyl-2-propenal(E)-cinnamaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
2	128.45	100	129.30	91	128.69	100
6	128.45	100	129.30	91	128.69	100
4	128.45	100	129.40	48	128.50	48
3	129.04	92	129.81	100	129.02	96
5	129.04	92	129.81	100	129.02	96
β	131.20	41	131.78	55	131.13	48
1	133.96	12	135.19	12	134.07	23
α	152.66	21	153.19	32	153.00	35
γ	193.54	25	193.96	30	194.19	32

<sup>1</sup>H (chloroform)

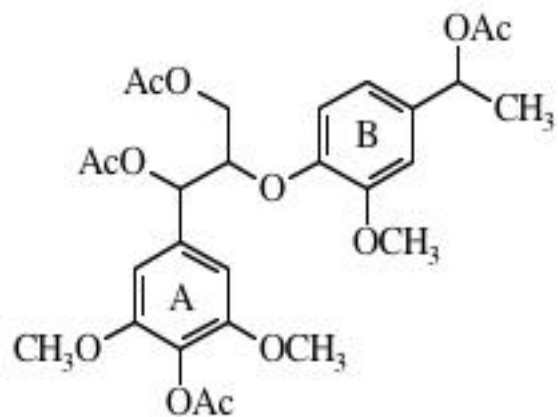
Atom	H Shifts	Mult	J
β	6.69	dd	16.0, 7.7
α	7.50	d	16.0
γ	9.68	d	7.7

**Notes:**

Fluka  
60mg

Compound Number 97

<sup>13</sup>C



*threo*

1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-[4-(1-acetoxyethyl)-2-methoxyphenoxy]

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.06	s	
Ac Me	2.07	s	
Ac Me	2.32	s	
B β	1.52	d	6.6
B OMe	3.83	s	
A3,5 OMe	3.81	s	
γ1	4.07	dd	11.8, 5.7
γ2	4.32	dd	11.8, 4.6
β	4.60	m	
B α	5.82	q	6.6
α	6.08	d	6.2
A2,6	6.67	s	

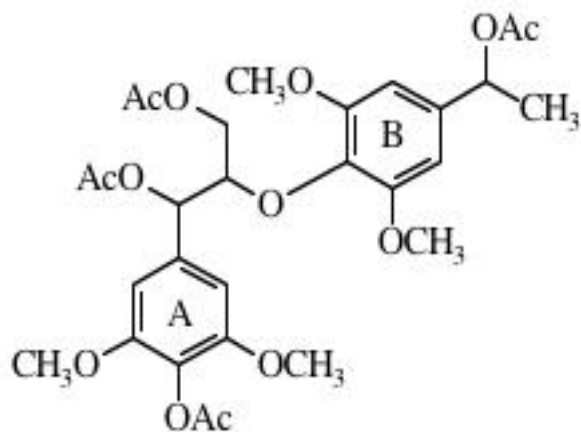
**Notes:**

S. Ralph SRIII-43  
40mg  
ca 90% threo

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	42	20.23	49	20.04	58
Ac Me	20.70	32	20.62	46	20.37	67
Ac Me	21.04	37	20.93	40	20.63	50
Ac Me	21.35	42	21.15	44	20.93	67
B β	22.08	34	22.46	40	21.87	42
B OMe	55.88	50	56.29	59	55.61	54
A OMe	56.21	100	56.52	100	55.96	100
A OMe	56.21	100	56.52	100	55.96	100
γ	62.98	21	63.58	37	62.42	25
B α	72.06	26	72.40	48	71.35	42
α	74.65	24	75.64	41	74.54	29
β	80.12	24	80.68	33	79.08	29
A2	104.09	55	104.93	81	103.91	33
A6	104.09	55	104.93	81	103.91	33
B2	110.64	18	111.71	32	110.55	21
B5	118.22	24	118.71	30	117.03	33
B6	118.65	26	119.18	43	118.05	42
A4	128.83	18	129.65	10	127.78	21
A1	134.71	32	136.12	32	134.92	38
B1	136.72	26	137.72	24	136.00	33
B4	147.53	16	148.51	22	146.99	42
B3	150.58	32	151.52	25	149.82	42
A3	152.17	53	153.14	51	151.52	75
A5	152.17	53	153.14	51	151.52	75
A4 Ac C=O	168.47	26	168.40	21	167.88	33
α Ac C=O	169.66	18	169.96	19	169.32	33
B αAc C=O	170.27	24	170.17	17	169.52	38
γAc C=O	170.55	26	170.65	19	169.92	33

Compound Number 98

<sup>13</sup>C



*threo*

1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-[4-(1-acetoxyethyl)-2,6-dimethoxyphenoxy]propane

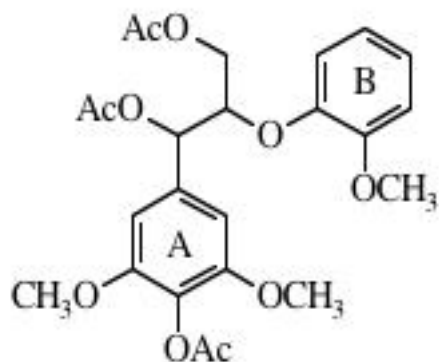
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.07	s	
Ac Me	2.08	s	
Ac Me	2.32	s	
B β	1.52	d	6.6
OMe	3.78	s	
OMe	3.80	s	
γ1	3.94	dd	11.8, 7.3
γ2	4.36	dd	11.8, 4.5
β	4.54	m	
B α	5.79	q	6.6
α	6.12	d	6.1
B2,6	6.55	s	
A2,6	6.70	s	

**Notes:**

S. Ralph SR111-44  
131mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	47	20.23	40	20.06	49
Ac Me	20.72	42	20.63	35	20.37	46
Ac Me	21.02	31	20.92	31	20.62	35
Ac Me	21.33	36	21.14	41	20.95	57
Bβ	22.25	31	22.56	29	22.02	32
OMe	56.02	96	56.36	91	55.78	100
OMe	56.02	96	56.36	91	55.78	100
OMe	56.21	100	56.45	100	55.98	95
OMe	56.21	100	56.45	100	55.98	95
γ	63.53	18	64.18	32	63.22	22
B α	72.35	25	72.68	35	71.72	37
α	75.61	31	76.62	26	75.73	18
β	80.64	35	81.44	33	80.27	23
B2	103.14	46	103.92	55	102.85	38
B6	103.14	46	103.92	55	102.85	38
A2	104.18	46	104.78	57	103.76	49
A6	104.18	46	104.78	57	103.76	49
A4	128.64	14	129.42	9	127.75	11
A1	135.46	28	136.61	29	135.39	32
B1	135.95	11	136.96	17	135.48	35
B4	137.57	32	138.68	26	137.40	35
A3	151.98	61	152.94	49	151.52	65
A5	151.98	61	152.94	49	151.52	65
B3	152.87	38	153.69	49	152.27	66
B5	152.87	38	153.69	49	152.27	66
A4 Ac C=O	168.49	19	168.37	20	167.93	29
α Ac C=O	169.70	15	169.80	22	169.27	35
B α Ac C=O	170.16	19	170.11	20	169.56	40
γ Ac C=O	170.50	25	170.56	19	169.95	40

**Compound Number 99**
<sup>13</sup>C

*threo*
**1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-(2-methoxyphenoxy)propane**
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.97	s	
Ac Me	2.02	s	
Ac Me	2.21	s	
A3,5 OMe	3.80	s	
OMe	3.81	s	
γ1	4.04	dd	11.9, 5.6
γ2	4.26	dd	11.9, 4.2
β	4.79	m	
α	6.08	d	6.5
A2,6	6.85	s	
B1	6.97	m	8.2, 8.1, 1.3
B2	6.99	m	8.2, 1.0
B5	7.04	m	8.0, 1.3
B6	6.87	m	8.0, 8.1, 1.0

**Notes:**

S. Ralph SRIII-45

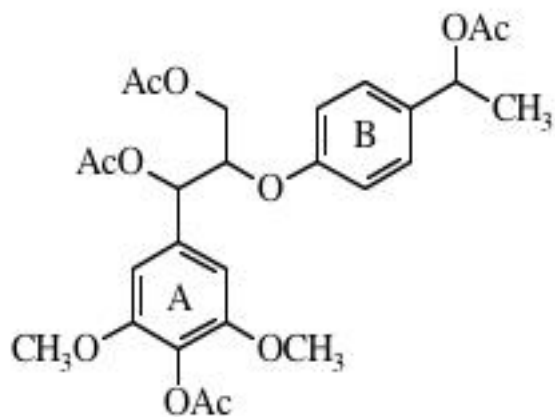
55mg ca 80% threo

\*CS assignments for overlapping 1H patterns A2,6 and B1,B2,B5 and B6 from deconvolution and simulation spectra, MacNuts, Acorn NMR Inc.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	48	20.24	56	20.05	68
Ac Me	20.71	36	20.62	48	20.39	50
Ac Me	21.05	40	20.94	44	20.65	47
B OMe	55.77	54	56.20	63	55.52	59
OMe	56.20	100	56.52	100	55.97	100
OMe	56.20	100	56.52	100	55.97	100
γ	63.08	32	63.60	43	62.48	26
α	74.77	35	75.67	43	74.58	35
b	80.23	36	80.64	48	79.00	35
A2	104.08	61	104.93	81	103.92	62
A6	104.08	61	104.93	81	103.92	62
B2	112.48	34	113.71	44	112.69	41
B5	118.61	40	119.04	43	117.31	41
B6	120.98	41	121.66	48	120.63	53
B1	123.28	42	123.68	44	122.49	35
A4	128.79	10	129.65	10	127.81	21
A1	134.80	31	136.18	27	134.99	41
B4	147.92	20	149.06	17	147.54	38
B3	150.76	20	151.75	21	150.06	35
A3	152.16	50	153.14	41	151.56	74
A5	152.16	50	153.14	41	151.56	74
A4 Ac C=O	168.47	21	168.41	29	167.89	29
α Ac C=O	169.68	20	169.97	17	169.34	26
γ Ac C=O	170.55	19	170.66	19	169.94	29

Compound Number 100

<sup>13</sup>C



*threo*

1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-[4-(1-acetoxyethyl)phenoxy] propane

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.99	s	
Ac Me	2.05	s	
Ac Me	2.05	s	
Ac Me	2.32	s	
B β	1.51	d	6.6
A3,5 OMe	3.80	s	
γ1	4.06	dd	11.8, 6.1
γ2	4.25	dd	11.8,-
β	4.69	m	
B α	5.83	q	6.6
α	6.03	d	6.3
A2,6	6.63	s	
B3,5	6.89	m	7.8
B2,6	7.28	m	7.8

**Notes:**

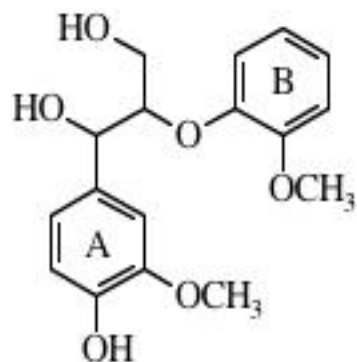
S. Ralph SRIII-46  
24mg  
CDCl3 spectrum poor

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.43	33	20.23	49	20.04	66
Ac Me	20.68	40	20.60	38	20.38	69
Ac Me	21.03	45	20.89	47	20.62	59
Ac Me	21.36	48	21.15	40	20.92	72
B β	22.01	36	22.36	36	21.76	50
OMe	56.25	100	56.58	89	56.01	100
OMe	56.25	100	56.58	89	56.01	100
γ	62.67	33	63.31	33	62.15	25
B α	71.85	45	72.19	40	71.12	22
α	74.24	21	75.45	36	74.32	28
β	78.17	26	79.23	22	77.60	25
A2	104.09	76	105.05	89	104.00	62
A6	104.09	76	105.05	89	104.00	62
B3	116.32	60	117.12	49	116.00	84
B5	116.32	60	117.12	49	116.00	84
B2	127.67	88	128.29	100	127.28	78
B6	127.67	88	128.29	100	127.28	78
A4	128.95	5	129.80	4	127.83	5
B1	134.35	31	135.98	27	134.66	56
A1	135.26	29	136.24	24	134.81	59
A3	152.28	52	153.25	47	151.57	72
A5	152.28	52	153.25	47	151.57	72
B4	158.02	19	159.20	18	157.68	34
A4 Ac C=O	168.44	21	168.39	22	167.86	28
α Ac C=O	169.69	24	170.02	20	169.37	38
B α Ac C=O	170.30	21	170.19	13	169.52	41
γ Ac C=O	170.56	24	170.68	20	169.94	31



Compound Number 101

<sup>13</sup>C



*erythro*

Guaiacylglycerol- $\beta$ -guaiacyl ether

1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propan-1,3-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.83	s	
OMe	3.84	s	
$\alpha$	4.95	d	4.8
$\beta$	4.16	m	

**Notes:**

J. Ralph JRB 178.3

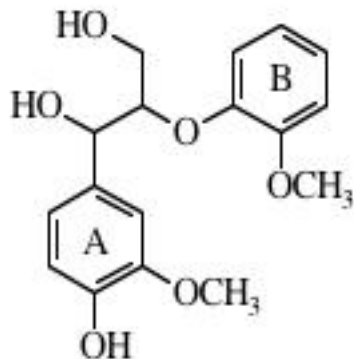
30mg

J. Ralph Holzforschung 42(1988) p273-5

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.86	82	56.20	97	55.35	100
OMe	55.94	100	56.27	100	55.52	84
$\gamma$	60.75	76	61.81	81	60.04	59
$\alpha$	72.78	76	73.82	81	71.60	72
$\beta$	87.02	75	86.72	100	83.67	66
A2	108.81	71	111.38	94	111.35	62
B2	112.19	75	113.50	81	112.60	69
A5	114.31	84	115.12	90	114.48	66
B5	119.07	73	119.70	90	115.86	59
A6	120.57	75	120.45	94	119.43	66
B6	121.59	90	121.85	100	120.56	78
B1	124.00	80	123.32	100	120.89	69
A1	131.95	51	134.23	55	133.15	69
A4	145.09	49	146.61	42	145.35	78
A3	146.64	45	147.93	39	146.86	72
B4	146.89	35	149.04	35	148.00	62
B3	151.40	39	151.96	35	149.68	56

Compound Number 102

<sup>13</sup>C



*threo*

Guaiacylglycerol- $\beta$ -guaiacyl ether

1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propane-1,3-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.86	s	
OMe	3.90	s	
$\alpha$	4.96	d	8.0
$\beta$	4.02	m	

**Notes:**

J. Ralph JRGV 135.X1

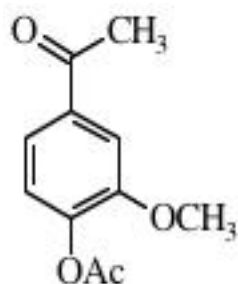
21mg

J. Ralph Holzforschung 42(1988) p.273-5

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.91	92	56.21	96	55.33	97
OMe	55.97	100	56.31	100	55.53	100
$\gamma$	61.06	72	61.90	75	60.02	59
$\alpha$	74.00	80	73.93	84	70.90	69
$\beta$	89.45	72	88.58	84	84.37	62
A2	109.46	86	111.41	96	110.96	66
B2	112.18	88	113.40	86	112.50	66
A5	114.35	88	115.21	78	114.57	62
B5	120.25	88	120.06	90	115.79	62
A6	120.98	75	120.57	88	118.92	62
B6	121.69	94	121.95	80	120.60	76
B1	124.21	85	123.44	88	120.96	69
A1	131.51	46	133.81	43	132.86	76
A4	145.59	48	146.82	39	145.33	79
A3	146.68	42	148.00	29	146.89	66
B4	147.63	35	149.70	31	148.32	59
B3	151.27	38	151.80	29	149.62	59

Compound Number 103

<sup>13</sup>C



Acetylated acetovanillone  
4-acetoxy-3-methoxyacetophenone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	65	20.46	64	20.29	83
β	26.49	81	26.63	84	26.62	88
OMe	56.05	100	56.37	97	55.88	100
2	111.51	97	112.44	97	111.62	77
6	121.94	88	122.38	93	121.56	83
5	122.80	95	123.77	100	123.02	84
1	135.96	37	136.93	30	135.62	51
4	143.87	26	144.80	21	143.21	35
3	151.41	33	152.40	24	150.92	41
Ac C=O	168.46	30	168.64	26	168.12	44
α	196.91	30	196.89	29	196.88	40

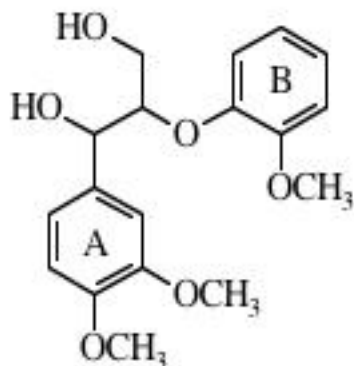
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.59	s	
β	2.33	s	
OMe	3.88	s	
2	7.59	d	1.9
5	7.12	d	8.1
6	7.54	dd	8.1, 1.9

**Notes:**

IPC  
45mg

Compound Number 104

<sup>13</sup>C*threo*Veratrylglycerol- $\beta$ -guaiacyl ether

1-(3,4-Dimethoxyphenyl)-2-(2-methoxyphenoxy)propane-1,3-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.82	s	
OMe	3.83	s	
OMe	3.84	s	
$\alpha$	4.96	d	5.0
$\beta$	4.15	m	

**Notes:**

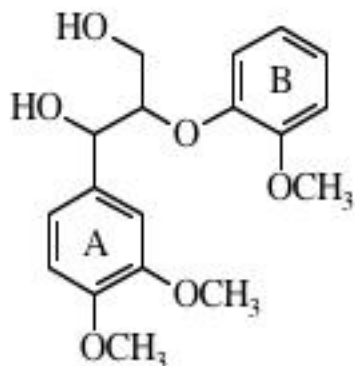
LL Landucci

75mg Shifts reported are for threo isomer-minor isomer of this mixture, see 105 also

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.84	76	56.03	100	55.22	72
OMe	55.88	100	56.11	97	55.42	82
OMe	55.88	100	56.27	94	55.52	100
$\gamma$	61.04	16	61.70	60	60.02	48
$\alpha$	73.77	16	73.64	74	70.77	18
$\beta$	88.82	14	87.92	28	84.26	20
A2	110.05	15	111.89	67	110.67	20
A5	111.07	45	112.29	74	111.13	53
B2	112.21	43	113.36	31	112.52	23
A6	119.55	15	120.03	72	115.84	23
B5	120.52	15	119.56	32	118.62	22
B6	121.61	19	121.83	34	120.56	32
B1	123.93	17	123.30	66	120.95	23
A1	132.38	12	135.01	16	134.47	22
B4	147.65	10	148.92	25	147.72	27
A4	148.83	12	149.67	15	147.98	43
A3	149.04	12	149.96	32	148.25	20
B3	151.07	11	151.61	10	149.67	23

Compound Number 105

<sup>13</sup>C



*erythro*

Veratrylglycerol-β-guaiacyl ether

1-(3,4-Dimethoxyphenyl)-2-(2-methoxyphenoxy)-propane-1,3-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.85	s	
OMe	3.85	s	
OMe	3.85	s	
α	4.99	d	4.8
β	4.17	m	
γ1	3.69	m	
γ2	3.92	m	
A2	6.90	m	
A6	6.99	m	
<u>acetone</u>			
OMe	3.76		
OMe	3.77		
OMe	3.81		
α	4.91		
β	4.29		
γ1	3.67		
γ2	3.81		
A2	7.11	d	2.1
A6	6.86	d	8.45

**Notes:**

LL Landucci  
30mg alpha OH proton 4.55 in acetone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.87	73	56.07	87	55.23	92
OMe	55.91	100	56.15	87	55.44	100
OMe	55.91	100	56.30	95	55.54	97
γ	60.81	46	61.79	30	60.03	61
α	72.75	50	73.75	36	71.54	69
β	87.10	50	86.58	74	83.62	67
A2	109.41	46	111.97	80	111.03	72
A5	111.08	50	112.35	84	111.14	75
B2	112.21	53	113.55	84	112.61	75
A6	118.49	50	120.06	100	115.95	72
B5	120.68	50	119.64	85	119.18	67
B6	121.58	48	121.86	87	120.56	81
B1	124.02	45	123.32	87	120.95	72
A1	132.70	37	135.50	31	134.79	69
B4	146.96	26	149.03	31	147.76	56
A4	148.48	26	149.63	31	147.99	61
A3	149.02	27	150.04	34	148.10	67
B3	151.47	26	151.96	31	149.72	53

Compound Number 106

<sup>13</sup>C



Erone

3-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propan-1-one

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.83	s	
OMe	3.87	s	
γ	4.08	d	5.1
β	5.43	t	5.1

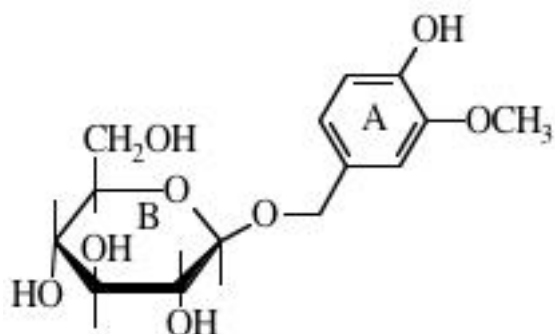
**Notes:**

S. Ralph  
45mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.82	100	56.20	97	55.46	96
OMe	56.02	96	56.24	100	55.50	100
γ	63.70	72	64.11	41	62.52	55
β	83.94	88	83.69	82	81.32	61
A2	110.88	87	112.48	73	111.71	56
B2	112.35	89	113.65	85	112.67	60
A5	114.21	87	115.50	82	114.48	57
B5	117.56	79	116.70	81	114.98	55
B6	121.18	92	121.57	88	120.48	66
B1	123.26	88	122.94	82	121.47	60
A6	124.16	88	124.66	86	123.51	54
A1	127.68	56	128.72	42	126.79	52
B4	146.91	55	148.29	36	146.94	56
A3	146.95	59	148.36	41	147.49	61
B3	150.12	42	150.86	27	149.13	54
A4	151.28	62	152.76	41	152.22	68
α	194.91	52	195.64	42	194.69	50

Compound Number 107

<sup>13</sup>C



Vanillyl-β-D-Glucoside

2-(4-Hydroxy-3-methoxybenzyloxy)-6-hydroxymethyl tetrahydropyran-3,4,5-triol

<sup>1</sup>H Not run

Atom	H Shifts	Mult	J

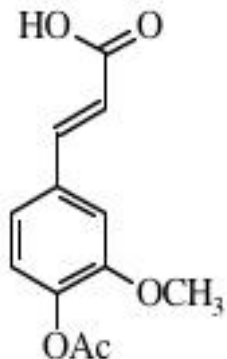
**Notes:**

M.Mozuch 88/71/1  
20mg not soluble in CDCl<sub>3</sub>

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.30	100	55.46	100
B6			63.00	76	61.09	57
B4			70.98	76	69.40	61
B2			71.74	90	70.09	86
B5			74.90	86	73.40	93
α			77.48	84	76.66	89
B3			78.02	88	76.82	86
B1			102.70	79	101.52	82
A2			112.81	88	112.29	82
A5			115.41	87	114.90	82
A6			121.77	87	120.50	79
A1			130.28	50	128.57	79
A3			147.00	46	145.80	75
A4			148.21	33	147.25	71

Compound Number 108

<sup>13</sup>C



Acetylated ferulic acid  
4-acetoxy-3-methoxycinnamic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.48	86	20.29	98
OMe			56.42	96	55.90	100
2			112.48	80	111.79	76
β			119.48	76	119.47	80
6			122.03	91	121.20	84
5			124.11	100	123.10	82
1			134.38	39	133.19	64
4			142.62	26	140.77	56
α			144.79	89	143.23	80
3			152.71	34	151.09	64
Ac C=O			167.70	41	167.50	78
γ			168.78	36	168.29	66

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.33	s	
OMe	3.88	s	
α	7.04	d	15.9
β	6.41	d	15.9

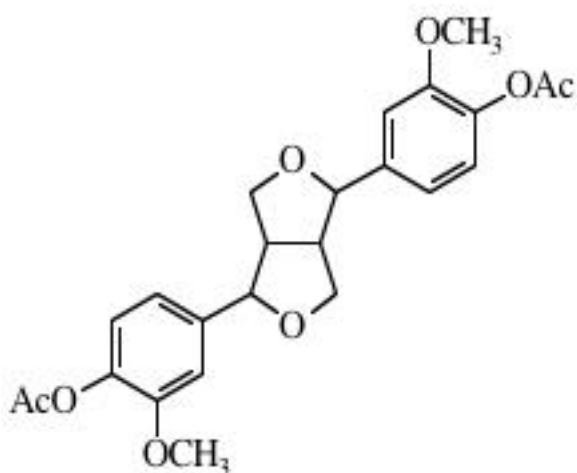
**Notes:**

R. Helm RFH 83F1  
50mg not soluble in CDCL3



Compound Number 109

<sup>13</sup>C



Pinoresinol diacetate

Acetic acid 4-[4-(4-acetoxy-3-methoxyphenyl) tetrahydrofuro[3,4-c]furan-1-yl]-2-methoxyphenyl ester

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.30	s	
OMe	3.83	s	
β	3.08	m	
γ1	3.92	dd	9.0, 3.2
γ2	4.27	dd	9.0, 6.8
α	4.78	d	3.9
6	6.88	dd	8.1, 1.4
2	6.99	m	
5	7.00	m	

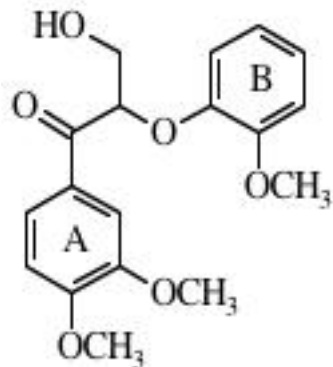
**Notes:**

J. Pew  
As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	86	20.48	76	20.28	85
β	54.36	94	55.42	92	53.75	85
OMe	55.92	100	56.23	100	55.67	100
γ	71.95	86	72.58	79	71.24	78
α	85.50	93	86.22	92	84.64	80
2	109.91	87	111.12	81	110.33	78
6	117.92	88	118.63	84	117.78	76
5	122.74	77	123.46	83	122.50	83
4	139.13	37	140.15	27	138.42	51
1	140.11	61	141.80	43	140.41	71
3	151.23	48	152.28	35	150.70	66
Ac C=O	168.99	42	168.98	25	168.44	58

Compound Number 110

<sup>13</sup>C



Veratrone

1-(3,4-Dimethoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy)propan-1-one

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.84	s	
OMe	3.90	s	
OMe	3.93	s	
γ	4.08	m	
β	5.42	t	5.2
A2	7.61	d	2.0
A6	7.76	dd	8.4, 2.0

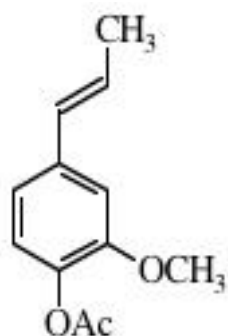
**Notes:**

LL Landucci  
34mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.82	94	56.05	59	55.39	84
OMe	55.97	100	56.05	59	55.46	100
OMe	56.10	100	56.21	100	55.70	87
γ	63.73	77	64.11	52	62.47	68
β	84.31	89	83.88	65	81.38	71
A2	110.17	81	111.53	56	110.75	68
A5	111.04	83	112.23	57	110.87	71
B2	112.35	89	113.74	67	112.68	71
B5	117.96	74	116.95	61	114.58	71
B6	121.17	85	121.59	69	120.48	74
B1	123.40	94	123.04	65	121.56	74
A6	123.63	77	124.28	56	123.24	65
A1	128.10	42	129.44	28	127.88	61
B4	146.97	34	148.43	20	146.88	52
A3	149.20	47	150.07	22	148.50	65
B3	150.30	38	151.01	20	149.14	55
A4	153.95	40	154.89	22	153.40	58
α	195.04	49	195.92	26	195.14	55

Compound Number 111

<sup>13</sup>C



acetylated isoeugenol  
1-(3-methoxy-4-acetoxyphenyl)-1-propene

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	18.37	91	18.45	81	18.11	94
Ac Me	20.62	73	20.45	68	20.32	86
OMe	55.77	100	56.10	100	55.64	100
2	109.69	77	110.54	89	109.73	95
6	118.36	96	118.90	97	117.99	100
5	122.65	85	123.53	97	122.68	92
β	126.01	85	126.34	94	125.80	79
α	130.48	87	131.36	94	130.24	92
1	137.06	41	137.70	35	136.44	71
4	138.65	25	139.88	21	138.24	46
3	151.02	31	152.26	24	150.86	52
Ac C=O	169.04	32	168.95	23	168.46	40

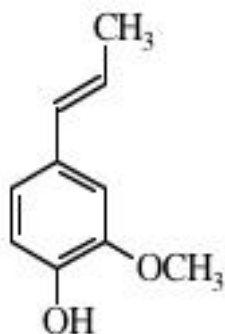
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ	1.85	dd	6.35, 1.4
Ac Me	2.28	s	
OMe	3.81	s	
β	6.17	dq	15.7, 6.35
α	6.35	dd	15.7, 1.4

**Notes:**

J. Ralph JRPS115.1  
50mg

Compound Number 112

<sup>13</sup>C

Isoeugenol

1-(3-methoxy-4-hydroxyphenyl)-1-propene

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	18.30	86	18.38	88	18.05	98
OMe	55.82	100	56.13	100	55.50	100
2	108.01	81	109.64	83	109.41	87
5	114.43	95	115.66	89	115.41	91
6	119.30	98	119.89	100	118.78	95
β	123.34	86	122.97	89	121.98	95
1	130.66	42	130.93	30	129.11	56
α	130.78	96	131.86	85	130.87	88
4	144.79	44	146.61	37	145.80	72
3	146.61	26	148.28	27	147.64	61

<sup>1</sup>H (chloroform)

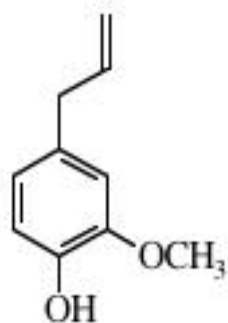
Atom	H Shifts	Mult	J
γ	1.83	dd	6..5, 1.6
OMe	3.84	s	
β	6.05	dq	15.7, 6.5
α	6.30	dd	15.7, 1.6

**Notes:**

Aldrich  
50mg contains an impurity

Compound Number 113

<sup>13</sup>C



Eugenol  
4-Allyl-2-methoxyphenol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	39.88	84	40.32	90	39.08	99
OMe	55.86	100	56.16	100	55.49	100
2	111.17	94	112.83	81	112.58	82
γ	114.31	98	115.31	71	115.11	82
5	115.46	86	115.61	93	115.35	100
6	121.19	96	121.66	86	120.48	76
1	131.90	36	132.07	27	130.39	56
β	137.83	72	139.05	68	138.13	82
4	143.93	32	145.68	32	144.72	63
3	146.47	27	148.13	25	147.43	50

<sup>1</sup>H (chloroform)

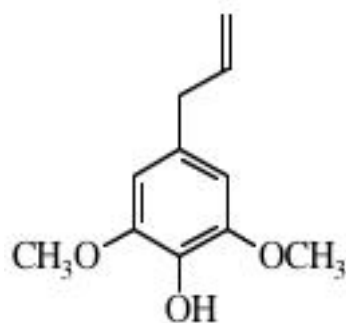
Atom	H Shifts	Mult	J
α	3.30	d	6.6
OMe	3.84	s	
γ	5.04	m	
β	5.94	ddt	6.6
5	6.83	d	8.5

**Notes:**

Aldrich  
50mg

Compound Number 114

<sup>13</sup>C



4-Allyl-2,6-dimethoxyphenol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
α	3.30	d	6.7
OMe	3.85	s	
2,6	6.40	s	
γ1	5.04	m	
β	5.94	ddt	16.8, 10.2, 6.7

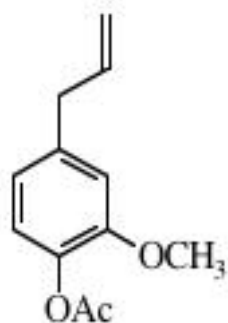
**Notes:**

Aldrich 50mg Extraneous peaks around 106 and 119

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	40.31	49	40.73	53	39.53	66
OMe	56.26	97	56.58	99	55.89	100
OMe	56.26	97	56.58	99	55.89	100
2	105.26	100	106.83	100	105.83	83
6	105.26	100	106.83	100	105.83	83
γ	115.65	46	115.42	45	115.26	48
1	131.06	23	131.13	19	129.63	30
4	133.10	16	135.19	15	133.81	28
β	137.60	43	138.95	36	137.98	47
3	147.03	36	148.60	28	147.93	54
5	147.03	36	148.60	28	147.93	54

Compound Number 115

<sup>13</sup>C



acetylated eugenol  
1-(3-methoxy-4-acetoxyphenyl)-2-propene

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	76	20.45	73	20.30	69
α	40.08	100	40.51	100	39.26	100
OMe	55.81	89	56.08	100	55.57	81
2	112.76	89	113.66	87	112.82	67
γ	116.12	76	116.03	79	115.87	68
5	120.66	100	121.10	92	120.15	76
6	122.51	100	123.37	92	122.48	68
β	137.03	78	138.32	69	137.34	68
4	138.05	24	139.24	21	137.53	31
1	138.98	43	139.72	37	138.66	43
3	150.89	28	152.10	25	150.61	33
Ac C=O	169.12	32	168.95	25	168.47	33

<sup>1</sup>H (chloroform)

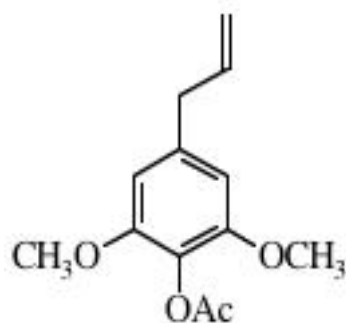
Atom	H Shifts	Mult	J
Ac Me	2.29	s	
α	3.36	d	6.7
OMe	3.80	s	
2			
γ	5.07	m	
β	5.95	ddt	16.8, 10.2, 6.7
A6	6.75	m	
A2	6.77	m	
A5	6.94	d	7.9

**Notes:**

J. Ralph JRC91.1  
50mg

Compound Number 116

<sup>13</sup>C



1-(3,5-dimethoxy-4-acetoxyphenyl)-2-propene

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.43	40	20.24	38	20.09	52
α	40.64	45	41.06	47	39.89	100
OMe	56.07	100	56.32	94	55.80	97
OMe	56.07	100	56.32	94	55.80	97
2	105.16	88	105.93	100	105.01	88
6	105.16	88	105.93	100	105.01	88
γ	116.22	39	116.11	44	115.97	47
4	126.99	8	128.10	6	126.33	12
β	136.90	38	138.24	37	137.27	47
1	138.52	25	139.32	20	138.31	35
3	151.97	34	153.06	25	151.58	57
5	151.97	34	153.06	25	151.58	57
Ac C=O	168.81	13	168.56	15	168.06	27

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.31	s	
α	3.34	d	6.7
OMe	3.79	s	
2,6	6.43	s	
γ	5.09	m	
β	5.95	ddt	16.8, 10.1, 6.7

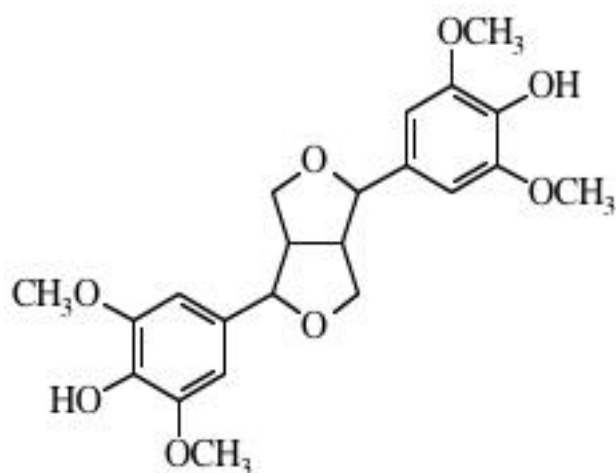
**Notes:**

J. Ralph JRPS143.1  
50mg



Compound Number 117

<sup>13</sup>C



Syringylresinol

3,3',5,5'-tetramethoxy-7,9',7',9-diepoxylignan-4,4'-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
β	4.28	m	
OMe	3.90	s	
γ <sub>2</sub>	4.28	m	
α	4.73	d	4.3
2,6	6.58	s	

**Notes:**

IPC - Pearl

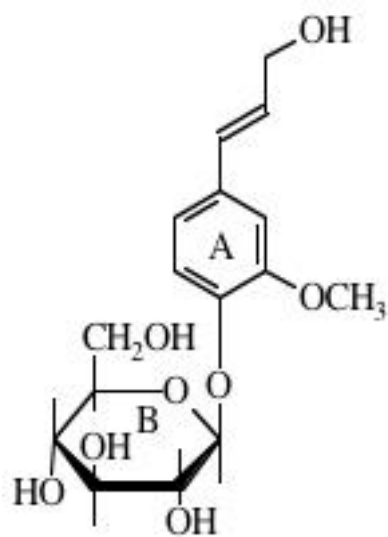
14mg

As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	54.38	49	55.33	61	53.59	39
OMe	56.41	100	56.69	100	55.95	100
OMe	56.41	100	56.69	100	55.95	100
γ	71.83	47	72.37	57	70.99	41
α	86.08	44	86.81	54	85.26	41
2	102.78	79	104.52	100	103.59	78
6	102.78	79	104.52	100	103.59	78
1	132.13	29	133.24	26	131.36	35
4	134.38	25	136.23	17	134.81	33
3	147.19	50	148.69	26	147.82	69
5	147.19	50	148.69	26	147.82	69

Compound Number 118

<sup>13</sup>C



Coniferin

4-(3-hydroxy-1-propenyl)-2-methoxyphenyl-  
β-D-glucopyranoside

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe					55.57	100
B6					60.60	49
γ					61.51	88
B4					69.60	68
B2					73.12	68
B5					76.76	67
B3					76.91	70
B1					100.00	65
A2					109.84	56
A5					115.25	58
A6					118.89	63
α					128.31	79
β					128.87	70
A1					130.95	70
A4					145.89	67
A3					148.94	70

<sup>1</sup>H (DMSO)

Atom	H Shifts	Mult	J
OMe	3.78	s	
γ1,γ2	4.10	dd	5.03
β	6.28	dt	15.9,5.0
α	6.47	d	15.9
A2	7.06	d	1.8
A5	7.02	d	8.4
A6	6.89	dd	8.4,1.8
B1	4.89	d	7.3
B2,3,4,5	3.34-3.18	nr	
B6 α	3.46	m	
B6 β	3.67	ddd	
B6 OH	4.54	t	5.7
γ OH	4.83	t	5.6

**Notes:**

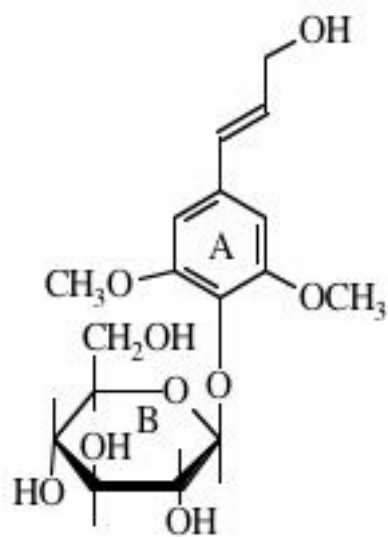
IPC - Pearl

53mg only soluble in DMSO

Terashima, Ralph, Landucci, Holzforschung, 50(1995)p. 151-155

Compound Number 119

<sup>13</sup>C



Syringin

4-(3-hydroxy-1-propenyl)-2,6-dimethoxy-  $\beta$ -D-glucopyranoside

<sup>1</sup>H (DMSO)

Atom	H Shifts	Mult	J
OMe	3.77	s	
$\gamma$ 1	4.11	dd	5.0
$\beta$	6.63	dt	15.9,4.7
$\alpha$	6.47	d	15.9
A2,6	6.73	s	
B1	4.91	d	4.8
B2,3,4,5	3.18-3.04	nr	
B6 $\alpha$	3.4	m	
B6 $\beta$	3.59	ddd	
B6 OH	4.29	t	5.4
$\gamma$ OH	4.85	t	5.5

**Notes:**

IPC - Pearl

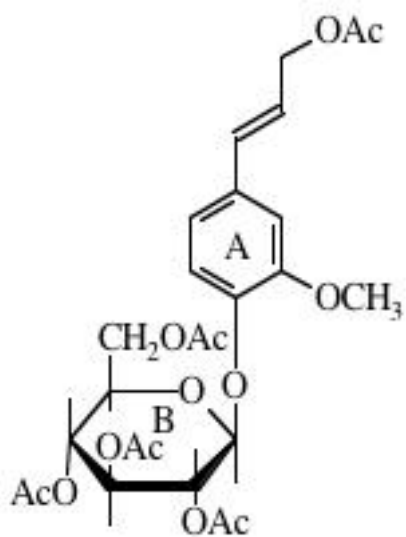
50mg only soluble in DMSO

Terashima, Ralph, Landucci, Holzforschung, 50(1995)p. 151-155

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe					56.27	100
OMe					56.27	100
B6					60.82	29
$\gamma$					61.37	45
B4					69.86	37
B2					74.09	37
B5					76.45	37
B3					77.08	37
B1					102.51	35
A2					104.39	62
A6					104.39	62
$\alpha$					128.35	37
$\beta$					130.05	37
A1					132.52	35
A4					133.80	26
A3					152.60	77
A5					152.60	77

Compound Number 120

<sup>13</sup>C



Coniferin acetate

4-(3-hydroxy-1-propenyl)-2-methoxy phenyl- $\beta$ -D-glycopyranoside pentaacetate

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.03		
Ac Me	2.03		
Ac Me	2.07		
Ac Me	2.07		
Ac Me	2.09		
OMe	3.80	s	
$\gamma$	4.70	d	6.4
$\beta$	6.20	dt	15.8, 6.3
$\alpha$	6.59	d	15.8
A6	6.89	bd	8.2
A2	6.94	bs	
A5	7.07	d	8.2

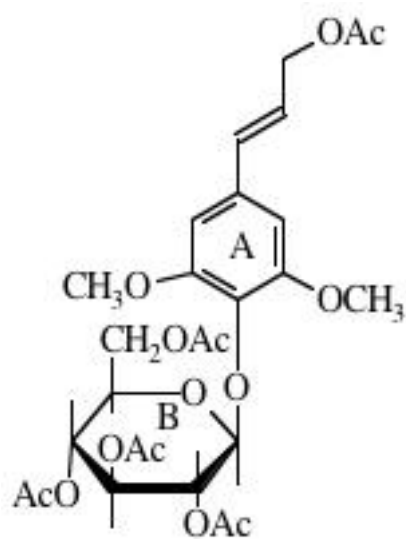
**Notes:**

S. Ralph III-58  
50mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.60	100	20.51	50	20.23	75
Ac Me	20.60	100	20.59	100	20.28	100
Ac Me	20.60	100	20.59	100	20.30	100
Ac Me	20.66	66	20.59	100	20.41	77
Ac Me	20.95	46	20.78	43	20.65	92
OMe	56.07	57	56.47	50	55.90	77
B6	61.97	38	62.69	36	61.66	33
$\gamma$	64.93	52	65.23	45	64.32	67
B4	68.46	47	69.33	43	68.15	46
B2	71.24	47	71.96	39	70.77	48
B5	72.02	45	72.56	41	70.86	52
B3	72.61	48	73.23	38	71.92	46
B1	100.67	47	100.79	48	98.76	46
A2	110.58	44	111.55	38	110.61	52
A5	119.57	46	119.77	37	118.05	46
A6	119.93	48	120.26	40	119.34	54
$\beta$	122.83	56	123.86	44	123.02	58
A1	133.02	37	133.63	30	132.14	54
$\alpha$	133.58	48	133.82	40	132.67	60
A4	146.09	32	147.19	26	145.66	56
A3	150.69	38	151.44	26	149.91	58
Ac C=O	169.26	34	169.58	24	168.91	50
Ac C=O	169.36	32	169.96	25	169.24	52
Ac C=O	170.15	34	170.22	28	169.49	56
Ac C=O	170.47	34	170.58	26	169.90	58
Ac C=O	170.71	22	170.69	16	170.07	44

Compound Number 121

<sup>13</sup>C



Syringin acetate

4-(3-hydroxy-1-propenyl)-2,6-dimethoxy phenyl-β-D-glucopyranoside penta acetate

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.03	s	
Ac Me	2.03	s	
Ac Me	2.03	s	
Ac Me	2.03	s	
Ac Me	2.09	s	
OMe	3.84	s	
γ	4.71	d	6.4
β	6.22	dt	16.8, 6.4
α	6.57	d	16.8
A2,6	6.61	s	

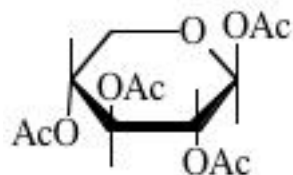
**Notes:**

S. Ralph III - 58  
50mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.60	52	20.56	100	20.25	51
Ac Me	20.68	100	20.56	100	20.36	75
Ac Me	20.68	100	20.56	100	20.36	75
Ac Me	20.68	100	20.67	49	20.36	75
Ac Me	20.95	39	20.77	43	20.64	54
OMe	56.32	89	56.69	97	56.13	100
OMe	56.32	89	56.69	97	56.13	100
B6	62.35	32	62.91	40	61.82	25
γ	64.84	41	65.14	49	64.19	42
B4	68.56	36	69.47	48	68.26	31
B2	71.99	42	72.51	46	70.73	31
B5	72.08	42	72.81	48	71.54	31
B3	73.11	40	73.61	48	72.14	29
B1	101.21	36	101.69	43	100.48	31
A2	104.09	72	105.10	89	104.09	56
A6	104.09	72	105.10	89	104.09	56
β	123.30	39	124.38	46	123.74	36
A1	133.11	31	134.02	33	132.79	56
α	133.86	42	134.11	41	132.79	56
A4	134.56	23	135.38	19	133.87	32
A3	153.07	63	154.06	54	152.68	68
A5	153.07	63	154.06	54	152.68	68
Ac C=O	169.25	29	169.59	22	168.94	34
Ac C=O	169.41	30	169.94	24	169.24	36
Ac C=O	170.31	30	170.24	29	169.48	31
Ac C=O	170.51	25	170.48	24	169.81	37
Ac C=O	170.75	20	170.64	17	170.04	32

Compound Number 122

<sup>13</sup>C



$\alpha + \beta$  Xylose Acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	62	20.35	59	20.21	43
Ac Me	20.54	40	20.46	43	20.25	54
Ac Me	20.60	83	20.51	71	20.34	100
Ac Me	20.60	83	20.55	100	20.34	100
Ac Me	20.66	88	20.55	100	20.34	100
Ac Me	20.66	88	20.55	100	20.34	100
Ac Me	20.74	41	20.65	70	20.44	62
Ac Me	20.79	55	20.65	70	20.52	49
5	60.65	49	61.12	57	60.05	32
5	62.76	31	63.14	35	62.01	18
4	68.35	32	69.09	41	67.99	41
4	68.67	53	69.22	59	68.10	28
3	69.39	100	69.87	63	68.83	41
3	69.39	100	70.24	67	68.93	41
2	69.53	38	70.30	48	69.36	25
2	70.97	34	71.54	37	70.52	23
1	89.26	54	89.76	56	88.60	38
1	92.05	31	92.67	41	91.49	24
Ac C=O	168.92	37	169.35	17	168.78	19
Ac C=O	168.92	37	169.53	21	169.02	43
Ac C=O	169.22	18	169.66	17	169.02	43
Ac C=O	169.65	31	170.01	17	169.36	24
Ac C=O	169.68	35	170.10	23	169.41	33
Ac C=O	169.68	35	170.19	40	169.49	24
Ac C=O	169.75	23	170.22	36	169.54	33
Ac C=O	170.02	27	170.22	36	169.58	37

<sup>1</sup>H (chloroform)

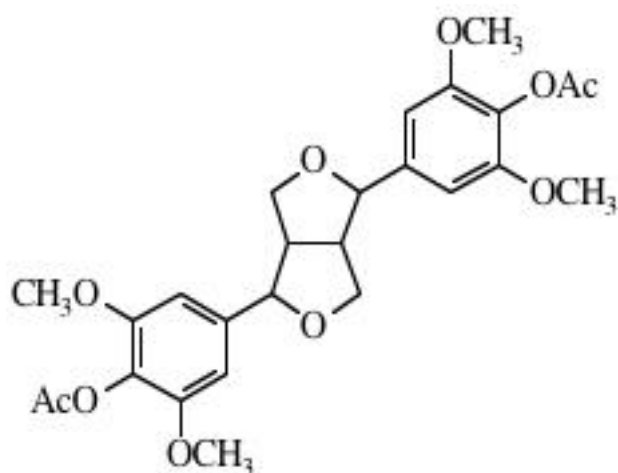
Atom	H Shifts	Mult	J
Ac Me	2.02	s	
Ac Me	2.049	s	
Ac Me	2.049	s	
Ac Me	2.052	s	
Ac Me	2.052	s	
Ac Me	2.06	s	
Ac Me	2.11	s	
Ac Me	2.17	s	

**Notes:**

S. Ralph III - 58  
50mg mixture of  $\alpha + \beta$

Compound Number 123

<sup>13</sup>C



Syringylresinol diacetate

Acetic acid 4-[4-(4-acetoxy-3,5-dimethoxyphenyl) tetrahydrofuro[3,4-c]furan-1-yl]-2,6-dimethoxyphenyl ester

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.33	s	
β	3.09	m	
OMe	3.83	s	
γ1	3.95	dd	9.1, 3.3
γ2	4.31	dd	9.1, 6.7
α	4.77	d	4.1
A2,6	6.59	s	

**Notes:**

S. Ralph III - 58

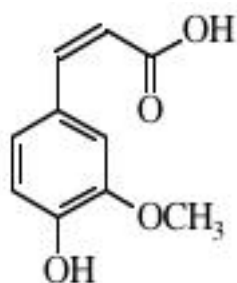
20mg

As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.46	42	20.26	52	20.07	44
β	54.42	41	55.41	58	53.72	41
OMe	56.23	100	56.46	98	55.90	100
OMe	56.23	100	56.46	98	55.90	100
γ	72.11	47	72.71	54	71.38	36
α	85.85	47	86.51	56	84.93	34
2	102.29	85	103.30	100	102.44	63
6	102.29	85	103.30	100	102.44	63
1	128.06	12	128.91	8	127.04	19
4	139.63	30	141.41	31	140.03	31
3	152.30	50	153.23	44	151.60	68
5	152.30	50	153.23	44	151.60	68
Ac C=O	168.76	23	168.59	15	168.01	29

Compound Number 124

<sup>13</sup>C



*cis*

**cis - Ferulic Acid**  
**(Z)-4-hydroxy-3-methoxycinnamic acid**

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.93	100	56.16	97	55.38	100
2	113.15	87	114.99	89	114.30	80
5	113.98	89	115.23	100	114.78	75
β	115.50	87	116.82	97	116.77	69
6	126.17	80	126.51	100	124.78	82
1	126.79	44	127.80	36	126.09	57
α	145.97	38	144.40	89	141.90	70
3	146.36	76	147.60	31	146.72	52
4	147.50	51	149.04	39	147.90	41
γ	171.34	44	167.85	31	167.54	51

<sup>1</sup>H (methanol)

Atom	H Shifts	Mult	J
OMe	3.85	s	
β	5.77	d	12.9
α	6.80	d	12.9
5	6.76	d	8.0
6	7.09	dd	8.1, 2.0
2	7.70	d	2.0

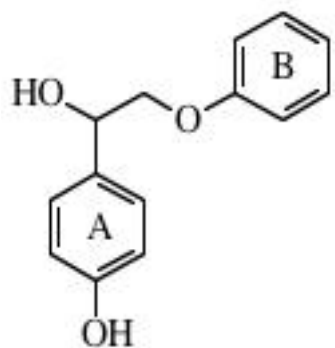
**Notes:**

J. Obst  
25mg Thanks to Rong Ji et.al, Chemosphere (2005) 1169-1181 for noting the miss assignment of C6 and Cβ



Compound Number 125

<sup>13</sup>C



1-(4-hydroxyphenyl)-2-phenoxyethanol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
α	5.05	dd	8.3, 3.6
β	4.05	m	

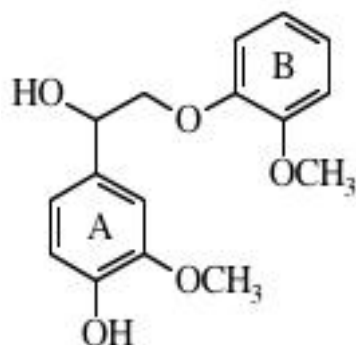
**Notes:**

JR C37.1  
52mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	72.31	43	72.42	41	70.55	44
β	73.25	49	74.32	50	73.07	39
B3	114.73	93	115.43	90	114.49	100
B5	114.73	93	115.43	90	114.49	100
A3	115.51	98	115.76	88	114.74	92
A5	115.51	98	115.76	88	114.74	92
B1	121.33	51	121.37	46	120.38	42
A2	127.80	98	128.39	95	127.42	85
A6	127.80	98	128.39	95	127.42	85
B2	129.55	100	130.12	100	129.32	94
B6	129.55	100	130.12	100	129.32	94
A1	131.68	20	133.53	22	132.63	25
A4	155.77	28	157.61	22	156.54	38
B4	158.41	20	159.84	15	158.52	29

Compound Number 126

<sup>13</sup>C



1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)ethanol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.88	s	
OMe	3.89	s	
α	5.02	dd	9.3, 3.0
β1	3.93	dd	10.0, 9.3
β2	4.15	dd	10.0, 3.0

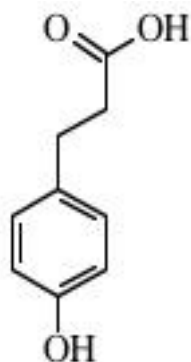
**Notes:**

JR 145.2  
62mg \* 76.50 shift in CDCL3  
falls under solvent peak.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.90	87	56.28	95	55.52	100
OMe	55.97	87	56.35	92	55.52	100
α	72.20	67	72.71	70	70.81	61
β	76.50	100	76.32	95	74.15	51
A2	108.87	70	111.01	95	110.75	52
B2	112.16	77	113.67	88	112.51	52
A5	114.26	77	115.37	82	113.75	49
B5	116.21	73	115.93	75	114.92	57
A6	119.37	77	119.89	95	118.67	55
B6	121.13	77	121.83	100	120.74	66
B1	122.58	73	122.45	90	120.92	60
A1	131.61	33	134.17	35	133.46	47
A4	145.46	30	146.84	30	145.66	52
A3	146.68	27	148.12	22	147.21	44
B3	148.10	23	149.74	25	148.23	43
B4	150.26	20	151.06	18	149.10	38

Compound Number 127

<sup>13</sup>C



Dihydrocoumaric acid  
3-(4-hydroxyphenyl)propionic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	29.94	53	30.68	43	29.58	43
β	35.75	40	36.33	46	35.70	41
3	115.46	92	115.99	100	115.04	93
5	115.46	92	115.99	100	115.04	93
2	129.36	100	130.00	79	129.00	100
6	129.36	100	130.00	79	129.00	100
1	132.10	14	132.54	17	130.92	34
4	154.55	22	156.42	18	155.46	34
γ	176.90	5	174.68	10	173.81	27

<sup>1</sup>H (chloroform)

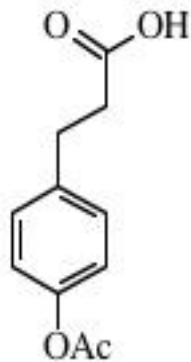
Atom	H Shifts	Mult	J
β	2.63	t	7.0
α	2.88	t	7.0
3,5	6.77	m	8.6
2,6	7.06	m	8.6

**Notes:**

IPC Pearl Coll.  
60mg

Compound Number 128

<sup>13</sup>C



acetylated dihydrocoumaric acid  
3-(4-acetoxyphenyl)propionic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.06	39	20.91	39	20.73	45
α	29.96	51	30.80	53	29.68	46
β	35.48	46	35.80	55	35.14	36
3	121.56	100	122.37	86	121.47	100
5	121.56	100	122.37	86	121.47	100
2	129.24	100	129.94	100	129.09	94
6	129.24	100	129.94	100	129.09	94
1	137.78	27	139.24	20	138.29	29
4	149.17	19	150.24	14	148.70	25
Ac C=O	169.78	14	169.65	13	169.14	23
γ	178.63	20	174.18	17	173.60	24

<sup>1</sup>H (chloroform)

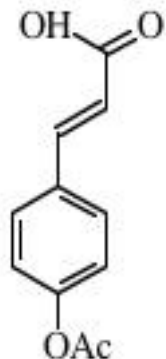
Atom	H Shifts	Mult	J
Ac Me	2.27	s	
β	2.67	t	7.3
α	2.92	t	7.3
2,6	6.99	m	8.5
3,5	7.19	m	8.5

**Notes:**

IPC Pearl Coll.  
60mg Contains unacetylated cmpd also

Compound Number 129

<sup>13</sup>C



*trans*

acetylated coumaric acid  
(E)-4-acetoxycinnamic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.12	45	20.96	43	20.76	54
β	117.38	47	119.32	50	119.29	38
3	122.22	100	123.19	100	122.28	98
5	122.22	100	123.19	100	122.28	98
2	129.48	100	130.07	95	129.32	100
6	129.48	100	130.07	95	129.32	100
1	131.82	26	133.04	19	131.89	38
α	145.80	42	144.44	43	142.88	43
4	152.50	24	153.41	17	151.80	31
Ac C=O	168.98	21	167.68	21	167.48	30
γ	171.14	13	169.39	14	168.92	26

<sup>1</sup>H (chloroform)

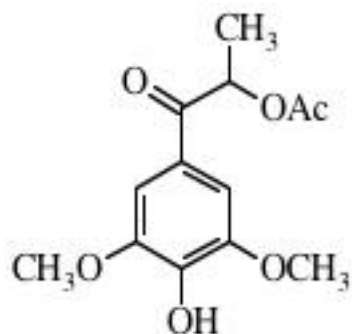
Atom	H Shifts	Mult	J
Ac Me	2.31	s	
β	6.41	d	16.0
3,5	7.15	m	8.6
2,6	7.57	m	8.6
α	7.75	d	16.0

**Notes:**

IPC Pearl coll.  
60mg

Compound Number 130

<sup>13</sup>C



2-acetoxy-1-(4-hydroxy-3,5-dimethoxyphenyl)propan-1-one

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
γ	1.53	d	7.0
Ac Me	2.15	s	
OMe	3.94	s	
β	5.96	q	7.0
2,6	7.24	s	

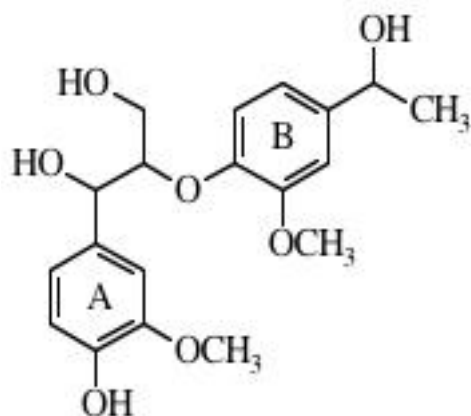
**Notes:**

IPC Pearl coll.  
60mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	17.44	41	17.77	43	17.43	51
Ac Me	20.78	29	20.63	38	20.40	43
OMe	56.57	100	56.85	100	56.22	100
OMe	56.57	100	56.85	100	56.22	100
β	70.94	47	71.98	48	71.15	40
2	106.12	84	107.38	98	106.43	76
6	106.12	84	107.38	98	106.43	76
1	125.83	16	126.17	13	124.02	31
4	140.42	13	142.41	7	141.67	29
3	147.02	30	148.59	18	147.75	57
5	147.02	30	148.59	18	147.75	57
Ac C=O	170.45	13	170.42	13	169.70	29
α	195.11	16	195.30	15	194.63	29

Compound Number 131

<sup>13</sup>C



*threo*

1-(4-hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)-2-methoxyphenoxy]propane-1,3-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	1.46	d	6.4
OMe	3.84	s	
OMe	3.86	s	
B α	4.82	q	6.4
α	4.92	d	7.7
A5	7.03	d	8.2

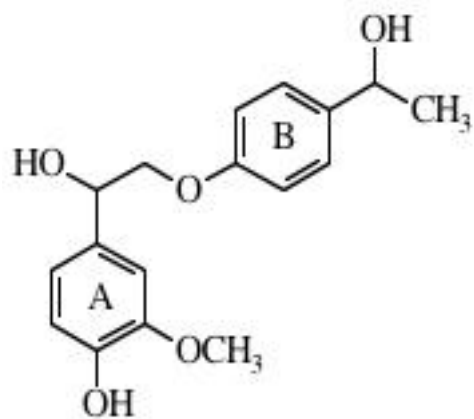
**Notes:**

S. Ralph SRIII-62-1  
35mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.20	68	26.21	66	25.80	90
OMe	55.90	86	56.24	85	55.35	67
OMe	55.98	100	56.31	100	55.52	87
γ	61.09	46	61.89	61	60.02	49
B α	70.01	73	69.74	80	67.78	85
α	73.93	59	73.95	63	70.91	38
β	89.03	51	88.72	51	84.74	36
B2	109.35	54	110.67	58	109.79	36
A2	109.54	57	111.45	76	110.98	38
A5	114.42	59	115.24	64	114.57	49
B5	118.41	62	118.70	64	115.62	38
B6	120.17	65	119.68	68	117.24	49
A6	120.23	49	120.59	71	118.93	44
A1	131.56	38	133.85	34	132.89	54
B1	141.90	43	142.92	41	140.44	38
A4	145.57	51	146.83	41	145.31	59
A3	146.72	54	148.04	29	146.87	100
B4	146.78	35	148.31	31	146.87	100
B3	150.99	35	151.45	31	149.31	46
erythro isomer:						
γ	60.8		61.9		60.0	
α	72.8		73.8		71.6	
β	86.9		86.9		83.9	
A1	132.0		134.3		133.2	

Compound Number 132

<sup>13</sup>C



1-(4-hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)-2-methoxyphenoxy]ethanol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	1.46	d	6.4
OMe	3.90	s	
β1	3.96	dd	9.7, 8.6
β2	4.06	dd	9.7, 3.5
B α	4.84	q	6.4
α	5.03	dd	8.6, 3.5

**Notes:**

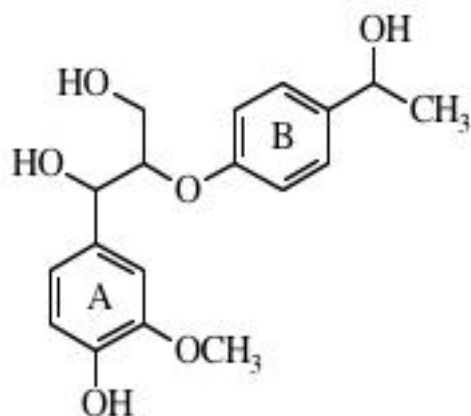
S. Ralph SRIII-63-1  
50mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.05	40	26.20	40	25.83	54
OMe	55.98	52	56.27	50	55.50	62
B α	69.91	44	69.50	39	67.52	62
α	72.43	50	72.65	46	70.68	46
β	73.58	44	74.65	48	73.22	38
A2	108.82	44	110.89	39	110.55	35
B3	114.64	87	115.07	84	113.95	96
B5	114.64	87	115.07	84	113.95	96
A5	114.37	56	115.42	38	114.88	46
A6	119.33	52	119.88	41	118.63	42
B2	126.73	100	127.27	100	126.28	100
B6	126.73	100	127.27	100	126.28	100
A1	131.66	25	134.30	21	133.30	37
B1	138.66	23	140.41	21	139.30	37
A4	145.57	25	146.86	21	145.60	40
A3	146.70	25	148.16	15	147.17	38
B4	157.81	23	158.80	18	157.19	38



Compound Number 133

<sup>13</sup>C



major

1-(4-hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)phenoxy]-  
propane-1,3-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	1.47	d	6.4
OMe	3.87	s	
β	4.37	m	
Bα	4.85	q	6.4
α	4.96	d	6.7

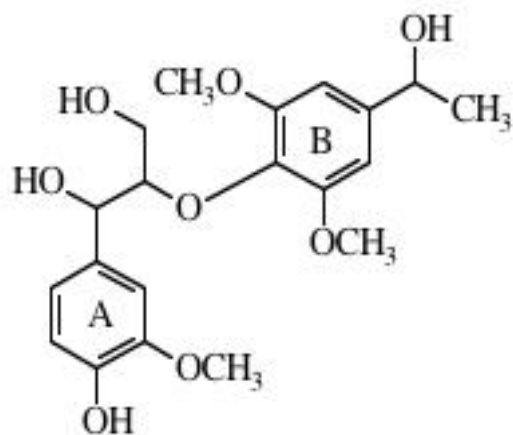
**Notes:**

S. Ralph SRIII-63-3  
70mg  
2:1 isomeric mixture,

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.08	49	26.07	52	25.78	64
OMe	56.00	72	56.22	53	55.45	49
γ	61.24	34	61.69	34	60.00	27
B α	69.86	64	69.52	52	67.60	62
α	73.94	43	73.38	36	70.95	24
β	83.28	45	84.16	38	83.14	29
A2	109.42	45	111.37	45	110.90	22
A5	114.38	47	115.19	48	114.68	33
B3	116.47	91	116.69	81	115.39	78
B5	116.47	91	116.69	81	115.39	78
A6	119.99	49	120.34	42	118.96	29
B2	126.88	100	127.14	100	126.14	100
B6	126.88	100	127.14	100	126.14	100
A1	131.60	26	134.18	25	133.19	36
B1	139.39	26	140.38	31	139.20	44
A4	145.68	19	146.63	25	145.33	42
A3	146.72	17	147.92	25	146.93	40
B4	157.50	21	158.92	23	157.71	33
minor isomer shifts						
γ	61.54		62.04		60.11	
α	74.04		73.99		71.50	
β	82.09		83.75		83.14	
B3,5	116.54		116.81		115.54	
A6	119.33		120.47		119.37	
B2,6	126.78		127.10		126.07	
A1	132.35		134.44		133.32	
B4	157.06		158.55		157.41	

Compound Number 134

<sup>13</sup>C



*threo*

□ 1-(4-Hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)-2,6-dimethoxyphenoxy]propane-1,3-diol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	1.47	d	6.4
A OMe	3.86	s	
B OMe's	3.89	s	
B α	4.83	q	6.4
α	5.00	d	8.8
B2,6	6.63	s	
A2	6.95	s	
A5	6.85	d	8.3
A6	6.91	dd	8.3, 1.7

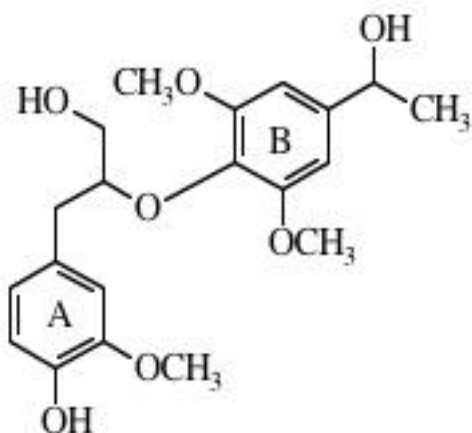
**Notes:**

S. Ralph SR111-64-1  
35mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.39	37	26.27	42	25.81	51
A OMe	55.96	45	56.23	49	55.46	51
B OMe	56.14	<b>100</b>	56.54	<b>100</b>	55.80	<b>100</b>
B OMe	56.14	100	56.54	100	55.80	100
γ	60.55	30	61.35	41	60.09	27
B α	70.29	39	70.01	44	68.07	56
α	74.10	35	74.10	42	71.48	34
β	89.00	35	89.82	40	87.20	37
B2	102.32	69	103.48	87	102.53	63
B6	102.32	69	103.48	87	102.53	63
A2	109.90	36	111.51	41	110.97	24
A5	114.36	37	115.24	54	114.56	32
A6	120.34	38	120.75	48	119.14	37
A1	131.89	26	133.67	26	132.82	39
B1	134.26	15	135.57	13	134.56	24
B4	142.80	23	144.64	26	142.88	41
A4	145.44	29	146.79	24	145.23	39
A3	146.56	30	147.95	25	146.77	37
B3	152.91	50	153.64	45	152.13	73
B5	152.91	50	153.64	45	152.13	73

Compound Number 135

<sup>13</sup>C



3-(4-hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)-2,6-dimethoxyphenoxy]propan-1-ol

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	1.47	d	6.4
α1	2.97	dd	13.6, 8.8
α2	3.20	dd	13.6, 5.4
B OMe	3.85	s	
A OMe	3.83	s	
B α	4.82	q	6.4
β	4.18	m	
B2,6	6.61	s	
A6	6.74	dd	8.0, 1.9
A2	6.80	d	1.9
A5	6.82	d	8.0

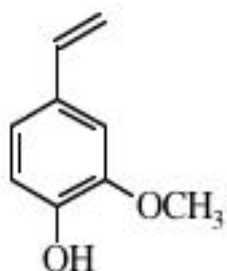
**Notes:**

S. Ralph SRIII-64-2  
30mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.30	35	26.26	45	25.81	54
α	37.32	36	38.03	45	36.77	26
A OMe	55.94	58	56.23	48	55.46	49
B OMe	56.11	100	56.44	100	55.74	100
B OMe	56.11	100	56.44	100	55.74	100
γ	62.31	34	62.84	36	61.58	26
B α	70.42	35	70.04	39	68.13	51
β	84.52	42	85.30	48	83.40	36
B2	102.45	62	103.53	66	102.50	56
B6	102.45	62	103.53	66	102.50	56
A2	112.31	37	113.93	38	113.55	31
A5	114.27	46	115.51	48	115.01	36
A6	122.10	37	122.80	46	121.57	38
A1	130.13	25	130.80	25	129.24	38
B1	134.64	14	135.57	11	133.95	21
B4	142.09	19	144.15	14	142.83	38
A4	144.07	25	145.80	14	144.55	36
A3	146.38	20	148.04	18	147.03	36
B3	153.29	46	154.08	39	152.61	74
B5	153.29	46	154.08	39	152.61	74

Compound Number 136

<sup>13</sup>C



Vinyl guaiacol  
2-methoxy-4-vinylphenol  
4-vinylguaiacol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.86	100	56.17	83	55.52	77
2	108.14	51	109.85	50	109.61	47
β	111.38	78	111.09	100	110.81	73
5	114.40	85	115.69	42	115.34	74
6	120.03	88	120.58	86	119.46	93
1	130.26	24	130.59	22	128.77	44
α	136.62	78	137.70	86	136.63	100
A4	145.64	20	147.55	9	146.68	43
A3	146.63	22	148.38	14	147.64	37

<sup>1</sup>H (acetone)

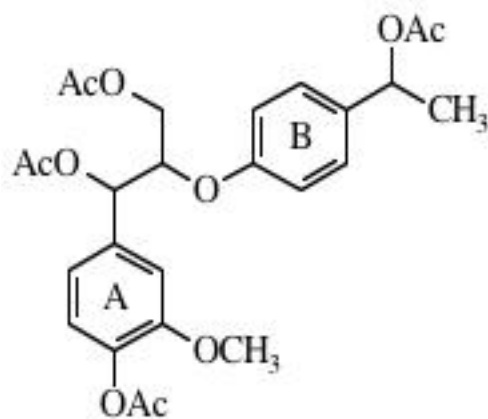
Atom	H Shifts	Mult	J
OMe	3.84	s	
β1	5.04	dd	10.9, 1.1
β2	5.62	dd	17.6, 1.1
α	6.63	dd	17.6, 10.9
A5	6.78	d	8.1
A6	6.90	dd	8.1, 1.9
A2	7.07	d	1.9

**Notes:**

J. Ralph  
30mg

Compound Number 137

<sup>13</sup>C



*threo*

1,3-diacetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(1-acetoxyethyl)phenoxy] propane

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.98	s	
Ac Me	2.05	s	
Ac Me	2.05	s	
Ac Me	2.29	s	
B β	1.51	d	6.6
OMe	3.81	s	
γ1	4.04	dd	11.8, 6.1
γ2	4.27	dd	11.8, 3.8
B α	5.83	q	6.6
α	6.07	d	6.3
β	4.69	m	
<u>erythro</u>			
B β	1.50	d	6.6
α	6.03	d	5.2
B α	5.82	q	6.6

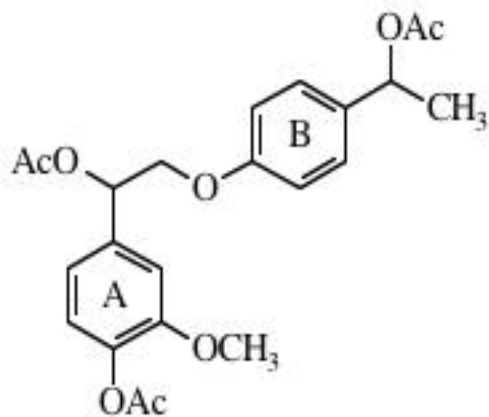
**Notes:**

S. Ralph SRIII-65-A 52mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	65	20.45	52	20.28	<b>100</b>
Ac Me	20.62	65	20.56	35	20.36	93
Ac Me	20.98	54	20.86	39	20.61	81
Ac Me	21.34	50	21.14	41	20.92	100
B β	22.00	44	22.34	38	21.78	64
OMe	55.98	65	56.31	42	55.82	69
γ	62.64	36	63.24	28	62.16	31
B α	71.85	49	72.17	27	71.14	57
α	74.00	36	75.07	32	74.00	40
β	78.08	25	79.10	22	77.57	36
A2	111.64	32	112.61	32	111.65	45
B5	116.31	68	117.08	51	116.01	98
B3	116.31	68	117.08	51	116.01	98
A6	119.60	40	120.37	43	119.45	40
A5	122.96	39	123.63	32	122.71	45
B2	127.66	<b>100</b>	128.27	<b>100</b>	127.30	100
B6	127.66	100	128.27	100	127.30	100
B1	134.86	32	136.20	18	134.71	40
A1	135.22	24	136.39	22	135.25	48
A4	140.05	18	140.97	14	139.25	36
A3	151.20	22	152.25	18	150.73	45
B4	157.97	17	159.12	19	157.69	40
A4 Ac C=O	168.71	20	168.81	18	168.30	43
Ac C=O	169.69	19	169.99	14	169.35	45
Ac C=O	170.29	18	170.18	14	169.51	48
Ac C=O	170.55	22	170.65	14	169.82	45
erythro isomer:						
γ	62.32		62.88		61.73	
B α	71.85		72.17		71.14	
α	73.62		74.21		72.81	
β	78.40		78.86		76.99	
B4	157.58		158.59		157.03	

Compound Number 138

<sup>13</sup>C



1-Acetoxy-1-(4-acetoxy-3-methoxyphenyl)2-[4-(1-acetoxyethyl)phenoxy] ethane

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.11	s	
Ac Me	2.31	s	
Bβ	1.51	d	6.6
OMe	3.85	s	
β1	4.13	dd	10.4, 3.9
β2	4.25	dd	10.4, 7.8
Bα	5.83	q	6.6
α	6.12	dd	7.8, 3.9
B3,5	6.86	m	8.7
B2,6	7.28	m	8.7

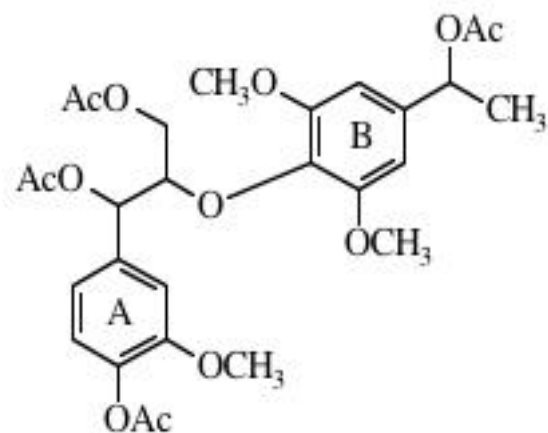
**Notes:**

S. Ralph SRIII-65-B  
14mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.65	52	20.45	46	20.28	68
Ac Me	21.12	46	20.94	42	20.73	64
Ac Me	21.37	40	21.13	36	20.92	64
B β	21.98	52	22.35	50	21.78	64
OMe	55.98	59	56.30	52	55.79	64
β	70.49	43	71.18	44	69.76	36
B α	71.92	43	72.20	47	71.13	56
α	73.52	43	74.21	47	73.01	48
A2	111.26	39	112.20	42	111.34	40
B3	114.72	87	115.45	100	114.55	100
B5	114.72	87	115.45	100	114.55	100
A6	119.09	52	119.70	43	118.71	44
A5	122.95	53	123.61	44	122.66	52
B2	127.62	100	128.27	88	127.29	100
B6	127.62	100	128.27	88	127.29	100
B1	134.50	29	135.58	24	134.09	40
A1	135.85	30	137.17	24	135.84	44
A4	139.90	16	140.87	13	139.09	32
A3	151.20	27	152.28	20	150.69	36
B4	158.09	25	159.08	20	157.55	44
A4 Ac C=O	168.88	20	168.84	8	168.38	36
Ac C=O	169.98	20	170.13	14	169.49	36
Ac C=O	170.30	16	170.13	14	169.58	32

Compound Number 139

<sup>13</sup>C



*threo*

G-β-S5

1,3-diacetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(1-acetoxy ethyl)-2,6-dimethoxyphenoxy] propane

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.99	s	
Ac Me	2.06	s	
Ac Me	2.07	s	
Ac Me	2.30	s	
B β	1.51	d	6.6
A OMe	3.82	s	
B OMe	3.77	s	
γ1	3.95	dd	11.8, 3.2
γ2	4.34	dd	11.8, 4.7
β	4.54	m	
B α	5.79	q	6.6
α	6.15	d	6.3
B2,6	6.54	s	
A2	7.08	bs	
A5	6.99	m	
A6	6.99	m	

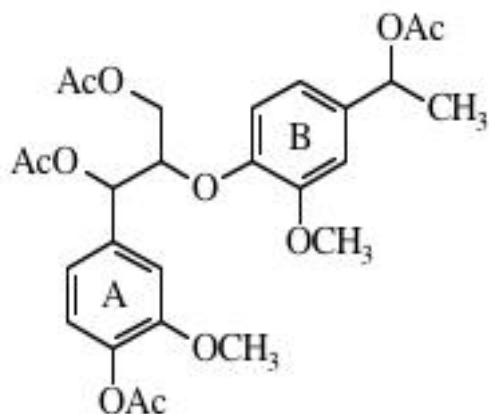
Notes:

S. Ralph SRIII-65-C 51mg  
erythro shifts from SRVII 138BB in acetone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	46	20.45	53	20.30	46
Ac Me	20.70	41	20.58	43	20.60	26
Ac Me	21.00	29	20.92	38	20.95	37
Ac Me	21.34	36	21.14	43	22.01	19
B β	22.23	25	22.57	32	22.06	19
A OMe	55.99	65	56.28	57	55.78	100
B OMe	56.02	100	56.39	100	55.78	100
B OMe	56.02	100	56.39	100	55.78	100
γ	63.48	18	64.17	42	63.14	13
B α	72.38	29	72.71	48	71.70	23
α	75.25	36	76.25	32	75.28	13
β	80.59	35	81.38	42	80.11	18
B2	103.21	47	104.01	68	102.88	32
B6	103.21	47	104.01	68	102.88	32
A2	111.92	21	112.64	38	111.53	15
A6	119.65	39	120.24	50	119.25	21
A5	122.51	39	123.34	48	122.53	19
A1	135.96	26	136.92	17	135.25	19
B1	135.96	26	137.14	30	135.84	25
B4	137.54	22	138.78	32	137.44	24
A4	139.72	21	140.71	18	139.08	21
A3	150.91	26	152.02	27	150.58	26
B3	152.91	43	153.79	50	152.30	45
B5	152.91	43	153.79	50	152.30	45
A4 Ac C=O	168.80	19	168.86	20	168.37	19
Ac C=O	169.71	12	169.85	23	169.25	20
Ac C=O	170.19	15	170.16	20	169.56	20
Ac C=O	170.54	19	170.57	22	169.89	22
erythro isomer						
γ			63.28			
Bα			72.68			
α			75.06			
β			81.26			
B2,6			103.91			
2			112.17			
6			119.99			
5			123.36			

Compound Number 140

<sup>13</sup>C



*threo*

1,3-diacetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(1-acetoxyethyl)-2-methoxyphenoxy] propane

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
B β	1.51	d	6.6
Ac Me	1.99	s	
Ac Me	2.06	s	
Ac Me	2.065	s	
Ac Me	2.30	s	
OMe	3.82	s	
OMe	3.83	s	
γ1	4.04	dd	11.9, 5.6
γ2	4.30	dd	11.9, 4.6
β	4.61	m	
B α	5.82	q	6.6
α	6.11	d	6.3

**Notes:**

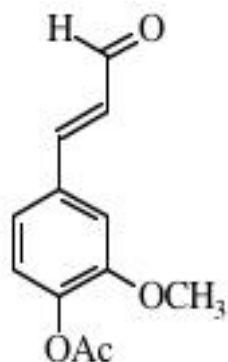
S. Ralph SRIII-65-D  
44mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	89	20.45	51	20.28	92
Ac Me	20.68	71	20.58	47	20.35	100
Ac Me	21.01	63	20.91	38	20.62	74
Ac Me	21.35	64	21.15	53	20.94	87
B β	22.09	57	22.45	39	21.89	58
OMe	55.92	100	56.29	100	55.66	84
OMe	55.97	86	56.29	100	55.78	71
γ	62.99	41	63.55	37	62.43	32
B α	72.06	57	72.39	46	71.37	71
α	74.41	41	75.34	39	74.26	39
β	80.14	41	80.68	39	79.10	45
B2	110.74	29	111.76	26	110.64	37
A2	111.74	46	112.64	32	111.62	45
B5	118.35	43	118.85	28	117.18	50
B6	118.67	56	119.19	43	118.09	61
A6	119.57	64	120.28	44	119.38	50
A5	122.80	60	123.51	41	122.63	47
A1	135.24	53	136.60	37	135.36	55
B1	136.76	43	137.78	22	136.11	53
A4	139.94	39	140.88	17	139.21	47
B4	147.53	24	148.48	17	147.00	50
B3	150.65	36	151.57	20	149.92	63
A3	151.12	43	152.18	21	150.68	55
A4 Ac C=O	168.74	37	168.82	16	168.32	42
Ac C=O	169.66	29	169.94	14	169.31	47
Ac C=O	170.25	27	170.16	14	169.53	47
Ac C=O	170.53	31	170.62	18	169.91	53
erythro isomer						
γ	63.0		62.5		61.8	
α	73.7		74.5		73.1	
β	80.1		80.2		78.3	
B4	146.7		147.7		146.1	



Compound Number 141

<sup>13</sup>C



acetylated coniferylaldehyde  
4-acetoxy-3-methoxycinnamaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.57	57	20.43	62	20.28	86
OMe	55.98	95	56.44	91	55.99	91
2	111.55	67	112.65	62	112.08	62
6	121.82	78	122.68	71	122.04	71
5	123.49	100	124.25	100	123.32	93
β	128.74	89	129.68	98	128.72	100
1	132.97	45	134.17	38	133.00	69
4	142.30	20	143.22	18	141.55	34
3	151.66	26	152.77	24	151.22	48
α	151.74	52	152.55	51	152.29	52
Ac C=O	168.52	21	168.72	16	168.19	34
γ	193.27	50	193.89	49	194.17	60

<sup>1</sup>H (acetone)

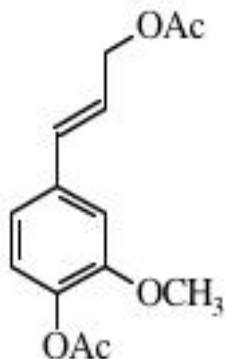
Atom	H Shifts	Mult	J
Ac Me	2.25	s	
OMe	3.89	s	
β	6.79	dd	15.9, 7.7
5	7.15	d	8.1
6	7.29	d	8.1, 1.9
2	7.49	d	1.9
α	7.64	d	15.9
γ	9.69	d	7.7

**Notes:**

S. Ralph SRIII-76B  
30mg  
in acetone 3 & α switch places

Compound Number 142

<sup>13</sup>C



acetylated coniferyl alcohol  
4-acetoxy-3-methoxycinnamylacetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.59	75	20.45	72	20.27	98
Ac Me	20.92	56	20.76	48	20.60	76
OMe	55.88	100	56.24	91	55.75	96
γ	64.84	84	65.13	82	64.12	96
2	110.34	73	111.23	51	110.41	80
6	119.37	92	119.92	100	118.99	100
5	122.88	97	123.74	96	122.83	98
β	123.61	90	124.90	93	124.16	100
α	133.52	97	133.62	97	132.29	100
1	135.30	43	136.26	39	134.97	62
4	139.76	21	140.82	18	139.08	40
3	151.21	35	152.43	25	150.94	56
A4 Ac C=O	168.83	30	168.89	22	168.37	49
γ Ac C=O	170.68	21	170.69	16	170.02	33

<sup>1</sup>H (acetone)

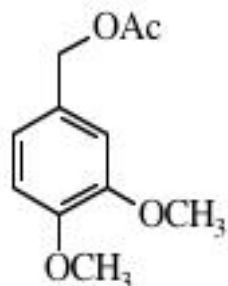
Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.23	s	
OMe	3.8	s	
γ	4.69	dd	
β	6.36	dt	
α	6.68	dt	
5	7.01	m	
6	7.01	m	
2	7.21	s	

**Notes:**

M.Mozuch 177/95 47mg

Compound Number 143

<sup>13</sup>C



Acetylated veratryl alcohol  
3,4-dimethoxybenzylacetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.03	36	20.83	33	20.66	57
OMe	55.96	<b>100</b>	56.18	<b>100</b>	55.50	<b>100</b>
OMe	55.96	100	56.18	100	55.50	100
α	66.38	58	66.53	62	65.47	82
2	111.27	50	112.76	36	111.70	54
5	112.06	52	113.50	38	112.34	61
6	121.33	66	121.90	68	120.88	84
1	128.60	24	129.99	15	128.45	36
3	149.14	18	150.38	13	148.66	30
4	149.26	17	150.45	11	148.75	28
Ac C=O	170.82	12	170.85	10	170.15	25

<sup>1</sup>H (acetone)

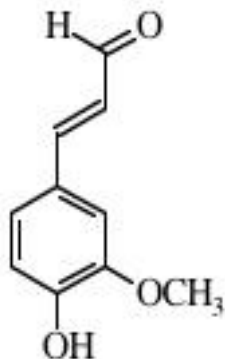
Atom	H Shifts	Mult	J
Ac Me	2.01	s	
OMe	3.79	s	
OMe	3.80	s	
α	5.00	s	
5	6.91	m	
6	6.91	m	
2	6.98	s	

**Notes:**

M.Mozuch 177/95 48mg

Compound Number 144

<sup>13</sup>C



coniferaldehyde  
4-hydroxy-3-methoxycinnamaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.05	100	56.41	92	55.74	63
2	109.75	90	111.66	70	111.59	44
5	115.06	93	116.21	100	115.68	59
6	124.03	92	124.68	78	123.86	56
β	126.35	95	127.03	92	125.69	100
1	126.66	38	127.46	32	125.69	100
4	147.11	33	148.83	27	148.02	37
3	149.12	43	150.78	35	150.15	39
α	153.16	57	153.89	57	153.83	46
γ	193.62	95	193.78	65	193.84	50

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.93	s	
β	6.67	dd	15.8, 7.8
5	6.92	d	8.2
6	7.21	dd	8.2, 2.0
2	7.38	d	2.0
α	7.57	d	15.8
γ	9.64	d	7.8

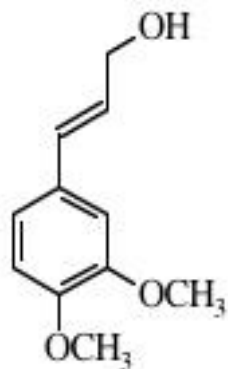
**Notes:**

Aldrich 40mg

Note: In DMSO β and 1 are coincident

Compound Number 145

<sup>13</sup>C



3,4-dimethoxycinnamyl alcohol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.79	s	
OMe	3.82	s	
γ	4.20	dd	5.4, 1.5
β	6.26	dt	15.9, 5.4
α	6.49	dt	15.9, 1.5
5	6.88	m	
6	6.89	m	
2	7.06	d	1.7

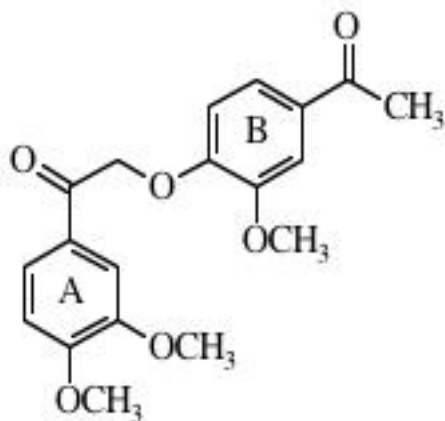
**Notes:**

M.Mozuch 199/16 25mg  
 Note: only 8 mg was used for DMSO spec.  
 and 1 and α switch places in CDCl3

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.87	100	56.12	100	55.50	100
OMe	55.95	97	56.18	90	55.55	86
γ	63.76	71	63.34	57	61.63	81
2	109.14	53	110.59	47	109.33	58
5	111.34	58	112.92	56	111.91	58
6	119.69	97	120.24	89	119.16	81
β	126.65	77	128.90	85	128.53	81
α	131.09	94	130.14	89	128.60	91
1	129.87	33	131.40	23	129.94	47
3	149.01	21	150.10	16	148.36	93
4	149.14	23	150.55	15	148.91	40

Compound Number 146

<sup>13</sup>C



2-(4-Acetyl-2-methoxyphenoxy)-1-(3,4-dimethoxyphenyl) ethanone

<sup>1</sup>H (acetone)

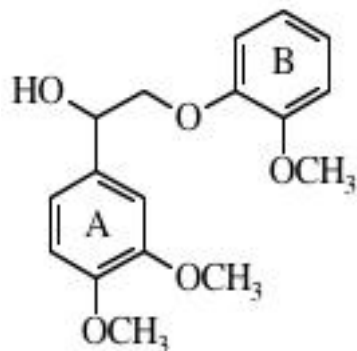
Atom	H Shifts	Mult	J
B β	2.50	s	
OMe	3.87	s	
OMe	3.89	s	
OMe	3.90	s	
β	5.56	s	
B5	6.94	d	8.9
A5	7.07	d	8.4
A6	7.75	dd	8.4, 1.9

Notes:

LLL XVII-19A

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	26.16	54	26.29	56	26.22	60
OMe	56.03	77	56.21	86	55.59	96
OMe	56.10	100	56.30	100	55.63	96
OMe	56.10	100	56.36	82	55.78	80
β	71.39	48	71.71	61	70.30	56
A2	110.30	55	111.63	46	110.32	51
A5	110.54	43	111.77	68	110.92	51
B2	111.10	43	112.29	45	111.03	64
B5	112.57	38	113.55	48	112.28	56
B6	122.74	62	123.45	83	122.58	100
A6	122.85	67	123.54	90	122.58	100
A1	127.58	22	128.67	23	127.08	44
B1	131.52	26	132.02	24	130.24	40
A3	149.40	29	150.32	32	148.54	44
B3	149.40	29	150.32	32	148.69	47
B4	151.79	22	153.19	25	151.73	40
A4	154.14	23	155.19	24	153.61	38
α	192.22	29	192.90	24	192.24	44
B α	196.56	23	196.36	20	196.17	33

Compound Number 147

<sup>13</sup>C

1-(3,4-Dimethoxyphenyl)-2-(2-methoxyphenoxy)ethanol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.78	s	
OMe	3.82	s	
OMe	3.82	s	
β1	4.0	dd	9.9, 7.7
β2	4.07	dd	9.9, 4.2
α	4.98	m	
A2	7.14	d	1.9

**Notes:**

LLL V-59B

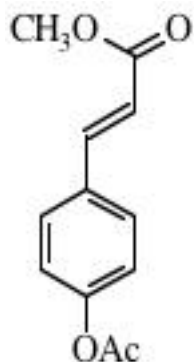
β-carbon in CDCl<sub>3</sub> was observed as shoulder on solvent.

Very limited solubility in acetone; DEPT was run in DMSO.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.93	100	56.13	83	55.38	51
OMe	55.93	100	56.26	100	55.57	100
OMe	56.01	77	56.36	63	55.57	98
α	72.17	67	72.59	67	70.68	47
β	76.53	67	76.22	76	74.07	40
A2	109.67	41	111.63	59	110.48	36
A5	111.28	44	112.77	66	111.56	37
B2	112.21	45	113.67	64	112.55	37
B5	116.28	45	115.82	57	113.79	33
A6	118.67	64	119.44	100	118.32	48
B6	121.15	67	121.86	71	120.73	52
B1	122.61	67	122.43	84	120.94	47
A1	132.36	23	135.50	33	135.11	35
B3	148.14	17	149.71	29	147.99	25
A3	148.89	21	149.71	29	148.20	26
A4	149.23	20	149.84	29	148.46	29
B4	150.30	17	150.30	29	149.11	22

Compound Number 148

<sup>13</sup>C



acetylated methyl coumarate  
methyl 4-acetoxycinnamate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.02	100	20.93	40	20.79	47
OMe	51.66	11	51.70	45	51.70	47
β	118.04	11	118.75	48	118.75	45
3	122.23	25	123.10	100	122.30	100
5	122.23	25	123.10	100	122.30	100
2	129.24	24	130.02	100	129.50	100
6	129.24	24	130.02	100	129.50	100
1	132.13	9	132.81	40	131.70	36
α	143.80	12	144.21	48	143.49	47
4	152.31	4	153.34	18	152.06	26
γ	167.31	4	167.36	17	166.56	26
Ac C=O	169.05	4	169.36	17	168.84	26

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.27	s	
OMe	3.75	s	
β	6.51	d	16.0
3,5	7.18	m	8.7
α	7.67	d	16.0
2,6	7.69	m	8.7

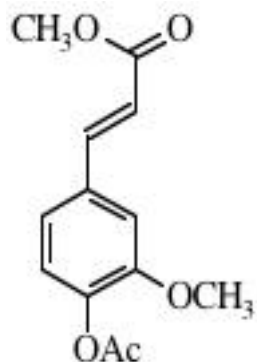
**Notes:**

J. Ralph P.S. 169.1  
50mg  
contains 30% unacetylated



Compound Number 149

<sup>13</sup>C



acetylated methyl ferulate  
methyl 4-acetoxy-3-methoxycinnamate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.54	68	20.46	70	20.28	100
γ OMe	51.62	73	51.69	85	51.34	83
OMe	55.94	100	56.44	100	55.95	96
2	111.52	71	112.59	78	112.01	71
β	118.13	85	118.95	85	118.05	96
6	120.20	87	122.04	89	121.37	83
5	123.30	98	124.12	100	123.11	88
1	133.41	47	134.25	33	132.92	67
4	141.66	27	142.73	22	140.98	42
α	144.12	85	144.68	100	143.81	92
3	151.57	37	152.72	30	151.10	58
γ	167.15	32	167.41	33	166.52	58
Ac C=O	168.59	27	168.76	26	168.19	46

<sup>1</sup>H (acetone)

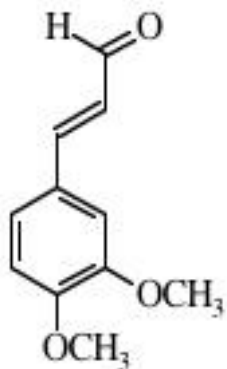
Atom	H Shifts	Mult	J
Ac Me	2.25	s	
γ OMe	3.74	s	
OMe	3.86	s	
β	6.54	d	16.0
5	7.09	d	8.1
6	7.23	dd	8.1, 1.7
2	7.41	d	1.7
α	7.64	d	16.0

**Notes:**

J. Ralph P.S. 171.1

Compound Number 150

<sup>13</sup>C



3,4-dimethoxy cinnamaldehyde

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.88	s	
OMe	3.90	s	
β	6.70	dd	15.8, 7.7
5	7.05	d	8.3
6	7.28	dd	8.3, 7.0
2	7.38	d	7.0
α	7.62	d	15.8
γ	9.67	d	7.7

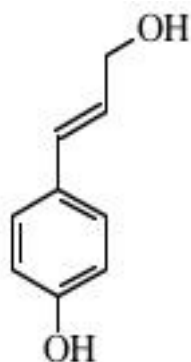
**Notes:**

S. Ralph SR111-81  
50mg  
DMSO nmr 20mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.01	<b>100</b>	56.26	<b>100</b>	55.51	<b>100</b>
OMe	56.06	95	56.32	100	55.51	100
2	110.20	49	111.66	58	110.58	42
5	111.32	63	112.61	72	111.55	58
6	123.41	80	124.30	82	123.50	61
β	126.78	81	127.57	91	126.42	67
1	127.17	34	128.28	31	126.80	42
3	149.52	20	150.73	15	148.93	30
4	152.11	17	153.24	18	151.53	30
α	152.71	51	153.64	58	153.27	45
γ	193.39	56	193.83	62	193.81	55

Compound Number 151

<sup>13</sup>C



p-Coumaryl alcohol  
4-hydroxycinnamyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			63.47	36	61.66	36
3			116.19	100	115.28	96
5			116.19	100	115.28	96
β			127.67	41	127.06	42
2			128.33	89	127.27	100
6			128.33	89	127.27	100
1			129.73	14	127.86	27
α			130.29	42	128.64	45
4			157.78	22	156.70	29

<sup>1</sup>H (acetone)

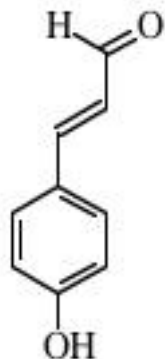
Atom	H Shifts	Mult	J
γ	4.20	bd	5.2
β	6.21	dt	15.8, 5.5
α	6.51	bd	15.9
3,5	6.80	m	8.7
2,6	7.31	m	8.7

**Notes:**

S. Ralph  
36mg

Compound Number 152

<sup>13</sup>C



p-Coumaraldehyde  
4-hydroxy cinnamaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
3			116.84	96	115.88	97
5			116.84	96	115.88	97
1			126.73	46	125.34	51
β			126.96	15	125.15	29
2			131.48	100	130.81	100
6			131.48	100	130.81	100
α			153.64	37	153.50	37
4			161.24	19	160.49	31
γ			193.81	40	193.80	46

<sup>1</sup>H (acetone)

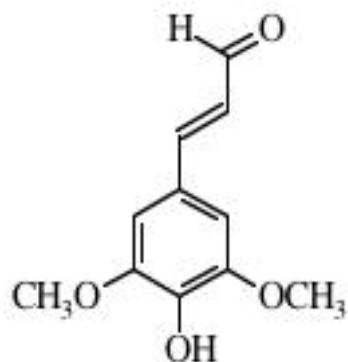
Atom	H Shifts	Mult	J
β	6.62	dd	15.8, 7.7
3,5	6.94	m	8.7
α	7.58	d	15.8
2,6	7.61	m	8.7
γ	9.64	d	7.7

**Notes:**

S. Ralph  
35mg  
order of β & 1 are reversed in DMSO

Compound Number 153

<sup>13</sup>C



Sinapaldehyde  
3,4-dimethoxy-4-hydroxycinnamaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.45	100	56.76	100	56.08	100
OMe	56.45	100	56.76	100	56.08	100
2	105.73	80	107.39	81	106.71	77
6	105.73	80	107.39	81	106.71	77
1	125.62	22	126.15	18	124.40	26
β	126.81	50	127.28	51	126.03	46
4	138.24	15	140.26	6	139.13	14
3	147.44	32	149.02	23	148.02	43
5	147.44	32	149.02	23	148.02	43
α	153.09	32	154.22	38	154.12	37
γ	193.32	35	193.70	26	193.75	40

<sup>1</sup>H (acetone)

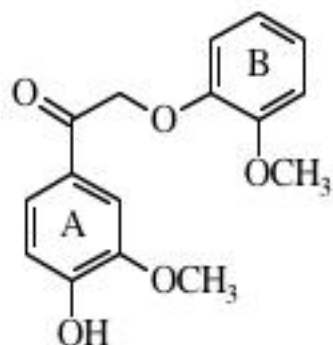
Atom	H Shifts	Mult	J
OMe	3.90	s	
β	6.69	dd	15.8, 7.7
2,6	7.08	s	
α	7.55	d	15.8
γ	9.63	d	7.7

**Notes:**

S. Ralph  
25mg

Compound Number 154

<sup>13</sup>C



1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)- ethanone

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.83	s	
OMe	3.92	s	
β	5.36	s	

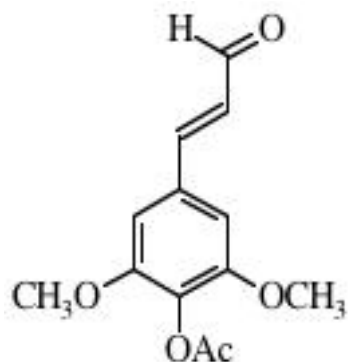
Notes:

S. Ralph

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.95	96	56.26	100	55.54	83
OMe	56.12	100	56.26	100	55.62	100
β	72.08	67	72.42	51	70.46	58
A2	110.31	74	111.84	57	111.21	58
B2	112.31	63	113.68	46	112.50	58
A5	114.06	93	115.42	57	113.70	58
B5	114.88	56	115.71	43	115.00	83
B6	120.86	93	121.48	69	120.46	100
B1	122.38	96	122.55	66	121.19	83
A6	123.41	85	123.94	71	122.79	83
A1	127.62	37	128.24	23	126.18	58
A3	146.86	33	148.30	20	147.56	92
B3	147.69	22	149.14	17	147.56	92
B4	149.82	26	150.86	14	148.96	42
A4	151.02	48	152.69	17	152.18	67
α	193.17	37	193.27	23	192.60	42

Compound Number 155

<sup>13</sup>C



Acetylated sinapaldehyde  
4-acetoxy-3,5-dimethoxycinnamaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.39	43	20.23	40	20.05	50
OMe	56.25	100	56.68	100	56.20	100
OMe	56.25	100	56.68	100	56.20	100
2	105.13	86	106.26	88	105.63	84
6	105.13	86	106.26	88	105.63	84
β	128.79	52	129.80	48	128.93	47
1	131.23	9	132.01	8	130.20	13
4	132.30	26	133.55	22	132.39	39
α	152.20	34	153.08	36	152.77	66
3	152.63	47	153.64	33	152.05	37
5	152.63	47	153.64	33	152.05	37
Ac C=O	168.30	17	168.37	15	167.76	24
γ	193.25	36	193.94	36	194.18	39

<sup>1</sup>H (acetone)

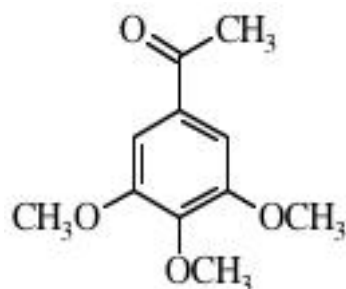
Atom	H Shifts	Mult	J
Ac Me	2.26	s	
OMe	3.87	s	
β	6.81	dd	15.9, 7.6
2,6	7.12	s	
α	7.61	d	15.9
γ	9.68	d	7.6

**Notes:**

Pearl Coll.  
40mg  
α and 3,5 change places in DMSO

Compound Number 156

<sup>13</sup>C



3,4,5-Trimethoxyacetophenone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.39	43	26.52	47	26.50	51
OMe	56.34	100	56.57	100	56.01	100
OMe	56.34	100	56.57	100	56.01	100
4 OMe	60.91	41	60.64	44	60.07	47
2	106.00	75	106.85	80	105.80	87
6	106.00	75	106.85	80	105.80	87
1	132.49	23	133.51	19	132.18	30
4	142.77	9	143.62	8	141.91	11
3	153.08	41	154.16	33	152.68	60
5	153.08	41	154.16	33	152.68	60
α	196.79	16	196.76	15	196.70	17

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	2.56	s	
4 OMe	3.80	s	
3,5 OMe	3.89	s	
2,6	7.29	s	

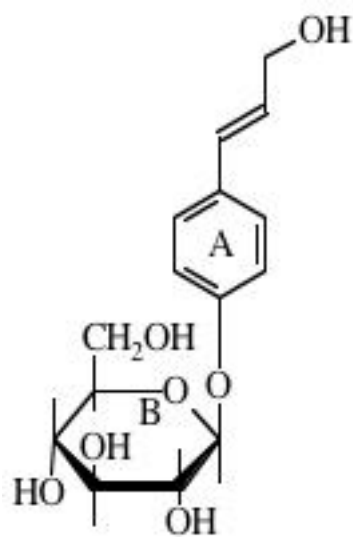
**Notes:**

Aldrich  
48mg



Compound Number 157

<sup>13</sup>C



**p-Gluco cinnamyl alcohol**  
**4-(3-hydroxy-1-propenyl)phenyl-β-D-glucopyranoside**

<sup>1</sup>H (DMSO)

Atom	H Shifts	Mult	J
γ	4.09	dd	5.2
β	6.24	dt	15.9, 5.0
α	6.49	bd	16.0
A3,5	6.98	d	8.7
A2,6	7.35	d	8.7
B1	4.84	d	7.3
B2,3,4,5	3.36-3.14	nr	
B6 α	3.46	m	11.7, 6.0
B6 β	3.70	ddd	11.7
B6 OH	4.58	t	5.7
γOH	4.83	t	5.4

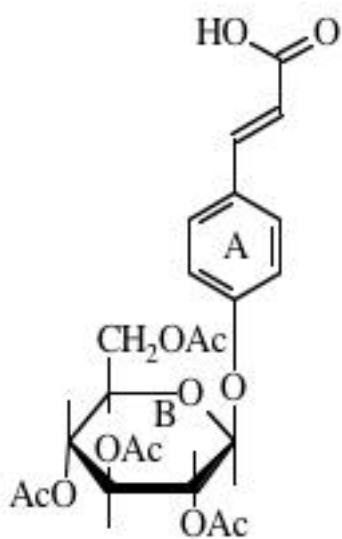
**Notes:**

N. Terashima  
 15mg only DMSO soluble  
 Terashima, Ralph, Landucci, Holzforschung, 50(1995)p. 151-155

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B6					60.63	36
γ					61.49	45
B4					69.64	45
B2					73.14	41
B5					76.51	41
B3					76.94	50
B1					100.32	41
A3					116.23	91
A5					116.23	91
A2					127.02	100
A6					127.02	100
α					127.97	50
β					128.71	45
A1					130.58	36
A4					156.62	41

Compound Number 158

<sup>13</sup>C



acetylated p-gluco cinnamic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.58	100	18.86	100	20.22	91
Ac Me	20.58	100	18.86	100	20.22	91
Ac Me	20.58	100	20.52	70	20.28	81
Ac Me	20.58	100	20.58	70	20.37	66
B6	61.97	32	62.73	47	61.52	41
B4	68.29	42	69.29	43	67.96	47
B2	71.17	42	71.96	43	70.60	47
B5	72.23	45	72.75	43	70.84	53
B3	72.68	48	73.33	47	71.86	44
B1	98.55	39	98.86	40	96.67	44
A3	117.18	90	117.81	87	116.48	100
A5	117.18	90	117.81	87	116.48	100
β	116.31	42	117.96	47	117.80	47
A1	129.38	29	130.39	23	128.98	41
A2	129.90	81	130.60	83	129.76	100
A6	129.90	81	130.60	83	129.76	100
α	145.76	39	144.67	40	143.05	53
4	158.52	29	159.39	33	157.60	38
γ	169.25	29	167.83	27	167.50	41
Ac C=O	169.39	32	169.71	23	168.95	44
Ac C=O	170.20	29	170.02	27	169.17	44
Ac C=O	170.51	29	170.29	27	169.44	38
Ac C=O	171.26	26	170.62	27	169.82	47

<sup>1</sup>H (acetone)

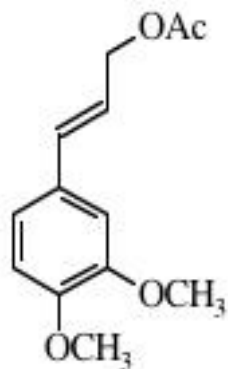
Atom	H Shifts	Mult	J
β	6.44	d	16.0
A3,5	7.13	d	8.8
α	7.64	d	8.7
A2,6	7.68	d	15.7

**Notes:**

N. Terashima  
22mg  
β + 3,5 switch places in CDCl<sub>3</sub>

Compound Number 159

<sup>13</sup>C



3,4-dimethoxycinnamyl acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.01	60	20.79	44	20.64	47
OMe	55.88	100	56.08	100	55.41	100
OMe	55.94	100	56.08	100	55.41	100
γ	65.25	87	65.48	59	64.43	47
2	109.07	60	110.48	40	109.28	33
5	111.20	67	112.67	46	111.63	37
6	120.03	87	120.78	58	119.73	50
β	121.19	100	122.28	58	121.37	50
1	129.34	47	130.37	24	128.81	30
α	134.28	87	134.54	58	133.25	43
3	149.14	33	150.54	19	148.83	43
4	149.31	40	150.62	17	148.83	43
Ac C=O	170.84	27	170.72	15	170.05	20

<sup>1</sup>H (acetone)

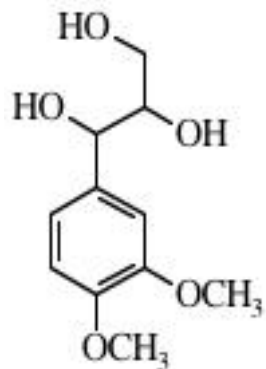
Atom	H Shifts	Mult	J
Ac Me	2.02	s	
OMe	3.79	s	
OMe	3.82	s	
γ	4.65	dd	6.5, 1.3
β	6.22	dt	15.9, 6.4
α	6.61	bd	15.9
5	6.89	d	8.3
6	6.95	dd	8.3, 1.9
2	7.10	q	1.9

**Notes:**

S. Ralph 15mg

Compound Number 160

<sup>13</sup>C



Veratryl glycerol  
1-(3,4-dimethoxyphenyl)glycerol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.98	100	56.10	94		
OMe	55.98	100	56.20	94		
γ	63.41	50	63.98	100		
β	74.87	47	74.70	88		
α	75.81	53	77.21	88		
2	109.71	33	111.82	62		
5	111.25	33	112.54	69		
6	119.04	50	119.91	88		
1	133.04	27	136.24	56		
3	149.08	23	149.70	31		
4	149.28	27	150.16	31		

<sup>1</sup>H (acetone)

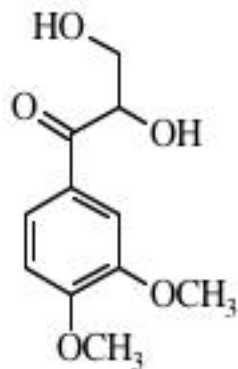
Atom	H Shifts	Mult	J
OMe	3.77	s	
OMe	3.78	s	
γ1	3.36	dd	
γ2	3.48	dd	
β	3.62	m	
α	4.58	d	
5	6.86	m	
6	6.86	m	
2	7.00	bs	

**Notes:**

M. Mozuch 2mg  
No DEPT run and not run in DMSO

Compound Number 161

<sup>13</sup>C



1-(3,4-dimethoxyphenyl)-2,3-dihydroxypropan-1-one

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.89	s	
OMe	3.92	s	
β	5.13	m	
5	7.08	d	8.4
2	7.55	d	2.0
6	7.71	dd	2.0, 8.4

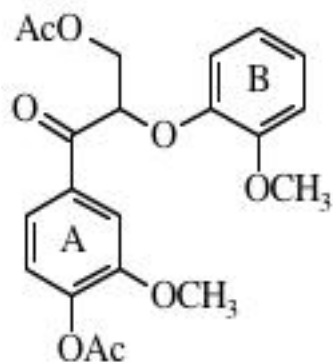
**Notes:**

M. Mozuch 17 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.11	100	56.20	72		
OMe	56.21	100	56.28	76		
γ	65.95	93	66.30	100		
β	74.17	93	75.28	90		
2	110.34	79	111.64	76		
5	110.77	71	112.03	48		
6	123.46	100	124.23	86		
1	126.55	43	128.45	24		
3	149.52	50	150.28	28		
4	154.42	36	155.09	28		
α	197.65	50	199.22	41		

Compound Number 162

<sup>13</sup>C



Erone diacetate

3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propan-1-one

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	100	20.48	100		
Ac Me	20.75	65	20.64	70		
OMe	55.75	75	56.16	79		
OMe	56.08	85	56.46	85		
γ	64.36	70	64.66	70		
β	80.58	60	80.50	67		
A2	112.73	85	113.45	66		
B2	112.73	85	113.93	64		
B5	118.53	65	118.58	56		
B6	121.04	80	121.67	74		
A6	122.34	70	122.81	67		
B1	122.97	75	124.04	89		
A5	123.66	80	124.04	89		
A1	133.67	40	134.87	39		
A4	144.38	30	145.35	20		
B4	146.82	25	147.86	33		
B3	150.43	35	151.40	25		
A3	151.47	35	152.50	39		
A4 Ac C=O	168.30	35	168.58	28		
γ Ac C=O	170.82	30	170.90	28		
α	194.59	40	195.10	31		

<sup>1</sup>H (acetone)

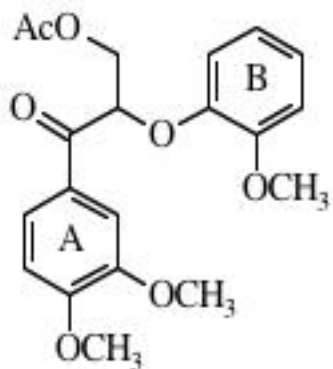
Atom	H Shifts	Mult	J
Ac Me	1.98	s	
Ac Me	2.27	s	
OMe	3.76	s	
OMe	3.88	s	
γ1	4.49	dd	6.5, 11.9
γ2	4.65	dd	3.9, 11.9
β	5.84	dd	3.9, 6.5
A2,6	7.81	m	
A5	7.23	d	8.8

**Notes:**

L.Landucci 30 mg  
Not run in DMSO

Compound Number 163

<sup>13</sup>C



Veratrone acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.78	84	20.64	64	20.44	95
OMe	55.79	100	56.05	82	55.40	93
OMe	55.96	95	56.17	100	55.53	100
OMe	56.07	93	56.22	96	55.74	90
γ	64.62	86	64.85	79	63.60	67
β	80.28	89	80.00	82	79.08	67
A2	110.22	82	111.59	82	110.70	74
A5	111.10	84	112.06	82	110.98	76
B2	112.67	88	113.85	86	112.88	76
B5	118.05	88	117.99	79	115.61	74
B6	120.96	93	121.57	89	120.53	83
A6	123.33	89	123.69	82	122.28	79
B1	123.76	95	124.27	86	123.23	79
A1	128.04	47	128.96	39	127.29	57
B4	146.92	37	147.95	32	146.33	55
A3	149.04	46	150.13	36	148.58	55
B3	150.32	39	151.25	32	149.37	55
A4	153.88	44	155.11	36	153.67	57
Ac C=O	170.84	42	170.89	32	170.00	55
α	194.05	46	194.24	39	193.22	62

<sup>1</sup>H (acetone)

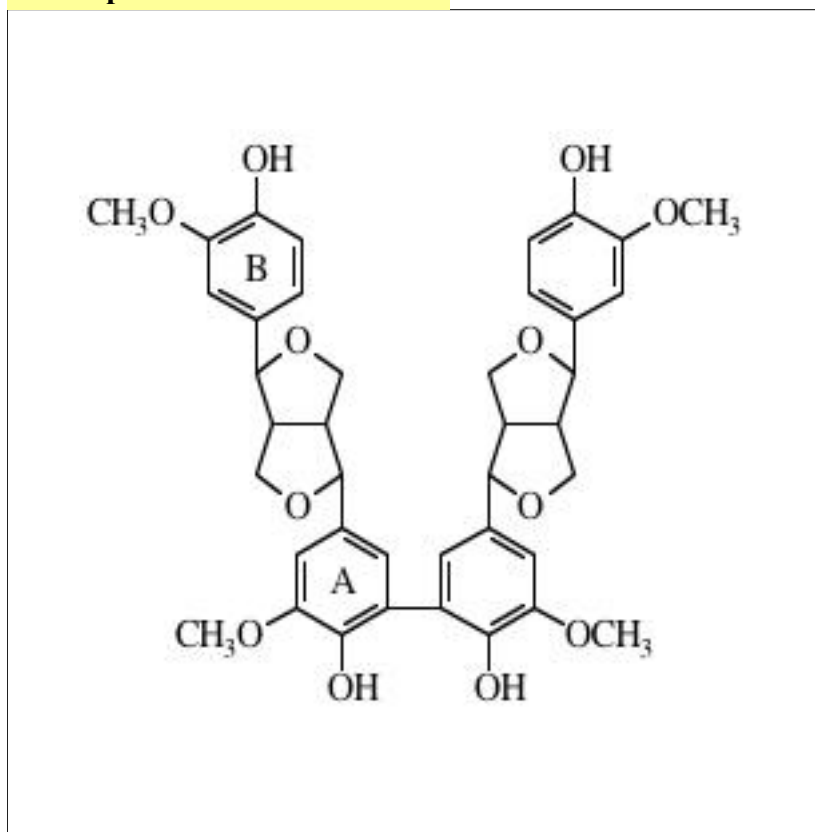
Atom	H Shifts	Mult	J
Ac Me	1.98	s	
OMe	3.77	s	
OMe	3.85	s	
OMe	3.89	s	
γ1	4.47	dd	6.8, 11.9
γ2	4.62	dd	3.9, 11.9
β	5.81	dd	3.9
A5	7.06	d	8.5
A2	7.66	d	2.0
A6	7.84	dd	2.0, 8.4

**Notes:**

L.Landucci  
35 mg

Compound Number 164

<sup>13</sup>C



Pinoresinol biphenyl

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A β	54.13	81	55.26	100	53.60	93
Bβ	54.18	81	55.26	100	53.60	93
OMe	55.97	100	56.25	69	55.57	100
OMe	56.22	91	56.48	83	55.90	77
A γ	71.66	62	72.19	60	70.86	53
B γ	71.82	62	72.33	59	70.98	51
A α	85.82	72	86.67	93	85.14	66
Bα	85.93	72	86.67	93	85.21	56
A2	108.17	47	109.38	49	108.61	34
B2	108.64	74	110.58	57	110.39	77
B5	114.28	77	115.51	58	115.08	73
B6	118.98	72	119.62	62	118.60	68
A6	120.93	51	121.96	51	120.90	36
A5	124.06	34	125.96	23	125.44	26
A1	132.82	55	133.50	41	131.28	44
B1	132.82	55	134.17	31	132.16	47
A4	142.31	47	144.01	28	142.96	38
B4	145.26	51	146.82	35	145.85	54
B3	146.73	47	148.28	33	147.46	65
A3	147.40	45	148.68	38	147.63	41

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.82	s	
OMe	3.87	s	
A,B γ2	4.21	dd	6.8, 9.0
A,B α	4.67	d	4.5

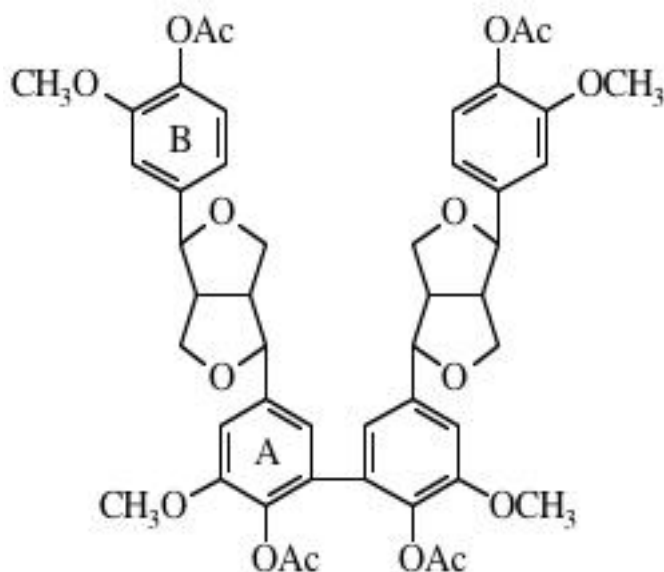
Notes:

J.Pew  
15 mg  
As this compound has a plane of symmetry the shifts for the other half are identical.



Compound Number 165

<sup>13</sup>C



Pinoresinol biphenyl acetate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.21	s	
OMe	3.80	s	
OMe	3.84	s	
A,B β	3.14	m	
A,B γ2	4.28	m	
A,Bα	4.80	m	

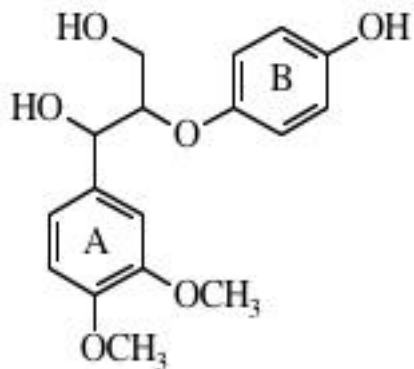
**Notes:**

J. Pew  
 7 mg intensities for some peaks are irregular  
 As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.47	65	20.42	77	20.19	66
Ac Me	20.67	55	20.49	92	21.16	100
A β	54.28	65	55.40	86	54.57	74
B β	54.37	52	55.40	86	54.57	74
OMe	55.96	73	56.22	71	56.52	99
OMe	56.17	85	56.47	64	56.82	66
A γ	71.95	66	72.62	100	72.09	69
B γ	72.05	45	72.62	100	72.09	69
A α	85.49	100	86.17	72	85.32	47
B α	85.49	100	86.17	72	85.42	63
A2	109.40	41	110.55	41	110.80	20
B2	109.89	46	111.09	55	111.18	61
B6	117.96	54	118.62	53	118.63	65
A6	119.79	50	120.26	38	119.80	22
B5	122.76	58	123.47	60	123.36	63
A5	131.38	32	132.09	26	131.16	33
A4	136.93	18	137.76	20	136.84	31
B4	139.13	28	140.12	20	139.23	42
A1	139.40	28	141.07	31	140.59	43
B1	140.02	29	141.80	35	141.24	41
A3	151.24	31	152.27	34	151.52	55
B3	151.51	35	152.59	38	151.86	48
A Ac C=O	168.71	25	168.83	26	168.93	26
B Ac C=O	169.08	26	169.02	34	169.32	51

Compound Number 166

<sup>13</sup>C



1-(3,4-dimethoxyphenyl)-2-(4-hydroxyphenoxy)propan-1,3-diol

<sup>1</sup>H (acetone)

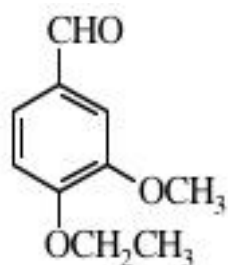
Atom	H Shifts	Mult	J
γ1	3.49	dd	5.2, 11.3
OMe	3.77	s	
OMe	3.77	s	
β	4.26	m	
α	4.95	d	5.0

**Notes:**

M. Mozuch  
40 mg  
not very soluble in CDCl<sub>3</sub>, not run in DMSO

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.03	61		
OMe			56.09	63		
γ			61.58	40		
α			73.29	40		
β			85.37	48		
A2			111.84	46		
A5			112.30	54		
B2			116.42	100		
B6			116.42	100		
B3			118.70	100		
B5			118.70	100		
A6			119.90	46		
A1			135.53	27		
A3			149.56	22		
A4			149.97	25		
B1			152.52	27		
B4			153.12	19		
minor isomer						
γ			61.96			
α			73.94			
β			85.17			

Compound Number 167

<sup>13</sup>C

Ethyl vanillin

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Me	14.38	87	14.92	75		
OMe	55.77	100	56.00	100		
CH <sub>2</sub>	64.39	88	65.02	83		
2	108.97	59	110.36	79		
5	111.07	73	112.52	93		
6	126.53	65	126.65	70		
1	129.69	33	130.98	30		
3	149.51	23	150.72	20		
4	153.71	24	154.88	20		
α	190.60	73	191.06	72		

<sup>1</sup>H (acetone)

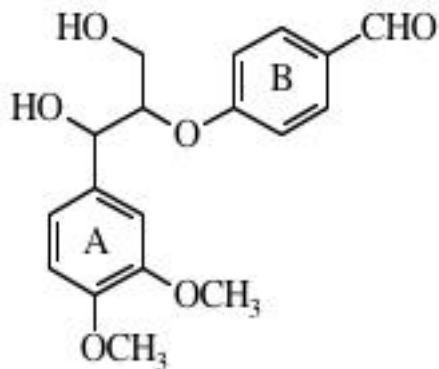
Atom	H Shifts	Mult	J
Me	1.42	t	7.0
OMe	3.89	s	
CH <sub>2</sub>	4.15	q	7.0
5	7.08	d	8.2
2	7.41	d	1.9
6	7.49	dd	1.9, 8.2
α	9.85	s	

**Notes:**

M. Mozuch  
40 mg  
Not run in DMSO

Compound Number 168

<sup>13</sup>C



1-(3,4-dimethoxyphenyl)-2-(4-carboxymethylphenoxy)  
propan-1,3-diol

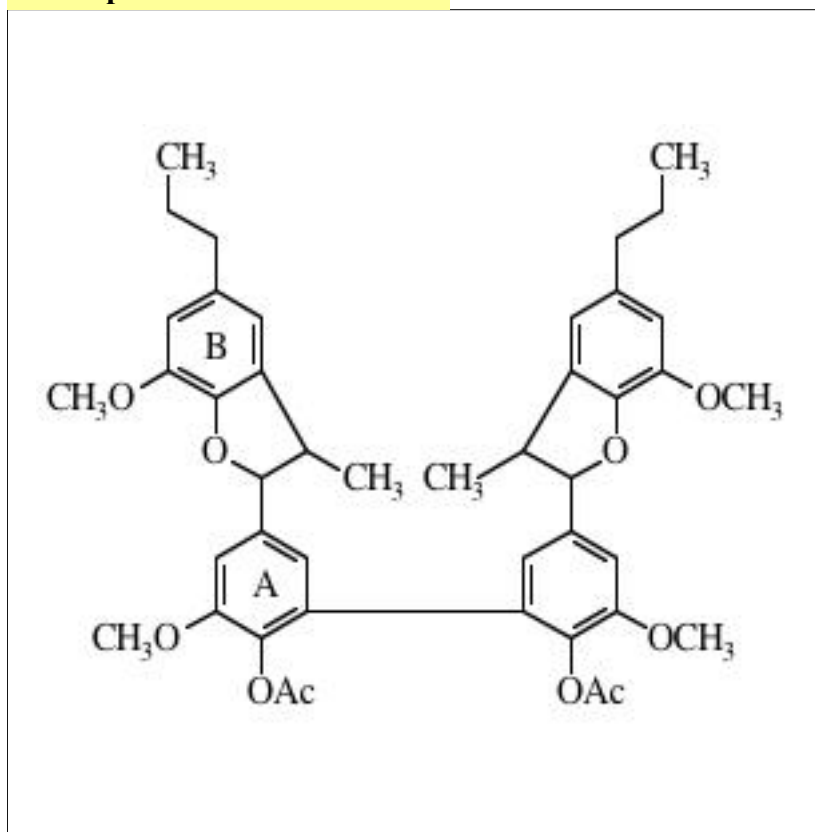
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.82	s	
β	4.54	m	
α	4.99	d	5.6
B 2,6	7.72	m	
B α	9.78	s	

**Notes:**

S. Kawai  
50 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.87	100	56.03	91		
γ	61.71	37	62.00	39		
α	74.04	41	73.55	36		
β	81.49	38	83.70	38		
A2	109.66	38	111.84	44		
A5	111.06	41	112.22	45		
B3	116.00	84	116.94	100		
B5	116.00	84	116.94	100		
A6	119.16	37	120.09	36		
A1	130.24	27	130.89	27		
B2	131.94	77	132.18	80		
B6	131.94	77	132.18	80		
B1	132.82	33	135.16	23		
A3	148.82	19	149.63	17		
A4	149.00	26	149.93	19		
B4	162.93	28	164.83	20		
B α	190.78	31	191.01	47		
Minor isomer						
γ	61.37					
α	73.62					
β	82.58					

**Compound Number 169**
<sup>13</sup>C

**Phenylcoumaran biphenyl acetate**

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.75	<b>100</b>	14.10	97	13.71	<b>100</b>
γ	17.71	75	18.49	74	17.81	57
Ac Me	20.26	77	20.30	67	19.96	49
B β	24.92	85	25.73	64	24.56	83
B α	37.91	82	38.53	86	37.29	60
β	45.76	73	46.82	61	45.26	49
OMe	55.85	88	56.43	<b>100</b>	55.66	79
OMe	56.00	81	56.48	93	56.04	64
α	92.66	66	92.74	74	91.15	43
B2	109.60	40	110.63	68	110.13	38
A2	111.74	52	113.65	69	112.29	40
B6	115.33	68	116.42	81	115.42	45
A6	120.42	38	120.46	56	119.24	23
A1	130.96	45	132.00	46	130.33	45
B1	132.48	62	133.69	68	132.47	51
A5	136.36	59	137.00	47	135.76	53
A4	137.28	33	138.28	29	136.61	36
B5	138.51	62	140.22	46	138.84	47
B3	143.69	55	144.86	31	143.40	53
A3	145.07	40	146.36	29	144.73	43
B4	151.39	56	152.72	49	151.24	47
Ac C=O	168.36	26	168.66	28	168.02	26

<sup>1</sup>H (acetone)

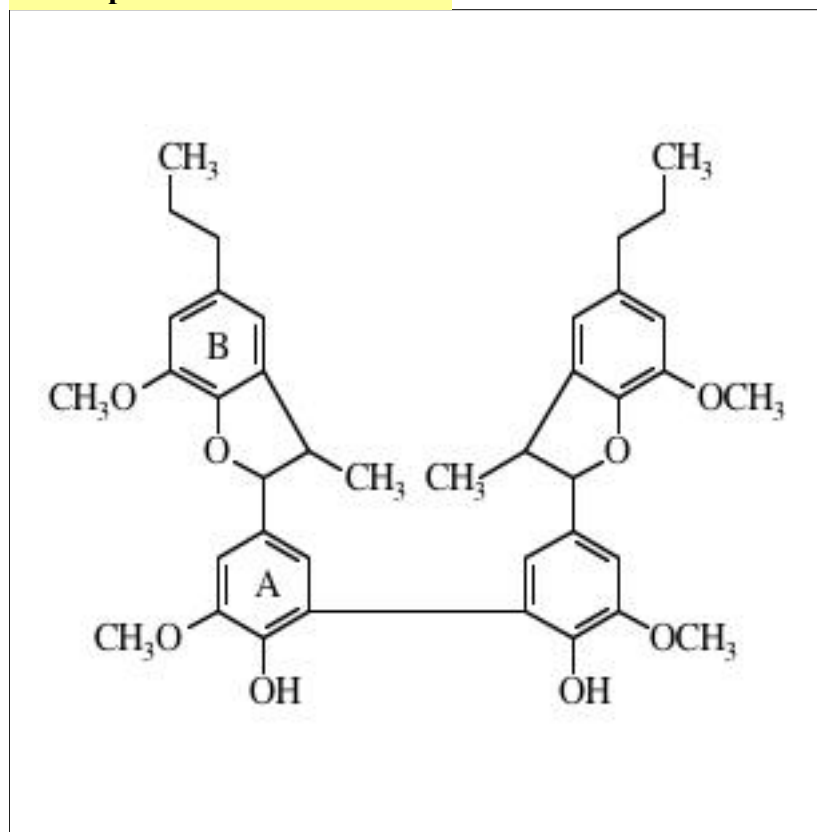
Atom	H Shifts	Mult	J
B γ	0.92	t	7.3
γ	1.41	d	6.8
B β	1.60	m	7.5
Ac Me	2.02	s	
B α	2.51	m	7.3
β	3.42	m	
OMe	3.82	s	
OMe	3.85	s	
α	5.18	d	8.7
B2	6.63	s	
B6	6.69	s	
A2	6.96	d	1.8
A6	7.25	d	1.9

**Notes:**

J. Pew  
50 mg  
As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 170

<sup>13</sup>C



Phenyl coumaran biphenyl

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.91	100	14.10	100	13.77	100
γ	17.48	70	17.87	78	17.28	76
B β	25.08	84	25.79	100	24.62	84
B α	38.07	84	38.54	93	37.32	64
β	45.68	79	46.48	74	44.80	50
OMe	56.00	80	56.40	89	55.66	84
OMe	56.20	85	56.50	93	55.94	68
α	93.52	72	93.84	81	92.39	48
B2	108.42	49	109.38	63	108.67	32
A2	111.83	54	113.57	70	112.19	46
B6	115.44	69	116.40	81	115.42	52
A6	122.01	61	122.57	74	121.57	36
A5	123.90	48	125.82	33	125.33	42
B1	132.15	64	132.38	48	129.98	46
A1	132.96	57	134.15	56	132.94	56
B5	136.28	62	136.65	48	135.41	58
B3	142.71	56	144.74	56	143.32	58
A4	143.82	49	144.79	56	143.78	48
A3	145.34	33	146.58	30	144.91	48
B4	147.41	52	148.76	56	147.74	50

<sup>1</sup>H (acetone)

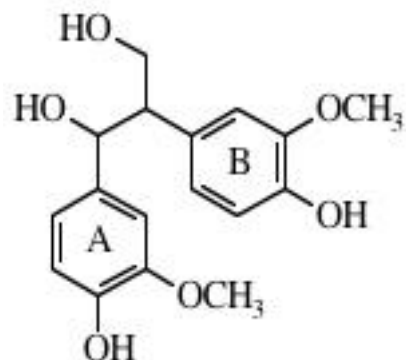
Atom	H Shifts	Mult	J
B γ	0.92	t	7.3
γ	1.37	d	6.8
B β	1.61	h	7.4
B α	2.52	t	7.4
β	3.44	m	
OMe	3.80	s	
OMe	3.89	s	
α	5.09	d	9.4
B2	6.63	s	
B6	6.68	s	
A2	7.02	d	1.8
A6	7.11	d	1.9

**Notes:**

J. Pew  
30 mg  
As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 171

<sup>13</sup>C



1,2-diguaiacylpropane-1,3-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.67	s	
OMe	3.72	s	
β	2.94	m	
α	5.02	d	

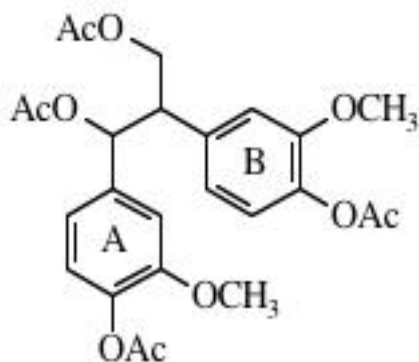
**Notes:**

S. Ralph  
15 mg  
β higher ppm than OMe's in acetone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	55.60	46	56.46	85	54.69	74
OMe	55.90	100	56.05	90	54.87	100
OMe	55.90	100	56.15	100	55.06	95
γ	64.25	49	64.42	78	62.20	60
α	75.78	51	74.86	70	71.96	67
A2	109.06	54	111.18	72	110.27	71
B2	111.80	51	114.18	72	113.46	74
A5	113.98	56	114.82	92	113.98	90
B5	114.58	51	115.01	88	114.03	81
A6	119.70	51	119.92	82	118.13	74
B6	121.54	51	123.00	82	121.32	71
B1	130.29	27	132.17	52	130.96	69
A1	133.99	32	136.59	60	135.49	71
B4	144.97	32	145.91	42	144.13	74
A4	145.32	29	146.12	45	144.36	64
B3	146.53	27	147.54	52	146.05	69
A3	146.63	27	147.60	45	146.24	67

Compound Number 172

<sup>13</sup>C



1,2-diguaiacylpropane-1,3-diol tetraacetate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.93	s	
Ac Me	1.98	s	
Ac Me	2.21	s	
Ac Me	2.22	s	
β	3.52	m	
γ1	4.21	dd	6.6, 11.0
γ2	4.38	dd	6.8, 11.3
α	6.18	d	6.6

**Notes:**

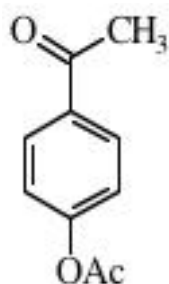
S. Ralph  
15 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.63	92	20.45	68	20.28	82
Ac Me	20.63	92	20.45	68	20.28	82
Ac Me	20.79	48	20.67	43	20.44	56
Ac Me	20.96	49	20.84	46	20.53	63
β	50.09	43	50.97	48	49.08	35
OMe	55.88	100	56.20	100	55.60	100
OMe	55.88	100	56.20	100	55.60	100
γ	64.02	42	64.86	42	63.94	28
α	74.87	42	75.56	46	74.49	35
A2	111.24	41	112.07	43	111.00	28
B2	113.32	46	114.49	42	113.38	37
A6	119.13	11	119.71	49	118.69	39
B6	120.98	47	121.91	48	120.71	39
B5	122.46	52	123.12	58	122.15	41
A5	122.58	47	123.29	51	122.38	34
B1	135.77	33	137.41	29	136.55	34
A1	136.91	33	138.70	26	137.52	35
B4	139.04	21	140.02	17	138.15	32
A4	139.58	21	140.48	17	138.71	32
B3	150.71	27	151.78	22	150.14	39
A3	150.86	24	151.97	20	150.40	34
Ac C=O	168.76	28	168.88	23	168.32	42
Ac C=O	168.84	27	168.94	22	168.32	42
α Ac C=O	169.63	26	169.64	20	169.19	32
γ Ac C=O	170.74	26	170.74	20	169.98	35
Minor isomer						
β			50.70			
γ			64.71			
α			76.50			



Compound Number 173

<sup>13</sup>C



4-acetoxy-acetophenone

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.28	s	
β	2.57	s	
3	7.24	d	8.9
2	8.02	d	8.9

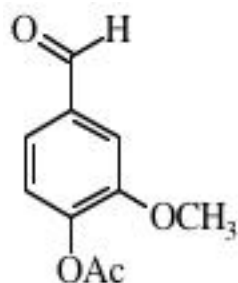
**Notes:**

Jamie Milhaupt  
JR-JMA 29.1  
50 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.11	39	20.98	40	20.51	47
β	26.55	41	20.64	45	26.62	46
3	121.75	92	122.75	100	122.02	93
5	121.75	92	122.75	100	122.02	93
2	129.91	100	130.53	94	129.78	100
6	129.91	100	130.53	94	129.78	100
1	134.72	15	135.65	11	134.39	23
4	154.35	15	155.43	11	154.08	22
Ac C=O	168.78	15	169.27	13	168.73	19
α	196.75	13	196.80	11	196.75	15

Compound Number 174

<sup>13</sup>C



Vanillin acetate  
4-formyl-2-methoxy phenyl acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.58	72	20.45	62	20.29	90
OMe	56.06	100	56.46	86	55.96	100
2	110.92	85	112.31	79	111.84	90
6	123.40	98	124.39	100	123.46	90
5	124.59	87	124.44	100	123.63	100
1	135.23	40	136.43	25	135.00	51
4	144.93	24	145.83	18	144.19	34
3	151.96	30	153.03	20	151.50	41
Ac C=O	168.26	28	168.57	18	168.01	41
α	190.97	92	191.76	71	191.87	95

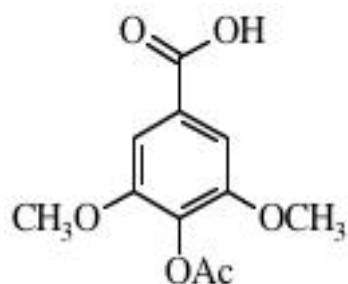
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.27	s	
OMe	3.91	s	
2	7.57	d	0.8
5	7.29	d	7.8
6	7.55	dd	7.8, 0.8
α	9.97	s	

**Notes:**

Jamie Milhaupt  
JR-JMA 23.1  
50mg

Compound Number 175

<sup>13</sup>C

Syringic Acid Acetate  
4-acetoxy-3,5-dimethoxy benzoic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.43	47	20.23	43	19.93	50
OMe	56.34	100	56.65	98	55.92	100
OMe	56.34	100	56.65	98	55.92	100
2	106.90	100	107.12	100	105.72	83
6	106.90	100	107.12	100	105.72	83
1	127.15	12	129.34	17	128.72	33
4	133.37	14	133.63	12	131.44	17
3	152.19	57	153.21	33	151.48	63
5	152.19	57	153.21	33	151.48	63
α	168.17	27	166.97	21	166.44	35
Ac C=O	171.25	20	168.18	19	167.52	30

<sup>1</sup>H (acetone)

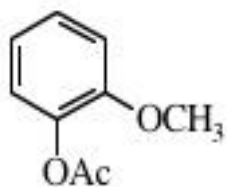
Atom	H Shifts	Mult	J
Ac Me	2.27	s	
OMe	3.88	s	
2,6	7.37	s	

**Notes:**

Jamie Milhaupt  
JR-JMA 25.1  
25 mg

Compound Number 176

<sup>13</sup>C



Guaiacol acetate  
2-methoxyphenyl acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	64	20.48	68	20.21	84
OMe	55.78	100	56.12	95	55.62	96
2	112.39	93	113.41	94	112.74	99
5	120.72	97	121.30	100	120.47	100
1	122.78	95	123.66	98	122.76	97
6	126.86	95	127.50	97	126.79	93
4	139.75	19	141.01	15	139.33	28
3	151.10	22	152.36	19	150.87	35
Ac C=O	168.99	21	168.93	17	168.43	34

<sup>1</sup>H (acetone)

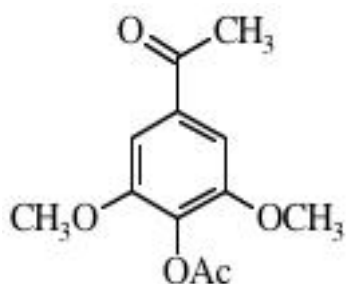
Atom	H Shifts	Mult	J
Ac Me	2.22	s	
OMe	3.79	s	
2	6.93	m	
5	7.20	m	
1	7.05	m	
6	7.05	m	

**Notes:**

Jamie Milhaupt  
JR-JMA 27.1  
54 mg

Compound Number 177

<sup>13</sup>C



Acetosyringone acetate  
4-acetoxy-3,5-dimethoxy acetophenone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	43	20.23	40	20.86	50
β	26.50	44	26.68	47	27.47	50
OMe	52.28	100	56.66	100	56.94	100
OMe	56.28	100	56.66	100	56.94	100
2	105.10	94	105.89	100	105.79	88
6	105.10	94	105.89	100	105.79	88
4	132.81	9	133.70	6	132.75	13
1	135.11	23	136.19	13	135.69	31
3	152.20	40	153.28	26	152.56	57
5	152.20	40	153.28	26	156.56	57
Ac C=O	168.14	17	168.21	13	168.43	27
α	196.75	17	196.92	13	197.64	28

<sup>1</sup>H (acetone)

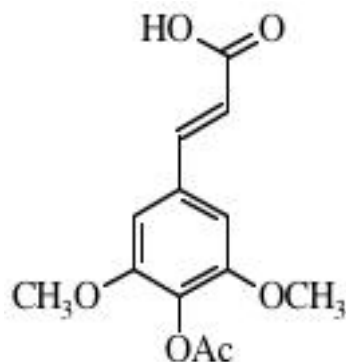
Atom	H Shifts	Mult	J
Ac Me	2.25	s	
β	2.58	s	
OMe	3.87	s	
2,6	7.31	s	

**Notes:**

Jamie Milhaupt  
JR-JMA 31.1  
50 mg

Compound Number 178

<sup>13</sup>C



Sinapic acid acetate  
4-acetoxy-3,5-dimethoxy cinnamic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	51	20.23	48	20.03	60
OMe	56.27	100	56.66	100	56.20	100
OMe	56.27	100	56.66	100	56.20	100
2	105.19	87	106.42	100	105.93	68
6	105.19	87	106.42	100	105.93	68
b	116.92	41	117.90	48	117.16	38
4	131.30	11	132.15	10	130.30	19
1	131.93	31	132.95	25	131.78	34
α	148.34	44	149.06	45	148.37	34
3	152.60	57	153.60	40	151.97	66
5	152.60	57	153.60	40	151.97	66
γ	162.19	25	163.11	15	162.61	28
Ac C=O	168.33	25	168.35	20	167.74	32

<sup>1</sup>H (acetone)

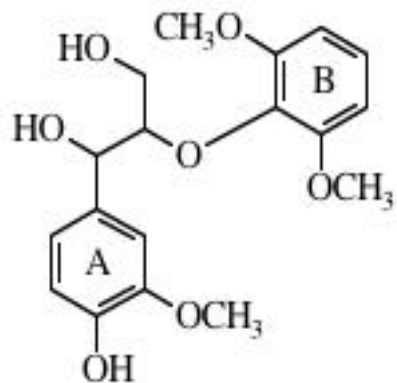
Atom	H Shifts	Mult	J
Ac OMe	2.29	s	
OMe	3.86	s	
2,6	7.13	s	
β	6.66	d	5.9
α	7.79	d	5.9

**Notes:**

20 mg  
sample has a minor impurity

Compound Number 179

<sup>13</sup>C



*threo*

Guaiacylglycerol- $\beta$ -syringyl ether  
1-(4-hydroxy-3-methoxyphenyl)-2-(2,6-dimethoxyphenoxy)  
propane-1,3-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
$\gamma$ 1	3.29	m	
$\gamma$ 2	3.64	m	
$\alpha$	5.00	dd	7.5, 2.6
$\beta$	3.51	m	
B2	6.73	d	8.4
A2	7.07	d	1.8
A5	6.78	d	8.0
A6	6.92	dd	8.0, 1.8
B1	7.04	t	8.4
A4	7.46	s	
$\alpha$ OH	4.36	dd	2.6, 1.1

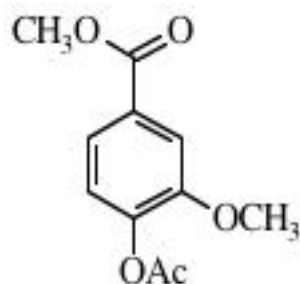
**Notes:**

S. Lemke SLI 75B  
17.7mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.97	58	56.23	37	55.45	49
OMe	56.16	100	56.58	100	55.85	100
OMe	56.16	100	56.58	100	55.85	100
$\gamma$	60.49	42	61.31	46	60.08	31
$\alpha$	74.13	45	74.07	44	71.40	39
$\beta$	89.06	47	89.76	51	86.96	34
B2	105.36	98	106.53	93	105.64	72
B6	105.36	98	106.53	93	105.64	72
A2	109.91	44	111.51	46	110.93	36
A5	114.33	45	115.23	49	114.55	39
A6	120.40	47	120.76	53	119.10	37
B1	124.50	47	124.90	53	123.26	39
A1	132.00	26	133.71	23	132.86	36
B4	135.38	15	137.16	11	136.18	22
A4	145.46	27	146.81	23	145.20	36
A3	146.58	24	147.95	18	146.76	33
B3	153.26	35	154.19	35	152.69	58
B5	153.26	35	154.19	35	152.69	58
erythro isomer						
$\gamma$	60.59		60.94		59.71	
$\alpha$	72.52		73.35		72.04	
$\beta$	87.03		87.83		86.12	

Compound Number 180

<sup>13</sup>C



4-acetoxy-3-methoxy methyl benzoate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.27	s	
α OMe	3.89	s	
OMe	3.88	s	
2	7.65	d	1.9
5	7.18	d	8.0
6	7.63	dd	8.0, 1.9

**Notes:**

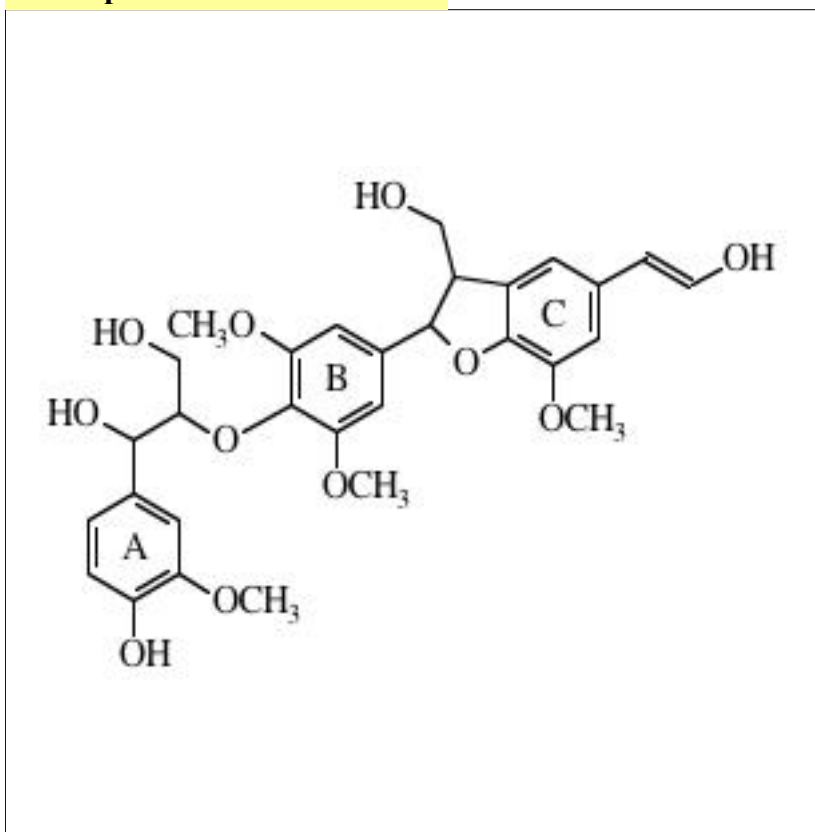
Jamie Milhaupt  
JR-JMA 43.1  
50 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	73	20.45	72	20.33	96
α OMe	52.26	77	52.45	74	52.60	91
OMe	56.07	96	56.40	100	55.95	91
2	113.44	88	113.96	82	112.96	77
6	122.60	93	123.05	88	122.06	100
5	122.78	100	123.85	88	123.24	93
1	128.82	34	129.67	30	128.32	52
4	143.64	22	144.81	20	143.28	41
3	151.07	28	152.30	24	150.93	49
α	166.33	33	166.53	20	165.56	46
Ac C=O	168.43	29	168.59	22	168.14	46



Compound Number 181

<sup>13</sup>C



G-b-S-c-CA

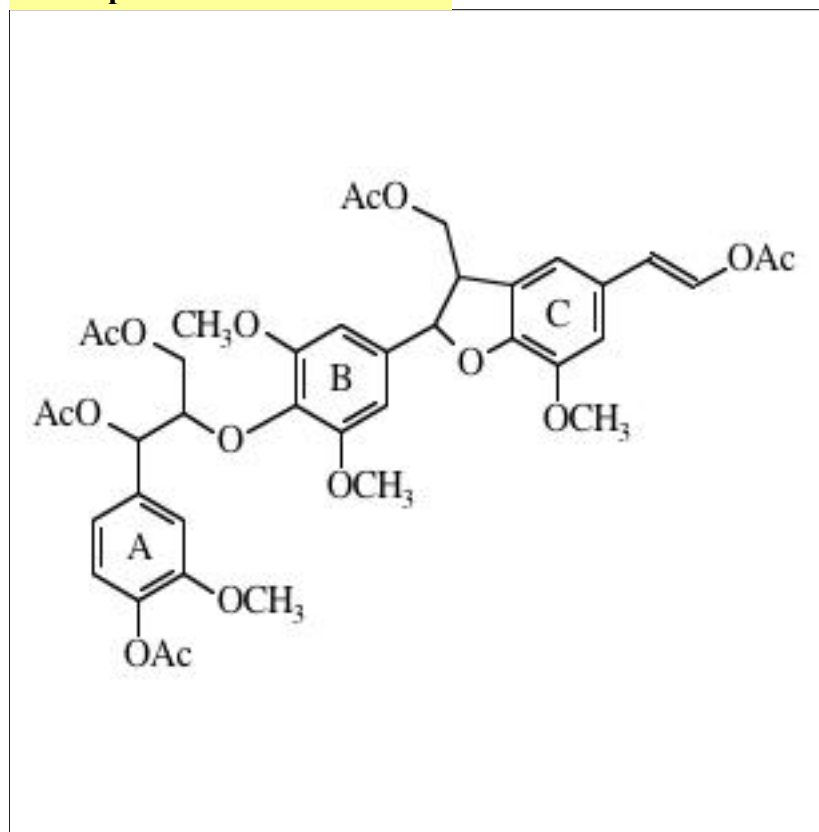
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.82	s	
OMe	3.84	s	
OMe	3.89	s	
α	5.00	m	
B α	5.62	d	6.5
B2,6	6.83	s	
C β	6.25	dt	15.8, 5.4
C α	6.54	d	15.9

**Notes:**

S. Luque SLL 11C  
 7mg Assignments from 360 MHz expts in acetone. Spectrum in CDCl<sub>3</sub> weak 3's,4's, and 1's uncertain Landucci, Luque and Ralph, J. Wood Chem. Tech., 15 (4), 493-513 (1995)

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	53.94	48	54.91	35	52.93	27
OMe	56.10	86	56.24	61	55.42	55
OMe	56.10	86	56.50	52	55.90	73
OMe	56.34	80	56.61	100	55.71	100
OMe	56.34	80	56.61	100	55.71	100
γ	60.66	33	60.97	38	59.64	24
C γ	63.81	28	63.36	41	61.52	31
B γ	64.21	16	64.62	34	62.71	28
α	72.64	20	73.37	41	71.98	33
β	87.19	29	87.87	38	86.14	31
B α	88.18	15	88.36	28	86.93	19
B2	103.26	45	104.10	66	103.24	40
B6	103.26	45	104.10	66	103.24	40
A2	108.53	29	110.89	41	110.81	39
C2	110.67	21	111.89	31	110.88	39
A5	114.29	40	115.20	42	114.56	30
C6	114.89	33	116.06	35	114.82	22
A6	118.84	30	120.01	39	119.19	21
C β	126.87	23	128.57	35	128.02	22
C5	130.15	13	130.15	15	128.78	24
C α	131.51	27	130.40	35	129.22	21
C1	131.34	31	132.20	18	130.63	19
A1	131.34	31	133.73	18	133.15	27
B1	134.75	13	136.10	8	134.79	15
B4	137.86	25	139.09	14	136.59	21
C3	144.57	12	145.22	11	143.59	25
A4	144.94	23	146.44	20	145.18	31
A3	146.71	17	147.97	17	146.86	36
C4	148.76	10	148.82	7	146.86	36
B3	153.53	39	154.26	30	152.60	43
B5	153.53	100	154.26	30	152.60	43

**Compound Number 182**
<sup>13</sup>C

**G-b-S-c-CA (acetate)**

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.68	56	20.49	56	20.33	80
Ac Me	2078	52	20.61	51	20.31	80
Ac Me	20.85	49	20.77	58	20.55	43
Ac Me	21.07	56	20.82	64	20.67	50
Ac Me	21.07	56	20.93	54	20.71	51
B β	50.51	30	51.32	36	49.37	22
OMe	55.96	48	56.28	56	55.73	53
OMe	56.10	100	56.45	100	55.82	100
OMe	56.10	100	56.45	100	55.82	100
OMe	56.10	100	56.51	78	55.82	100
γ	62.64	24	63.29	26	62.06	15
C γ	65.19	39	65.51	40	64.51	35
B γ	65.33	28	65.96	36	64.76	21
α	74.00	26	75.03	32	73.68	18
β	80.95	21	81.37	33	79.94	22
Bα	88.55	28	88.86	32	87.60	21
B2	103.08	57	103.94	65	103.13	39
B6	103.08	57	103.94	65	103.13	39
C2	110.72	26	112.19	29	111.07	24
A2	111.50	29	112.30	42	111.07	24
C6	115.33	29	116.33	36	115.24	20
A6	119.18	24	120.01	35	118.79	22
C β	121.37	33	122.30	35	121.41	25
A5	122.44	31	123.29	44	122.54	25
C5	127.52	24	129.08	24	127.99	25
C1	130.74	23	131.60	23	130.13	27
C α	134.28	31	134.70	35	133.48	27
B4	135.16	11	136.15	12	134.30	23
A1	136.12	16	137.09	22	135.63	22
B1	136.62	24	138.02	26	136.41	23
A4	139.51	21	140.56	21	138.89	22
C3	144.46	23	145.41	22	143.89	24
C4	148.19	17	149.31	14	147.55	19
A3	150.86	21	152.03	23	150.57	27
B3	153.38	47	154.19	45	152.65	47
B5	153.38	47	154.19	45	152.65	47
Ac C=O	168.88	21	168.97	21	168.44	25
Ac C=O	169.50	22	169.95	28	169.32	25
Ac C=O	170.71	24	170.70	24	169.94	28
Ac C=O	170.85	37	170.79	23	170.12	23
Ac C=O	170.85	37	170.98	24	170.25	30

<sup>1</sup>H (acetone)

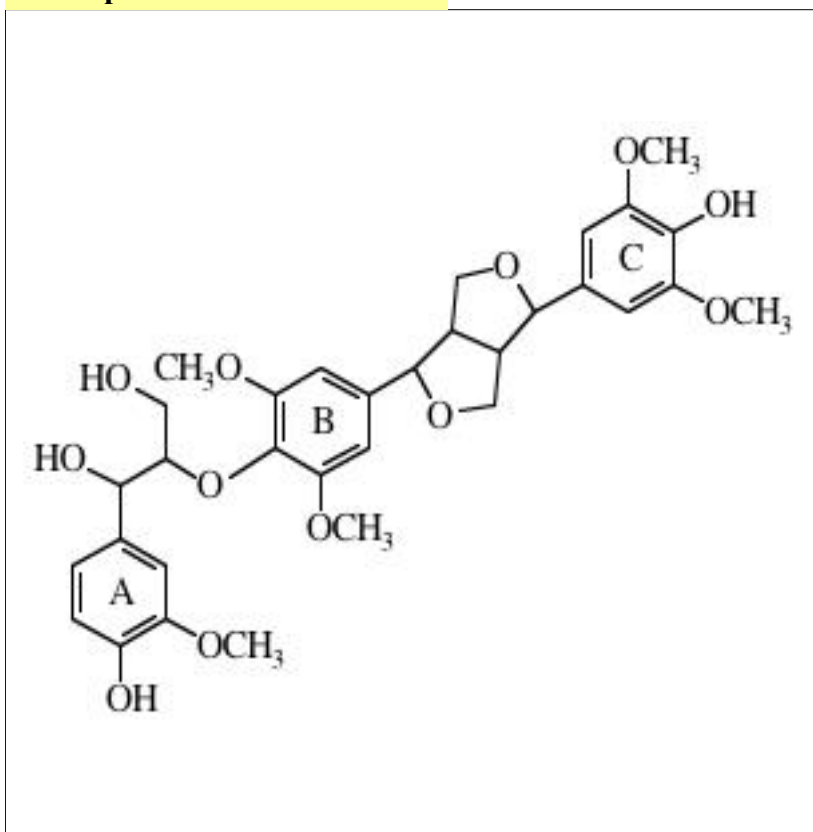
Atom	H Shifts	Mult	J
γ1	4.16	dd	11.9, 4.0
C γ	4.65	dd	6.5, 1.2
α	6.06	d	4.5
β	4.73	m	
B α	5.54	d	7.1
B2,6	6.76	s	
C2	7.14	m	
Cβ	6.24	dt	15.8, 6.5
C α	6.64	d	15.9

**Notes:**

L. Landucci SR VII-9,  
8mg Assignments in d<sub>6</sub>-acetone based on 360MHz cosy df br HMBC and HMQC  
exps. Landucci, Luque and Ralph, J. Wood Chem. Tech., 15(4), 493-513 (1995)

Compound Number 183

<sup>13</sup>C



G-b-S-r-S

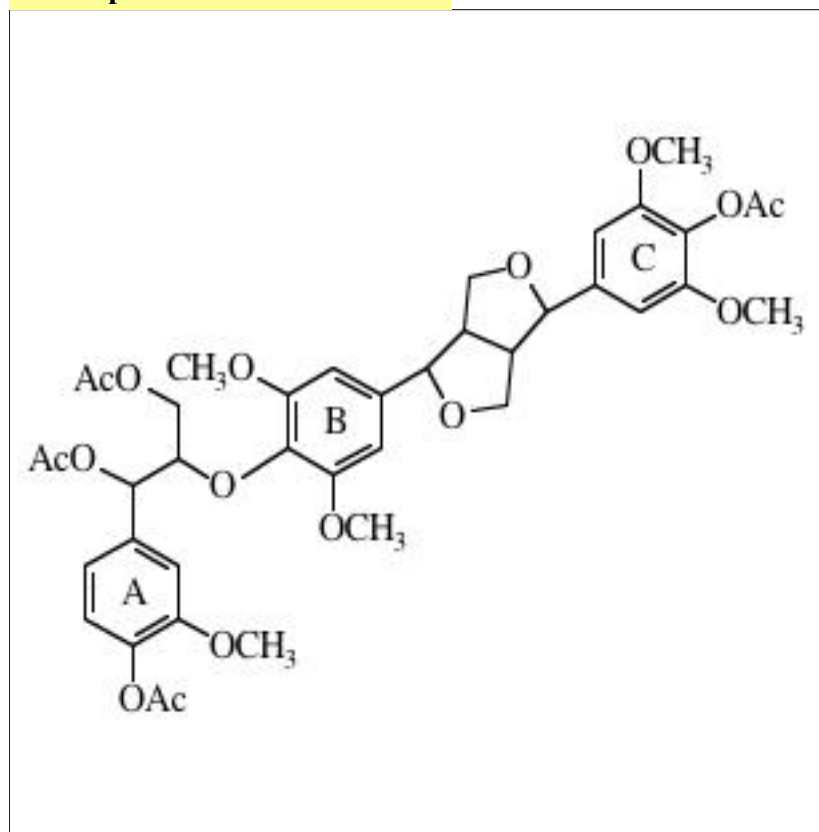
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B β	3.11	m	
C β	3.11	m	
γ 2	3.44	dd	72.0, 3.4
β	4.17	m	
C γ	4.22	m	
B γ	4.22	m	
C α	4.67	d	4.0
B α	4.73	d	4.0
α	4.98	d	3.4
B2	6.76	s	
C2	6.67	s	
A2	7.03	s	

**Notes:**

S. Lague SR VII 9  
 34mg Assignments in d6-acetone based on 360MHz HMBC and HMQC exps  
 Landucci, Luque and Ralph, J. Wood Chem. Tech., 15(4), 493-513 (1995)

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	54.32	27	55.23	32	53.61	22
C β	54.48	26	55.39	36	53.76	27
OMe	56.00	66	56.28	54	55.53	53
OMe	56.27	80	56.60	100	55.99	100
OMe	56.27	80	56.60	100	55.99	100
OMe	56.44	62	56.67	79	55.99	100
OMe	56.44	62	56.67	79	55.99	100
γ	60.57	36	60.97	34	59.84	22
C γ	71.76	22	72.38	33	71.13	22
B γ	72.08	25	72.57	33	71.27	25
α	72.56	29	73.38	39	72.12	27
B α	85.98	41	86.57	41	85.12	33
C α	85.98	41	86.72	30	85.32	23
β	87.03	27	87.78	42	86.14	32
B2	102.88	100	104.09	70	103.29	46
B6	102.88	100	104.09	70	103.29	46
C2	102.88	100	104.50	55	103.68	51
C6	102.88	100	104.50	55	103.67	51
A2	108.61	34	110.93	38	110.96	28
A5	114.28	39	115.21	41	114.65	28
A6	118.80	33	120.04	39	119.36	28
C1	131.37	22	133.10	18	131.38	22
A1	131.91	18	133.74	20	133.26	23
B1	134.36	14	135.67	17	134.77	20
C4	134.52	15	136.20	16	134.89	20
B4	137.80	19	139.05	24	136.89	23
A3	144.94	28	146.43	29	145.32	35
A4	146.71	27	147.96	28	146.96	34
C3	147.29	33	148.67	33	147.90	44
C5	147.29	33	148.67	33	147.90	44
B3	153.45	44	154.15	47	152.61	47
B5	153.45	44	154.15	47	152.61	47



G-b-S-r-S (acetate)

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B,C γ1	3.90	dd	
γ 1	4.18	ddd	11.9, 4.1, 1.8
B,C γ2	4.27	dd	
γ2	4.39	ddd	11.8, 5.9, 0.8
B α	4.72	d	4.4
C α	4.76	d	4.4
α	6.05	dd	4.7, 2.6
B2,6	6.68	s	
C2,6	6.74	s	
A6	6.96	dd	8.1, 1.8
A2	7.14	d	1.8
A5	7.01	d	7.4

**Notes:**

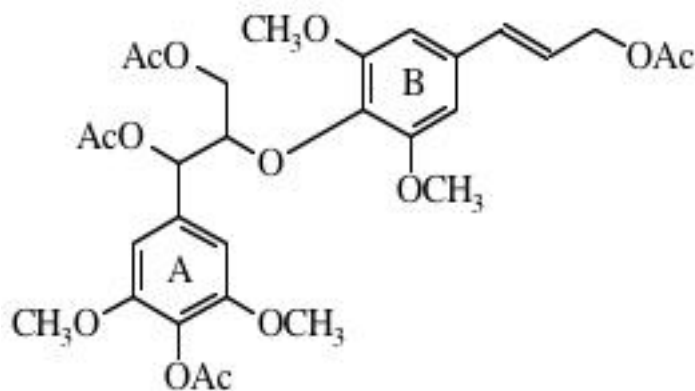
L. Landucci XXI 36

40mg Assign'ts in d6-acetone based on the HMBC exp't H assign'ts for 360 MHz spectra Landucci, Luque and Ralph, J. Wood Chem. Tech., 15(4), 493-513 (1995)

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.32	42	20.24	33	20.11	45
Ac Me	20.51	46	20.48	63	20.31	81
Ac Me	20.63	46	20.61	52	20.31	81
Ac Me	20.93	46	20.94	56	20.66	45
B β	54.16	25	55.33	30	53.67	39
C β	54.33	35	55.43	33	53.81	35
OMe	55.79	44	56.26	57	55.69	45
OMe	55.96	89	56.38	90	55.78	100
OMe	55.96	89	56.38	90	55.78	100
OMe	56.09	100	56.46	100	55.94	97
OMe	56.09	100	56.46	100	55.94	97
γ	62.50	26	63.29	36	62.10	26
B γ	71.87	25	72.65	53	71.36	45
C γ	71.98	25	72.65	53	71.36	45
α	73.82	21	75.05	30	73.72	23
β	80.62	21	81.28	22	79.86	16
B α	85.63	33	86.45	31	84.92	32
C α	85.77	30	86.54	33	85.06	32
C2	102.12	75	103.23	55	102.44	68
C6	102.12	75	103.23	55	102.44	68
B2	102.64	51	103.73	54	102.80	42
B6	102.64	51	103.73	54	102.80	42
A2	111.37	28	112.21	34	110.95	23
A6	119.09	26	120.04	25	118.80	16
A5	122.26	33	123.26	37	122.49	23
C4	127.87	14	128.85	8	127.06	19
B4	134.41	18	135.48	13	133.63	23
A1	135.97	18	137.12	18	135.71	19
B1	137.13	26	138.89	17	137.53	32
A4	139.35	26	140.54	21	138.86	26
C1	139.58	28	141.44	17	140.14	35
A3	150.68	26	152.00	23	150.53	29
C3	152.16	49	153.21	31	151.64	68
C5	152.16	49	153.21	31	151.64	68
B3	153.19	49	154.04	37	152.54	48
B5	153.19	49	154.04	37	152.54	48
Ac C=O	168.64	25	168.61	15	168.08	29
Ac C=O	168.72	26	168.94	29	168.41	29
Ac C=O	169.36	28	169.92	30	169.31	35
Ac C=O	170.70	28	170.67	31	169.94	35

Compound Number 185

<sup>13</sup>C



S-b-SA (acetate)

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	3.81	s	
Ac Me	3.85	s	
γ2	4.19	dd	11.8, 4.1
γ1	4.43	dd	11.8, 6.1
B γ	4.68	dd	7.4, 1.2
α	6.07	d	4.2
β	4.74	dt	6.1, 4.2
A6 or B6	3.78	s	
A2 or B2	6.80	s	
B β	6.33	dt	15.8, 6.3
B α	6.63	d	16.0

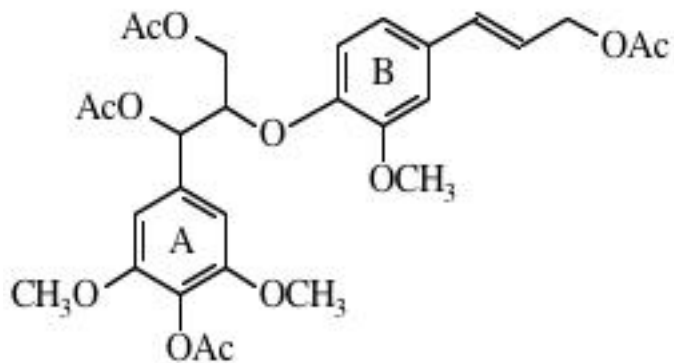
Notes:

S. Ralph SRVII 15A  
67mg Landucci, Luque and Ralph, J. Wood Chem. Tech.15(4), 493-513 (1995)

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.46	43	20.26	49	20.04	47
Ac Me	20.76	43	20.63	47	20.29	52
Ac Me	20.99	43	20.80	44	20.62	75
Ac Me	21.07	47	20.93	47	20.62	75
OMe	56.02	96	56.39	100	55.73	100
OMe	56.02	96	56.39	100	55.73	100
OMe	56.17	100	56.49	96	55.86	91
OMe	56.17	100	56.49	96	55.84	91
γ	62.76	34	63.28	40	62.07	26
B γ	64.92	43	65.25	48	64.16	40
α	74.25	35	75.29	41	73.84	91
β	80.93	37	81.56	42	79.98	91
A2	103.69	65	104.52	77	103.20	55
A6	103.69	65	104.52	77	103.20	55
B2	103.95	57	104.60	78	103.53	58
B6	103.95	57	104.60	78	103.53	58
B β	122.95	35	124.09	44	123.32	35
A4	128.49	11	129.32	11	127.47	19
B1	132.41	31	133.30	26	131.88	29
Bα	134.07	38	134.36	48	132.96	37
A1	135.37	18	136.46	17	134.40	28
B4	135.53	30	136.62	28	135.19	31
A3	151.93	51	153.02	43	151.44	64
A5	151.93	51	153.02	43	151.44	64
B3	153.22	53	154.14	49	152.58	62
B5	153.22	53	154.14	49	152.58	62
Ac C=O	168.57	18	168.51	22	167.91	26
Ac C=O	169.57	24	169.95	25	169.24	31
Ac C=O	170.82	27	170.68	26	169.86	35
Ac C=O	170.82	27	170.74	20	170.00	26

Compound Number 186

<sup>13</sup>C



S-b-CA (acetate)

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.54	34	20.25	45	20.04	45
Ac Me	20.86	37	20.64	43	20.38	52
Ac Me	21.12	46	20.80	41	20.63	75
Ac Me	21.12	46	20.89	47	20.63	75
OMe	55.91	57	56.29	54	55.61	56
OMe	56.29	100	56.54	100	55.90	100
OMe	56.29	100	56.54	100	55.90	100
γ	62.73	37	63.09	43	61.88	29
B γ	56.15	43	65.36	52	64.31	45
α	74.05	46	74.78	46	73.20	35
β	80.21	37	80.17	43	78.01	32
A2	104.52	83	105.14	81	103.94	65
A6	104.52	83	105.14	81	103.94	65
B2	110.41	43	111.40	45	110.26	33
B5	119.04	43	119.16	44	117.14	37
B6	119.89	46	120.49	40	119.43	39
B β	122.36	49	123.52	48	122.30	40
A4	128.85	14	129.61	11	127.66	23
B1	131.93	31	132.56	27	130.71	31
B α	133.90	43	134.13	48	132.84	40
A1	134.82	31	136.11	26	134.78	32
B4	147.37	29	148.33	22	146.56	31
B3	151.06	29	151.92	21	150.11	33
A3	152.13	60	153.06	38	151.38	65
A5	152.13	60	153.06	38	151.38	65
Ac C=O	168.59	23	168.46	21	167.90	31
Ac C=O	169.55	31	169.89	22	169.18	32
Ac C=O	170.84	26	170.75	29	169.96	36
Ac C=O	170.90	23	170.75	29	170.03	29

<sup>1</sup>H (acetone)

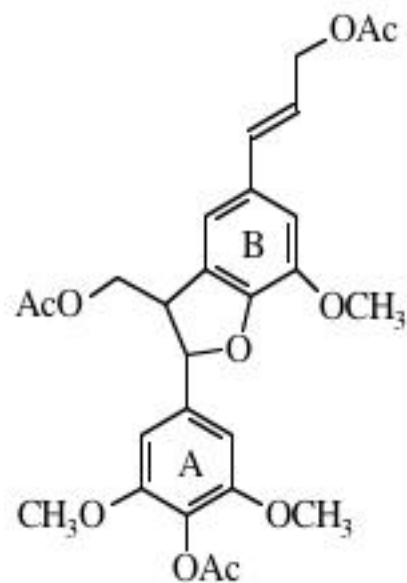
Atom	H Shifts	Mult	J
OMe	3.86	s	
OMe	3.81	s	
γ1	4.38	dd	11.9, 5.9
γ2	4.26	dd	11.9, 4.1
B γ	4.68	dd	6.4, 1.2
β	4.89	m	
α	6.05	d	5.1
B β	6.30	dt	15.8, 6.4
B α	6.63	d	15.9
A2,6	6.87	s	
B2	7.15	d	1.6

Notes:

S. Ralph SR VII 16D  
15mg Landucci, Luque and Ralph, J. Wood Chem. Tech., 15(4), 493-513 (1995)

Compound Number 187

<sup>13</sup>C



S-c-CA (acetate)

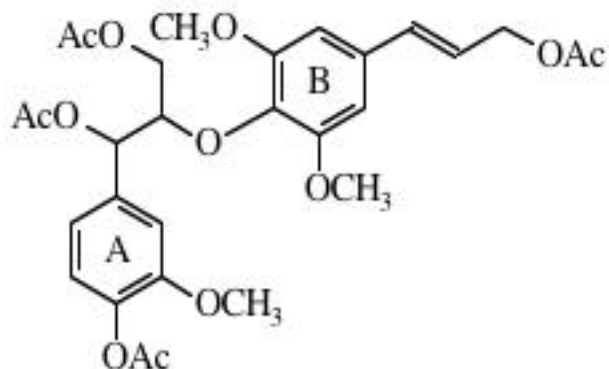
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.48	dd	11.1, 5.5
γ2	4.37	dd	11.1, 7.3
B γ	4.67	d	6.4
α	5.59	d	7.1
B β	6.25	dt	15.9, 6.4
B α	6.65	d	15.9
A2	6.84	s	
B2 or B6	7.05	s	
B2 or B6	7.07	s	

**Notes:**

S. Ralph SR VII 21C  
8mg  
Landucci, Luque and Ralph, J. Wood Chem. Tech., 15(4), 493-513 (1995)

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.53	45	20.25	30	20.13	46
Ac Me	20.92	43	20.74	30	20.57	52
Ac Me	21.11	42	20.82	30	20.73	54
β	50.62	47	51.37	32	49.37	34
OMe	56.18	58	56.54	100	55.84	55
OMe	56.31	100	56.54	100	56.00	100
OMe	56.31	100	56.54	100	56.00	100
B γ	65.26	53	65.50	35	64.51	48
γ	65.43	42	65.96	34	64.47	34
α	88.44	42	88.76	31	87.46	37
A2	102.65	81	103.51	62	102.86	73
A6	102.65	81	103.51	62	102.86	73
B2	110.87	43	112.38	31	111.11	33
B6	115.42	45	116.34	31	115.24	34
B β	121.44	47	122.36	31	121.46	39
B5	127.51	34	129.03	15	127.98	36
A4	128.68	13	129.52	6	127.74	18
B1	130.85	34	131.70	16	130.22	36
B α	134.33	47	134.67	31	133.46	37
A1	135.97	36	140.50	18	138.92	34
B3	144.53	30	145.55	15	143.90	34
B4	148.26	21	149.28	10	147.49	25
A3	152.43	53	153.40	27	151.77	69
A5	152.43	53	153.40	27	151.77	69
Ac C=O	168.69	25	168.57	12	168.02	28
Ac C=O	170.79	30	170.75	8	170.13	28
Ac C=O	170.93	15	170.94	8	170.28	37



G-b-SA acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.72	55	20.49	55	20.35	100
Ac Me	20.81	48	20.61	51	20.35	100
Ac Me	21.06	49	20.81	47	20.70	79
Ac Me	21.02	57	20.94	54	20.70	79
OMe	55.99	58	56.31	64	55.73	62
OMe	56.07	100	56.44	100	55.82	96
OMe	56.07	100	56.44	100	55.82	96
γ	62.74	32	63.24	43	62.05	27
B γ	65.00	39	65.26	49	64.24	37
α	74.09	35	75.07	38	73.67	29
β	81.03	36	81.57	39	80.04	29
B2	103.76	67	104.71	84	103.62	60
B6	103.76	67	104.71	84	103.62	60
A2	111.56	32	111.46	47	110.92	28
A6	119.24	33	119.94	39	118.72	28
A5	122.51	36	123.34	46	122.58	43
B β	122.97	41	124.14	45	123.43	34
B1	132.46	28	133.39	25	132.02	28
B α	134.16	36	134.40	41	133.02	35
A1	135.38	14	136.46	16	134.36	24
B4	136.11	26	137.14	28	135.66	27
A4	139.56	19	140.60	14	138.88	24
A3	150.91	22	152.10	22	150.59	29
B3	153.29	45	154.23	39	152.69	52
B5	153.29	45	154.23	39	152.69	52
Ac C=O	168.92	19	168.94	18	168.45	27
Ac C=O	169.55	26	169.92	24	169.33	33
Ac C=O	170.88	38	170.66	22	169.95	36
Ac C=O	170.88	38	170.66	22	170.10	27

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.84	s	
γ1	4.42	dd	11.8, 6.0
γ2	4.18	dd	11.8, 4.1
B γ	4.69	dd	6.2, 1.1
α	6.08	d	4.3
B2,6	6.80	s	
B β	6.33	dt	15.9, 6.2
B α	6.64	d	16.0

**Notes:**

S. Ralph SR VII - 17A

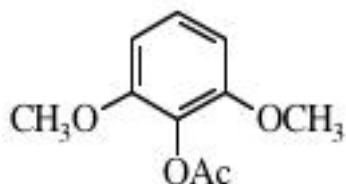
16mg

Landucci, Luque and Ralph, J. Wood Chem. Tech., 15(4), 493-513 (1995)



Compound Number 189

<sup>13</sup>C



2,6-dimethoxyphenol acetate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.22	s	
OMe	3.37	s	
2,6	6.69	d	8.5
1	7.13	t	8.5

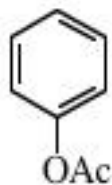
**Notes:**

Jamie Milhaupt  
JR-JMA 35.1  
40mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.45	36	20.27	35	20.12	47
OMe	56.12	100	56.40	100	55.89	96
OMe	56.12	100	56.40	100	55.89	96
2	104.91	90	105.77	95	105.00	100
6	104.91	90	105.77	95	105.00	100
1	126.23	47	126.92	53	126.23	53
4	128.85	5	129.94	5	128.11	9
3	152.34	24	153.43	22	151.90	42
5	152.34	24	153.43	22	151.90	42
Ac C=O	168.71	11	168.56	10	168.04	19

Compound Number 190

<sup>13</sup>C



phenol acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.12	33	20.94	36	20.75	47
3	121.58	89	122.57	97	121.70	100
5	121.58	89	122.57	97	121.70	100
1	125.82	50	126.36	57	125.63	59
2	129.42	100	130.09	100	129.35	100
6	129.42	100	130.09	100	129.35	100
4	150.74	10	151.96	10	150.44	16
Ac C=O	169.48	10	169.61	10	169.05	14

<sup>1</sup>H (acetone)

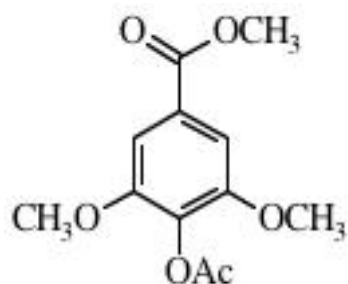
Atom	H Shifts	Mult	J
Ac Me	2.23	s	
3,5	7.12	m	
1	7.22	m	
2,6	7.40	m	

**Notes:**

Jamie Milhaupt  
JR-JMA 55  
54mg

Compound Number 191

<sup>13</sup>C



methyl (4-acetoxy-3,5-dimethoxy) benzoate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.26	s	
α OMe	3.88	s	
OMe	3.87	s	
2,6	7.33	s	

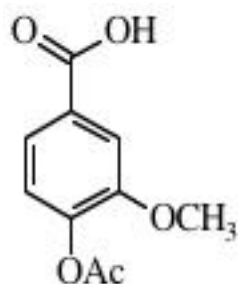
**Notes:**

Jamie Milhaupt  
JR-JMA 41.1  
40mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.40	42	20.22	43	20.06	48
α OMe	52.34	45	52.57	45	52.36	49
OMe	56.32	100	56.68	96	56.17	100
OMe	56.32	100	56.68	96	56.17	100
2	106.34	95	106.87	100	105.79	90
6	106.34	95	106.87	100	105.79	90
1	128.10	21	129.04	17	127.70	29
4	132.63	9	133.69	8	131.96	10
3	152.10	39	153.27	26	151.81	58
5	152.10	39	153.27	26	151.81	58
α	166.37	16	166.61	11	165.75	25
Ac C=O	168.14	17	168.17	13	167.67	26

Compound Number 192

<sup>13</sup>C



4-acetoxy-3-methoxy benzoic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.65	91	20.46	82	20.37	88
OMe	56.12	100	56.40	99	55.90	100
2	113.38	93	114.25	90	113.18	84
6	122.98	96	123.31	100	122.16	90
5	123.46	91	123.80	100	123.05	85
1	128.00	44	129.96	30	129.58	52
4	144.43	40	144.79	22	142.98	46
3	151.20	53	152.26	27	150.82	56
α	168.52	51	167.04	37	166.66	59
Ac C=O	171.37	56	168.65	37	168.21	54

<sup>1</sup>H (acetone)

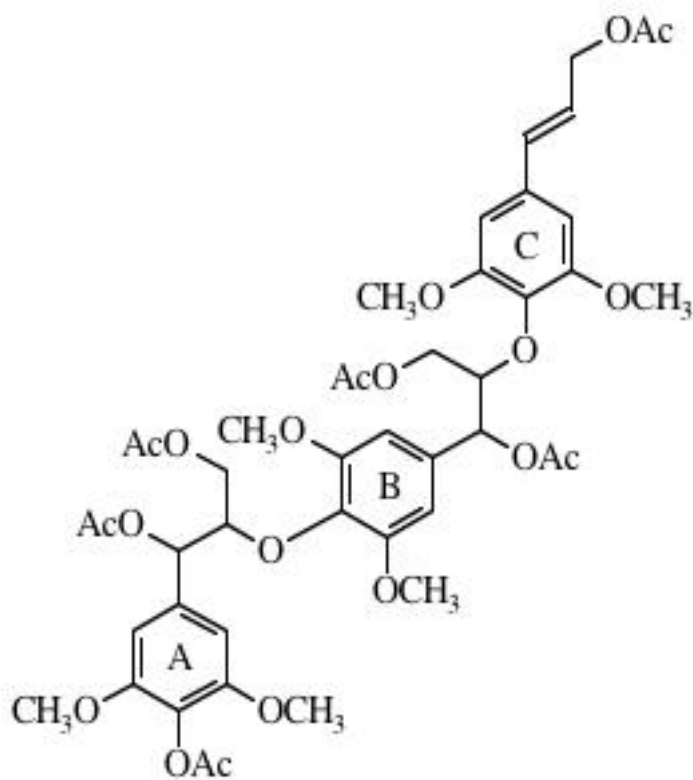
Atom	H Shifts	Mult	J
Ac Me	2.28	s	
OMe	3.90	s	
2	7.70	s	
6	7.67	dd	7.6, 1.8
5	7.19	dd	7.7, 1.0

**Notes:**

Jamie Milhaupt  
JR-JMA 39.1  
41mg 2D short range XH corr confirms assignment of 5 and 6.

Compound Number 193

<sup>13</sup>C



S-b-S-b-SA (acetate)

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A,B γ2	4.14	m	
A,B γ1	4.40	m	
C γ	4.70	d	11.2
A,B α	6.06,6.03	d	4.0
C β	6.33	dt	15.6

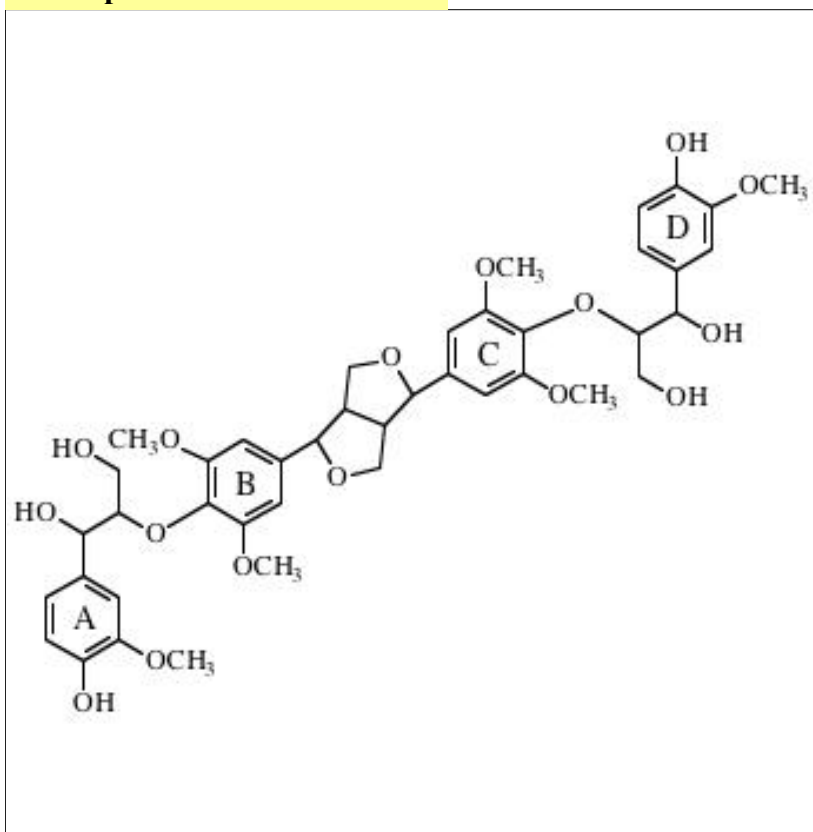
Notes:

L.Landucci  
LLL XIV 148BA  
10 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.53	70	20.26	41	20.04	50
Ac Me	20.53	70	20.26	41	20.04	50
Ac Me	20.85	56	20.67	27	20.21	33
Ac Me	20.85	56	20.80	21	20.30	35
Ac Me	21.15	73	20.95	46	20.61	70
Ac Me	21.15	73	20.95	46	20.61	70
OMe	56.12	100	56.46	100	55.72	100
OMe	56.12	100	56.46	100	55.72	100
OMe	56.26	100	56.46	100	55.72	100
OMe	56.26	100	56.46	100	55.72	100
OMe	56.26	100	56.46	100	55.85	92
OMe	56.26	100	56.46	100	55.85	92
γ	62.88	33	63.44	22	62.22	26
B γ	62.88	33	63.44	22	62.22	26
C γ	65.00	22	65.26	17	64.16	19
α	74.35	23	75.43	32	73.97	20
B α	74.50	23	75.43	32	73.97	20
β	80.89	33	81.42	14	79.89	17
B β	80.89	33	81.56	14	79.89	17
A2	103.81	41	104.67	49	103.35	46
A6	103.81	41	104.67	49	103.35	46
B2	104.10	44	104.67	49	103.35	46
B6	104.10	44	104.67	49	103.35	46
C2	104.33	35	104.96	20	103.53	30
C6	104.33	35	104.96	20	103.53	30
C β	123.04	17	124.09	12	123.29	13
A4	128.54	11	129.36	7	127.48	15
C1	132.45	11	133.25	9	131.80	11
B1	133.24	16	134.06	9	132.46	8
C α	134.12	18	134.38	12	132.95	15
C4	135.40	10	136.54	9	134.25	9
A1	135.63	12	136.60	9	134.45	7
B4	135.81	13	136.64	9	135.16	13
A3	151.96	42	153.01	26	151.40	43
A5	151.96	42	153.01	26	151.40	43
B3	153.08	29	153.88	21	152.29	34
B5	153.08	29	153.88	21	152.29	34
C3	153.29	33	154.16	19	152.54	26
C5	153.29	33	154.16	19	152.54	26
A4 Ac C=O	168.68	15	168.50	18	167.89	24
Ac C=O	169.52	18	169.95	28	169.23	33
Ac C=O	169.66	19	169.95	28	169.23	33
Ac C=O	170.79	17	170.67	23	169.83	39
Ac C=O	170.94	27	170.67	23	169.83	39
Ac C=O	170.94	27	170.67	23	169.98	12

Compound Number 194

<sup>13</sup>C



G-b-S-r-S-b-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B,C β	54.48	30	55.37	40	53.56	31
OMe	56.00	80	56.26	70	55.41	69
OMe	56.27	100	56.62	100	55.89	100
OMe	56.27	100	56.62	100	55.89	100
A,D γ	60.56	43	60.97	34	59.73	25
B,C γ	72.01	27	72.64	38	71.21	25
A,D α	72.55	32	73.38	36	72.00	25
B,C α	85.86	25	86.53	40	84.97	25
A,D β	87.08	30	87.84	45	86.05	19
B,C 2	102.82	68	104.12	74	103.22	50
B,C 6	102.82	68	104.12	74	103.22	50
A,D 2	108.45	36	110.93	40	110.85	25
A,D 5	114.19	41	115.19	49	114.54	25
A,D 6	118.75	43	120.05	38	119.24	25
A,D 1	131.31	25	133.77	19	133.18	25
B,C 1	134.41	16	135.74	17	134.69	25
B,C 4	137.63	23	139.00	21	136.68	25
A,D 4	144.89	30	146.45	26	145.20	38
A,D 3	146.64	32	147.96	26	146.85	38
B,C 3	153.49	50	154.20	47	152.50	56
B,C 5	153.49	50	154.20	47	152.50	56

<sup>1</sup>H (acetone)

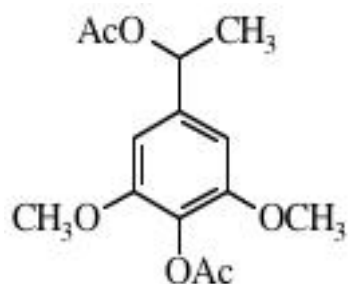
Atom	H Shifts	Mult	J
OMe	3.83	s	
OMe	3.87	s	
A,D γ2	3.71	dd	12.0, 3.4
A,D α	4.98	d	3.2
B,C α	4.75	d	2.3
B,C 2,6	6.77	s	
A,D 2	7.04	d	1.6

**Notes:**

S. Luque 12E  
 8 mg Landucci, Luque and Ralph, J. Wood Chem. Tech., 15(4), 493-513 (1995)  
 As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 195

<sup>13</sup>C



1-(4-acetoxy-3,5-dimethoxyphenyl)-1-acetoxy ethane

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.22	s	
β	1.49	d	6.6
OMe	3.80	s	
α	5.80	q	6.6
2,6	6.74	s	

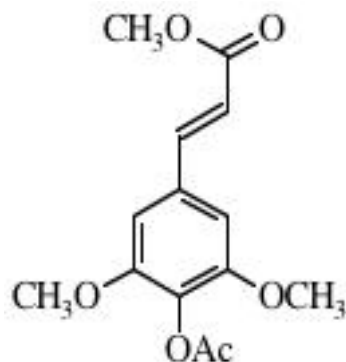
**Notes:**

J. Milhaupt  
A 51  
41mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.47	43	20.24	41	20.03	53
Ac Me	21.36	36	21.12	38	20.90	51
β	22.24	47	22.62	52	22.02	50
OMe	56.17	100	56.44	97	56.89	100
OMe	56.17	100	56.44	97	56.89	100
α	72.28	51	72.64	52	71.58	51
2	102.94	87	103.51	100	102.54	82
6	102.94	87	103.51	100	102.54	82
4	128.24	8	129.11	6	127.25	14
1	140.03	27	141.50	23	140.23	36
3	152.12	39	153.16	29	151.57	56
5	152.12	39	153.16	29	151.57	56
Ac C=O	168.69	18	168.52	14	168.00	28
α Ac C=O	170.15	15	170.16	14	169.54	26

Compound Number 196

<sup>13</sup>C



Acetylated Sinapic acid methyl ester

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.36	45	20.23	39	20.00	49
γ OMe	51.68	45	51.70	48	51.34	47
OMe	56.12	100	56.61	95	56.08	100
OMe	56.12	100	56.61	95	56.08	100
2	104.65	100	105.83	100	105.24	88
6	104.65	100	105.83	100	105.24	88
β	118.05	52	118.97	46	118.18	47
4	130.40	10	131.45	7	129.60	17
1	132.64	29	133.56	26	132.30	38
α	144.51	51	145.15	52	144.26	45
3	152.38	49	153.53	38	151.90	63
5	152.38	49	153.53	38	151.90	63
γ	167.11	24	167.44	18	166.57	30
Ac C=O	168.39	22	168.38	16	167.83	29

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.25	s	
γ OMe	3.75	s	
OMe	3.87	s	
2,6	7.08	s	
β	6.58	d	16.0
α	7.62	d	16.1

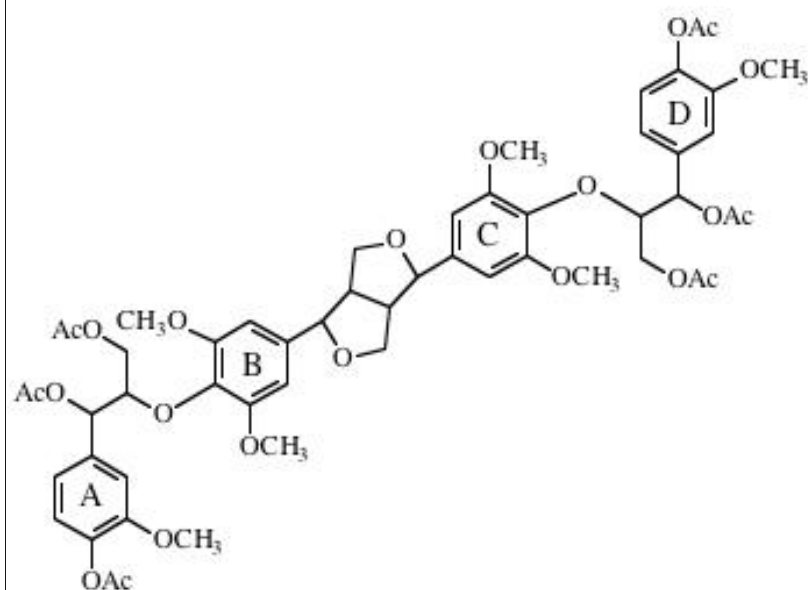
**Notes:**

J. Milhaupt  
A 45  
47mg



**Compound Number 197**

<sup>13</sup>C



**G-b-S-r-S-b-G (acetate)**

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B,C β	3.10	m	
OMe	3.80	s	
OMe	3.82	s	
B γ1	3.91	m	
A γ2	4.16	m	
B γ2	4.25	m	
A γ2	4.40	dd	
Aβ	4.68	m	
B,C α	4.72	m	
A,D α	6.06	m	
B,C 2,6	6.69	s	
A 6	6.96	dd	
A 5	7.02	d	
A 2	7.15	s	

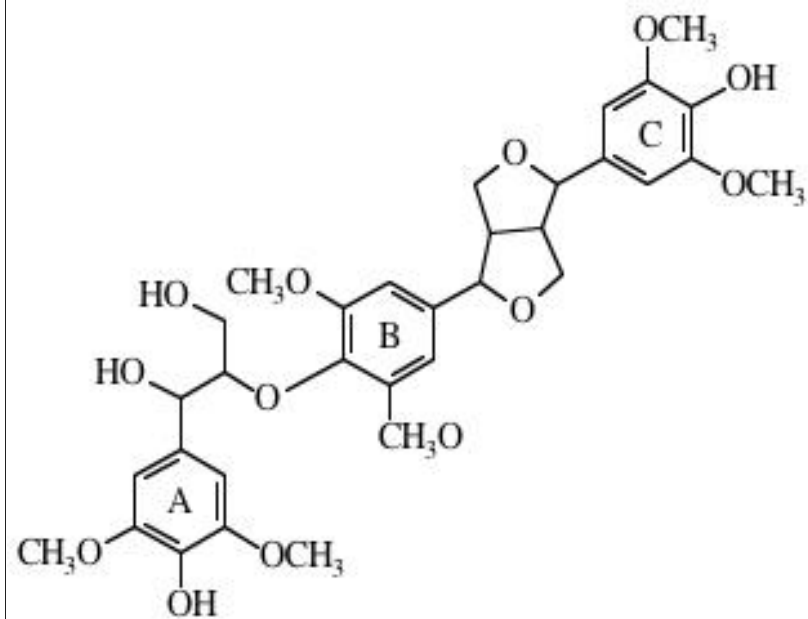
**Notes:**

S. Luque SLL 13F, 11 mg  
<sup>1</sup>H data from 360 MHz spectrum. The β-O-4 units are erythro,  
 Landucci, Luque and Ralph J. Wood Chem. Tech., 15(4), 493-513 (1995) As this  
 compound has a plane of symmetry, the shifts for the other half are identical.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.74	83	20.48	80	20.27	86
Ac Me	20.83	69	20.61	62	20.27	86
Ac Me	21.14	59	20.94	64	20.61	43
B,C β	54.45	22	55.38	31	53.65	22
A,D OMe	56.00	72	56.26	69	55.63	66
B,C OMe	56.18	100	56.39	100	55.73	100
B,C OMe	56.18	100	56.39	100	55.73	100
A,D γ	62.78	28	63.27	33	62.02	18
B,C γ	72.06	13	72.60	33	71.24	21
A,D α	74.01	26	75.04	31	73.64	17
A,D β	80.87	25	81.30	24	79.83	20
B,C α	85.94	23	86.52	31	84.93	19
B,C 2	102.86	48	103.71	58	102.69	31
B,C 6	102.86	48	103.71	58	102.69	31
A,D 2	111.58	27	112.20	33	110.85	16
A,D 6	119.27	28	120.03	24	118.72	16
A,D 5	122.48	29	123.25	36	122.43	18
B,C 4	134.60	12	135.47	11	133.51	14
A,D 1	136.19	16	137.15	18	135.61	15
B,C 1	137.35	16	138.96	20	137.50	14
A,D 4	139.56	22	140.54	22	138.79	17
A,D 3	150.90	20	152.01	22	150.46	21
B,C 3	153.42	43	154.05	44	152.46	34
B,C 5	153.42	43	154.05	44	152.46	34
4 Ac C=O	168.92	28	168.92	33	168.35	32
αAc C=O	169.56	23	169.90	27	169.24	31
γAc C=O	170.91	28	170.65	33	169.87	29

Compound Number 198

<sup>13</sup>C



S-b-S-r-S

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	54.43	27	55.27	19	53.59	20
C β	54.57	21	55.42	19	53.73	20
OMe	56.34	68	56.63	100	55.88	76
OMe	56.34	68	56.63	100	55.88	76
OMe	56.45	100	56.63	100	56.01	100
OMe	56.45	100	56.63	100	56.01	100
OMe	56.49	88	56.63	100	56.01	100
OMe	56.49	88	56.63	100	56.01	100
γ	60.65	27	61.03	17	59.90	14
C γ	71.80	18	72.40	21	71.10	18
B γ	72.17	16	72.61	20	71.26	21
α	72.77	14	73.63	17	72.38	20
B α	86.01	23	86.61	20	85.10	20
C α	86.01	23	86.73	21	85.30	22
β	87.24	18	87.87	17	86.20	21
B2	102.69	45	104.10	36	103.28	33
B6	102.69	45	104.10	36	103.28	33
C2	102.84	64	104.51	43	103.65	46
C6	102.84	64	104.51	43	103.65	46
A2	102.94	50	104.91	40	104.29	37
A6	102.94	50	104.91	40	104.29	37
A1	130.46	11	132.73	11	131.36	21
C1	132.00	16	133.13	13	132.42	18
B1	134.05	18	135.86	13	134.42	21
A4	134.51	21	135.86	13	134.86	26
C4	134.51	21	136.23	10	134.86	26
B4	137.91	18	139.07	13	136.79	13
A3	147.15	43	148.38	26	147.40	39
A5	147.15	43	148.38	26	147.40	39
C3	147.29	36	148.68	21	147.88	45
C5	147.29	36	148.68	21	147.88	45
B3	153.55	36	154.16	20	152.55	33
B5	153.55	36	154.16	20	152.55	33

<sup>1</sup>H (acetone)

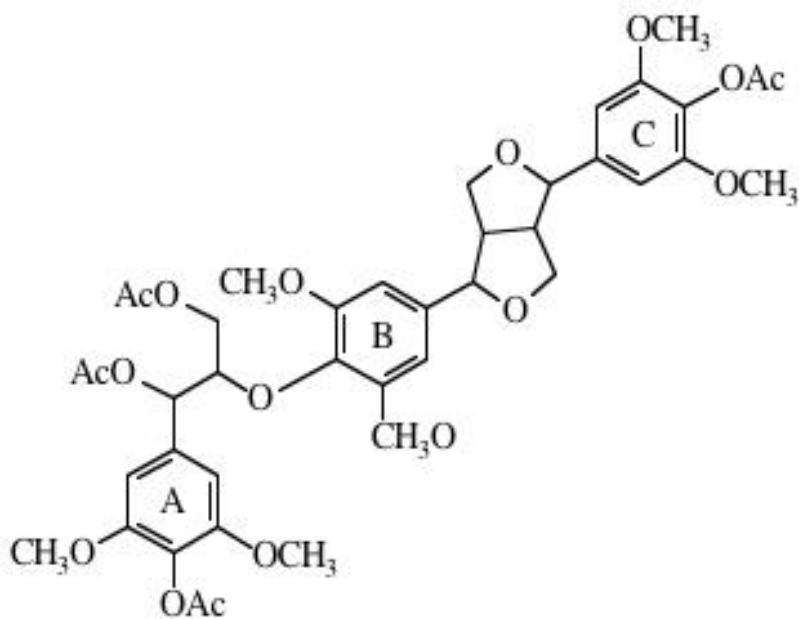
Atom	H Shifts	Mult	J
B,C β	3.12	m	
OMe	3.80	s	
OMe	3.82	s	
OMe	3.88	s	
B α	4.68	d	4.0
C α	4.74	d	4.0
α	4.99	m	
B 2,6	6.69	s	
C 2,6	6.71	s	
A 2,6	6.78	s	

Notes:

S. Luque SLL I 12E  
 10 mg A4 was coincident with other shifts, the assignments were inferred from other models and peak heights.  
 Landucci, Luque and Ralph, J. Wood Chem. Tech., 15(4), 493-513 (1995)

Compound Number 199

<sup>13</sup>C



S-b-S-r-S (acetate)

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B,C β	3.11	m	
B α	4.73	d	
C α	4.76	d	
α	6.05	m	
2,6	6.70	s	
2,6	6.76	s	

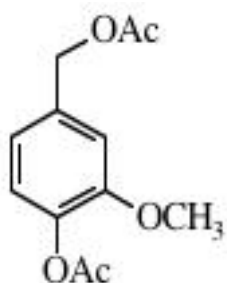
**Notes:**

S. Luque SLL 13F  
 15mg  
 Landucci, Luque and Ralph, J. Wood Chem. Tech., 15(4), 493-513 (1995)

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.53	52	20.26	49	20.06	45
Ac Me	20.53	52	20.26	49	20.06	45
Ac Me	20.86	31	20.63	26	20.29	32
Ac Me	21.16	30	20.94	26	20.63	34
B β	54.39	17	55.33	20	53.61	23
Cβ	54.52	23	55.44	23	53.85	23
OMe	56.17	65	56.38	64	55.72	68
OMe	56.17	65	56.38	64	55.72	68
OMe	56.23	88	56.46	100	55.87	100
OMe	56.23	88	56.46	100	55.87	100
OMe	56.29	100	56.46	100	55.87	100
OMe	56.29	100	56.46	100	55.87	100
γ	62.81	18	63.41	19	62.16	13
C γ	72.07	21	72.66	44	71.31	34
B γ	72.19	21	72.66	44	71.31	34
α	74.25	16	75.33	15	73.92	13
β	80.78	15	81.29	11	79.76	12
B α	85.82	21	86.45	25	84.85	19
C α	85.98	20	86.56	20	85.00	18
C2	102.30	48	103.23	47	102.36	44
C6	102.30	48	103.23	47	102.36	44
B2	102.84	32	103.71	35	102.70	26
B6	102.84	32	103.71	35	102.70	26
A2	104.07	41	104.68	34	103.30	26
A6	104.07	41	104.68	34	103.30	26
C1	128.05	7	128.85	7	126.98	9
A4	128.51	11	129.34	7	127.45	12
B4	134.67	13	135.61	9	133.69	12
A1	135.66	11	136.65	10	135.21	12
B1	137.27	13	138.83	12	137.38	14
C4	139.74	16	141.45	15	140.08	18
A3	151.92	33	152.95	20	151.38	32
A5	151.92	33	152.95	20	151.38	32
C3	152.34	31	153.22	24	151.58	39
C5	152.34	31	153.22	24	151.58	39
B3	153.35	25	153.98	22	152.41	26
B5	153.35	25	153.98	22	152.41	26
Ac C=O	168.63	18	168.48	15	167.91	22
Ac C=O	168.85	16	168.58	15	168.02	19
Ac C=O	169.53	16	169.91	14	169.26	19
Ac C=O	170.94	16	170.76	15	169.89	19

Compound Number 200

<sup>13</sup>C



Vanillyl alcohol diacetate  
4-hydroxy-3-methoxybenzyl alcohol diacetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.57	76	20.45	75	20.25	97
Ac Me	20.93	59	20.78	55	20.59	78
OMe	55.84	100	56.20	92	55.68	100
α	65.86	91	66.10	99	65.10	90
2	112.50	91	113.32	83	112.58	92
6	120.67	89	121.04	96	120.16	92
5	122.77	95	123.57	100	122.67	89
1	134.80	45	136.23	37	134.99	64
4	139.62	26	140.64	20	138.97	43
3	151.07	33	152.19	24	150.69	52
4 Ac C=O	168.84	29	168.93	24	168.42	49
α Ac C=O	170.66	23	170.79	19	170.15	36

<sup>1</sup>H (acetone)

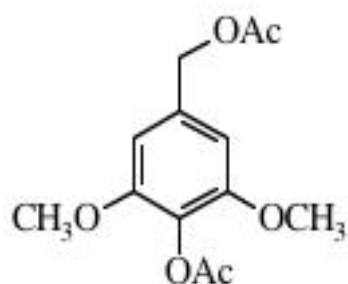
Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.23	s	
OMe	3.80	s	
α	5.06	s	
6	6.96	dd	8.1,1.8
5	7.03	d	8.0
2	7.11	d	1.7

**Notes:**

S. Ralph  
35mg

Compound Number 201

<sup>13</sup>C



Syringyl alcohol diacetate  
3,5-dimethoxy-4-hydroxy benzyl alcohol diacetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.47	59	20.23	49	20.05	62
Ac Me	21.05	31	20.79	27	20.63	42
OMe	56.21	100	56.46	100	55.91	100
OMe	56.21	100	56.46	100	55.91	100
α	66.37	48	66.46	44	65.45	42
2	105.13	89	105.67	93	104.84	80
6	105.13	89	105.67	93	401.84	80
4	128.58	7	129.43	6	127.57	12
1	134.42	21	135.77	19	134.49	32
3	152.21	39	153.19	27	151.59	53
5	152.21	39	153.19	27	151.59	53
4 Ac C=O	168.67	16	168.50	12	167.97	28
α Ac C=O	170.77	12	170.80	9	170.14	17

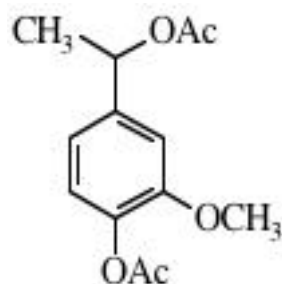
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.06	s	
Ac Me	2.22	s	
OMe	3.80	s	
α	5.05	s	
2,6	6.76	s	

**Notes:**

J. Milhaupt A 53  
35 mg  
Sample has impurity

Compound Number 202

<sup>13</sup>C

1-(4-acetoxy-3-methoxyphenyl)-1-acetoxyethane

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	1.49	d	6.6
Ac Me	2.03	s	
Ac Me	2.22	s	
OMe	3.82	s	
α	5.83	q	6.6
6	6.95	dd	8.1,1.8
5	7.02	d	8.1
2	7.11	d	1.8

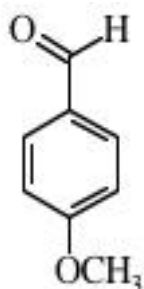
**Notes:**

J. Milhaupt  
A 49.1  
35mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.69	79	20.47	79	20.28	96
Ac Me	21.37	65	21.12	64	20.90	87
β	22.21	91	22.57	86	22.00	87
OMe	55.93	100	56.21	88	55.70	100
α	71.96	89	72.31	91	71.26	96
2	110.60	88	111.30	78	110.46	82
6	118.44	95	118.73	98	117.74	87
5	122.75	89	123.51	100	122.60	96
1	139.33	26	140.32	17	138.62	42
4	140.52	44	141.88	36	140.60	58
3	151.05	31	152.18	24	150.66	42
4 Ac C=O	169.01	31	168.95	22	168.44	49
α Ac C=O	170.21	30	170.17	19	169.55	42

Compound Number 203

<sup>13</sup>C



4-methoxy benzaldehyde

<sup>1</sup>H (acetone)

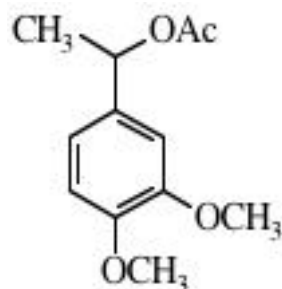
Atom	H Shifts	Mult	J
OMe	3.89	s	
3,5	7.08	d	8.8
2,6	7.85	d	8.8
α	9.86	s	

**Notes:**

Aldrich  
60mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.51	51	56.03	58	55.51	38
3	114.26	100	115.16	100	114.35	87
5	114.26	100	115.16	100	114.35	87
1	129.90	14	131.11	11	129.57	18
2	131.88	97	132.43	90	131.65	100
6	131.88	97	132.43	90	131.65	100
4	164.55	14	165.44	11	164.10	18
α	190.68	45	191.09	42	191.01	51

Compound Number 204

<sup>13</sup>C

1-(3,4-dimethoxyphenyl)-1-acetoxyethane

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	1.47	d	6.6
Ac Me	2.00	s	
OMe	3.78	s	
OMe	3.81	s	
α	5.78	q	6.6
5,6	6.90	m	
2	6.97	s	

**Notes:**

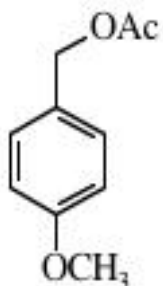
J. Milhaupt  
A 141  
38mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.39	39	21.18	38	20.93	62
β	21.99	55	22.41	57	21.82	72
OMe	55.91	100	56.13	100	55.43	100
OMe	55.91	100	56.13	100	55.43	100
α	72.20	51	72.51	54	71.42	73
2	109.69	46	111.16	43	109.93	67
5	111.06	49	112.63	46	111.57	70
6	118.64	53	119.25	54	118.12	70
1	134.19	24	135.54	17	134.02	45
4	148.76	16	150.01	12	148.32	35
3	148.96	18	150.29	12	148.58	36
Ac C=O	170.29	15	170.21	13	169.51	31



Compound Number 205

<sup>13</sup>C



4-methoxybenzyl alcohol acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.01	32	20.85	33	20.61	36
OMe	55.23	51	55.53	61	54.98	50
α	66.07	53	66.25	57	65.18	45
3	113.94	100	114.60	100	113.70	100
5	113.94	100	114.60	100	113.70	100
1	128.10	17	129.43	14	128.03	24
2	130.08	99	130.78	100	129.85	98
6	130.08	99	130.78	100	129.85	98
4	159.65	14	160.57	12	159.07	13
Ac C=O	170.85	11	170.85	10	170.13	13

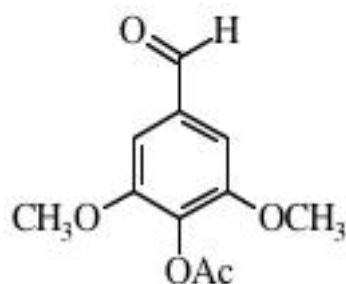
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
OMe	3.78	s	
α	5.01	s	
3,5	6.91	d	8.7
2,6	7.31	d	8.7

**Notes:**

J. Milhaupt  
A 139  
56mg

Compound Number 206

<sup>13</sup>C

Syringaldehyde acetate  
3,5-dimethoxy-4-acetoxy-benzaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	39	20.21	37	20.01	50
OMe	56.35	100	56.72	100	56.20	100
OMe	56.35	100	56.72	100	56.20	100
2	106.09	92	106.72	84	106.00	92
6	106.09	92	106.72	84	106.00	92
4	133.82	7	134.60	5	132.83	12
1	134.36	22	135.62	10	134.20	34
3	152.88	32	153.91	22	152.35	51
5	152.88	32	153.91	22	152.35	51
Ac C=O	168.01	14	168.15	11	167.58	23
α	191.00	45	191.82	31	191.89	48

<sup>1</sup>H (acetone)

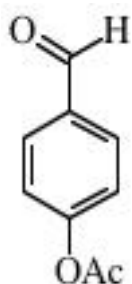
Atom	H Shifts	Mult	J
Ac Me	2.28	s	
OMe	3.90	s	
2,6	7.28	s	
α	9.93	s	

**Notes:**

J. Milhaupt  
A 147  
42mg

Compound Number 207

<sup>13</sup>C



4-Acetoxy benzaldehyde

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.30	s	
3,5	7.35	d	8.6
2,6	7.97	d	8.6
α	10.01	s	

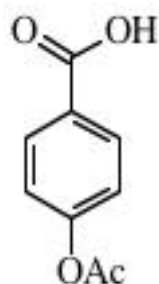
**Notes:**

J. milhaupt  
137.5  
42mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.06	39	20.98	39	20.78	42
3	122.32	100	123.43	100	122.63	98
5	122.32	100	123.43	100	122.63	98
2	131.12	92	131.68	100	130.85	100
6	131.12	92	131.68	100	130.95	100
1	133.93	16	135.13	13	133.75	19
4	155.30	12	156.42	11	154.99	16
Ac C=O	168.62	12	169.27	9	168.64	16
α	190.88	38	191.83	34	191.84	42

Compound Number 208

<sup>13</sup>C



4-Acetoxy benzoic acid

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.29	s	
3,5	7.26	d	8.8
2,6	8.08	d	8.8

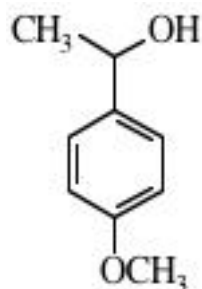
**Notes:**

J. Milhaupt  
27mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.25	48	20.98	48	20.80	48
3	121.84	100	122.76	95	121.96	100
5	121.84	100	122.76	95	121.96	100
1	126.96	20	128.81	15	128.31	21
2	131.95	96	131.91	100	130.78	99
6	131.95	96	131.91	100	130.78	99
4	155.09	26	155.55	18	153.86	25
α	168.89	22	167.00	17	166.55	20
Ac C=O	171.38	13	169.28	15	168.75	25

Compound Number 209

<sup>13</sup>C



4-Methoxy benzyl alcohol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	1.37	d	6.5
OMe	3.76	s	
α	4.79	m	
3,5	6.86	d	8.7
2,6	7.29	d	8.6

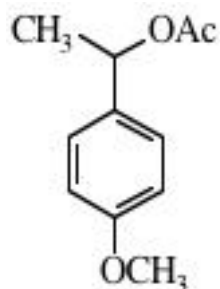
**Notes:**

J. Milhaupt  
JMA 145  
42mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	25.04	52	26.20	54	25.89	15
OMe	55.27	48	55.43	62	54.92	15
α	69.84	44	69.50	42	67.60	15
3	113.82	91	114.20	100	113.25	100
5	113.82	91	114.20	100	113.25	100
2	126.67	100	127.27	92	126.34	100
6	126.67	100	127.27	92	126.34	100
1	138.12	17	140.18	11	139.34	7
4	158.90	14	159.49	13	157.90	6

Compound Number 210

<sup>13</sup>C



1-(4-acetoxyphenyl)-1-acetoxy ethane

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	1.46	d	6.6
Ac Me	1.98	s	
OMe	3.78	s	
α	5.79	q	6.6
3,5	6.90	d	8.8
2,6	7.30	d	8.8

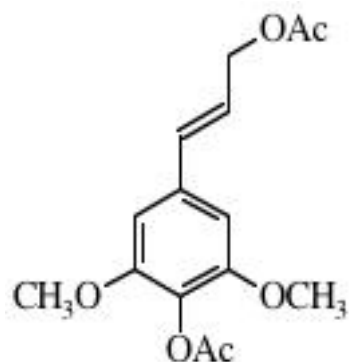
**Notes:**

J. Milhaupt  
JMA 149  
23mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.44	35	21.16	34	20.92	44
β	22.01	56	22.35	57	21.76	51
OMe	55.32	48	55.51	44	54.98	46
α	72.06	47	72.28	46	71.18	48
3	113.90	100	114.52	100	113.63	100
5	113.90	100	114.52	100	113.63	100
2	127.64	100	128.26	92	127.28	100
6	127.64	100	128.26	92	127.28	100
1	133.82	19	134.94	15	133.52	25
4	159.34	13	160.22	11	158.69	20
Ac C=O	170.38	12	170.20	10	169.49	19

Compound Number 211

<sup>13</sup>C



Sinapyl alcohol diacetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.51	46	20.26	44	20.05	49
Ac Me	21.05	33	20.79	33	20.62	45
OMe	56.21	100	56.47	100	55.90	100
OMe	56.21	100	56.47	100	55.90	100
γ	64.90	50	65.13	51	64.06	45
2	103.38	88	104.18	93	103.22	78
6	103.38	88	104.18	93	103.22	78
β	123.71	49	124.99	44	124.32	41
4	128.75	8	129.68	5	127.69	14
α	134.01	49	134.04	44	132.55	42
1	134.71	26	135.67	17	134.33	30
3	152.28	42	153.36	32	151.73	58
5	152.28	42	153.36	32	151.73	58
4 Ac C=O	168.71	21	168.51	16	167.395	25
γ Ac C=O	170.85	14	170.72	9	170.01	20

<sup>1</sup>H (acetone)

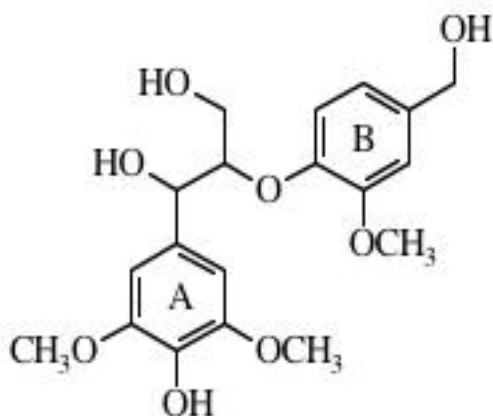
Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.22	s	
OMe	3.82	s	
γ	4.69	dd	6.2, 1.2
2,6	6.84	s	
β	6.38	dt	15.8, 6.2
α	6.66	d	15.9

**Notes:**

J.Milhaupt  
JMA 111  
20mg

Compound Number 212

<sup>13</sup>C



Syringylglycerol- $\beta$ -vanillyl alcohol ether  
 1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-[4-(1-hydroxymethyl)-2-methoxyphenoxy]propane-1,3-diol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	55.90	54	56.28	59	55.44	70
A OMe	56.34	100	56.60	100	55.74	100
A OMe	56.34	100	56.60	100	55.74	100
$\gamma$	61.05	44	61.95	41	60.00	51
B $\alpha$	64.87	54	64.54	46	62.74	68
$\alpha$	74.16	47	74.06	51	70.88	57
$\beta$	89.20	45	88.56	49	84.44	54
A2	103.82	73	105.41	94	104.13	76
A6	103.82	73	105.41	94	104.13	76
B2	110.98	48	111.95	51	110.97	57
B5	119.98	49	119.60	52	115.43	54
B6	120.50	45	120.02	48	118.58	57
A1	130.66	32	132.82	32	131.93	54
A4	134.61	29	136.17	32	134.31	46
B1	137.06	29	137.97	28	135.45	49
B4	146.93	38	148.42	49	146.93	46
A3	147.10	51	148.50	30	147.34	70
A5	147.10	51	148.50	30	147.34	70
B3	151.16	27	151.54	27	149.39	49

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A OMe	3.80	s	
B OMe	3.86	s	
$\gamma$ 1	3.50	m	
$\gamma$ 2	3.69	m	
$\beta$	4.18	m	
B $\alpha$	4.56	d	5.6
$\alpha$	4.87	m	
A 2,6	6.78	s	
6	6.84	dd	8.2,2.0
2	7.03	d	1.9
5	7.12	d	8.2

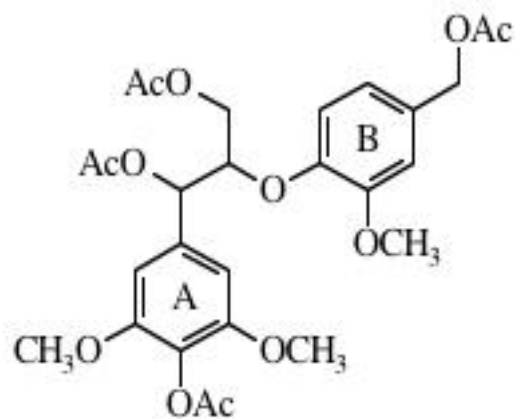
Notes:

T. Duch  
 I-57  
 25mg



Compound Number 213

<sup>13</sup>C



Syringylglycerol- $\beta$ -vanillyl alcohol ether tetra-acetate  
1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-[4-(1-acetoxymethyl)-2-methoxyphenoxy]

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.98	s	
Ac Me	2.03	s	
Ac Me	2.09	s	
A4 Ac Me	2.21	s	
A OMe	3.80	s	
B OMe	3.83	s	
$\gamma$ 1	4.05	s	12.3,5.9
$\gamma$ 2	4.27	s	11.9,4.0
$\beta$	4.81	s	
B $\alpha$	5.02	s	
$\alpha$	6.08	d	6.5
A 2,6	6.86	s	
B6	6.91	dd	8.3,1.8
B5	7.03	d	8.4
B2	7.05	d	1.6

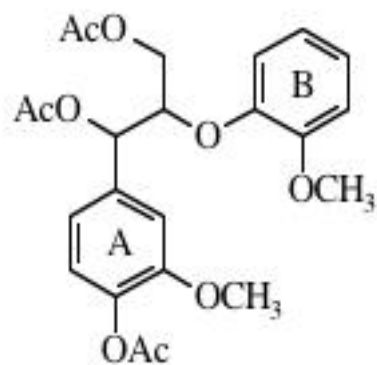
Notes:

T.Duch  
I-55  
40 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.36	45	20.24	51	20.03	66
Ac Me	20.64	57	20.63	75	20.38	62
Ac Me	20.97	68	20.83	45	20.65	100
Ac Me	20.97	68	20.95	50	20.65	100
B OMe	55.80	34	56.31	60	55.60	66
A OMe	56.14	100	56.55	100	55.98	100
A OMe	56.14	100	56.55	100	55.98	100
$\gamma$	62.91	27	63.59	46	63.37	48
B $\alpha$	66.08	66	66.35	57	65.28	57
$\alpha$	74.57	50	75.64	50	74.48	53
$\beta$	80.14	48	80.72	55	79.02	53
A2	104.02	89	105.13	99	103.94	90
A6	104.02	89	105.13	99	103.94	90
B2	112.70	52	113.94	59	112.86	60
B5	118.12	48	118.67	55	116.91	60
B6	121.15	52	121.77	56	120.69	62
A4	128.79	20	129.70	22	127.92	52
B1	130.88	36	132.09	30	130.30	57
A1	134.63	39	136.18	37	134.92	57
B4	147.90	34	148.97	29	147.38	55
B3	150.60	36	151.57	34	149.79	59
A3	152.14	61	153.21	57	151.55	78
A5	152.14	61	153.21	57	151.55	78
A4 Ac C=O	168.42	30	168.46	30	167.88	50
$\alpha$ Ac C=O	169.60	32	170.02	34	169.32	57
$\gamma$ Ac C=O	170.48	34	170.72	24	167.94	59
B $\alpha$ Ac C=O	170.79	25	170.88	24	170.15	40

Compound Number 214

<sup>13</sup>C



*erythro*

Guaiacylglycerol- $\beta$ -guaiacyl ether acetate

1-(4-acetoxy-3-methoxyphenyl)-1,3-diacetoxy-2-(2-methoxyphenoxy)propane

<sup>1</sup>H (acetone)

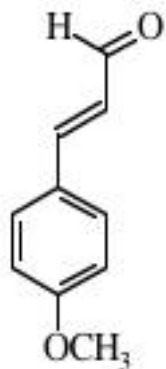
Atom	H Shifts	Mult	J
Ac Me	1.94	s	
Ac Me	2.08	s	
Ac Me	2.23	s	
OMe	3.81	s	
OMe	3.83	s	
$\gamma$ 1	4.22	dd	11.9,4.2
$\gamma$ 2	4.39	dd	11.9,5.8
$\beta$	4.83	m	
$\alpha$	6.09	d	5.0

**Notes:**

S. Ralph  
Mixture is 65/35 erythro/threo  
35mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.57	<b>100</b>	20.46	84	20.22	<b>100</b>
Ac Me	20.66	66	20.59	69	20.29	100
Ac Me	20.93	71	20.86	57	20.53	73
OMe	55.78	91	56.26	<b>100</b>	55.54	81
OMe	55.90	85	56.32	100	55.66	81
$\gamma$	62.55	57	63.03	55	61.84	44
$\alpha$	73.79	60	74.63	55	73.10	49
$\beta$	80.15	71	80.37	59	78.36	47
A2	112.02	54	112.83	55	111.61	58
B2	112.70	61	113.90	62	112.89	51
B5	119.51	79	119.88	59	117.93	51
A6	119.71	56	120.46	59	119.28	59
B6	120.98	86	121.68	69	120.61	71
A5	122.52	60	123.36	61	122.43	58
B1	123.58	59	124.08	60	122.83	49
A1	135.41	32	136.71	41	135.30	44
A4	139.80	22	140.85	21	139.05	32
B4	147.18	21	148.33	18	146.61	29
B3	150.97	24	152.11	32	150.30	31
A3	151.11	24	152.11	32	150.52	34
Ac C=O	168.69	26	168.89	26	168.31	36
Ac C=O	169.44	26	169.89	25	169.16	37
Ac C=O	170.68	23	170.74	20	169.94	27

Compound Number 215

<sup>13</sup>C

p-Methoxy cinnamaldehyde

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.34	46	55.81	52	55.35	43
3	114.48	<b>100</b>	115.35	<b>100</b>	114.51	<b>100</b>
5	114.48	100	115.35	100	114.51	100
β	126.33	46	127.37	47	126.31	51
1	126.67	22	127.91	16	126.69	23
2	130.28	92	131.26	95	130.65	98
6	130.28	92	131.26	95	130.65	98
α	152.72	44	153.22	41	153.10	40
4	162.13	15	163.08	11	161.75	20
γ	193.66	46	193.81	44	194.00	43

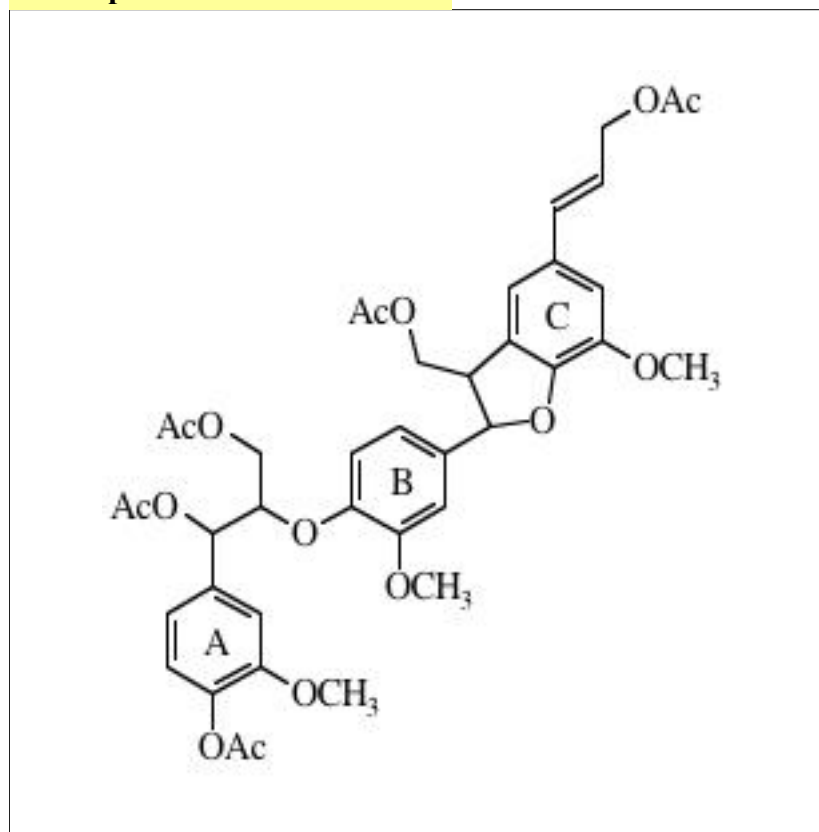
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.86	s	
β	6.65	dd	15.9,7.7
3,5	7.02	d	8.9
α	7.60	d	15.9
2,6	7.68	d	8.9
γ	9.66	d	7.7

**Notes:**Pew Collection  
50 mg

Compound Number 216

<sup>13</sup>C



G-b-G-c-CA (acetate)

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
C γAc Me	1.93	s	
A, B γ Ac Me	2.04	s	
A α Ac Me	2.06	s	
A4 Ac Me	2.21	s	
B β	3.75	m	
A, B OMe	3.81	s	
C OMe	3.89	s	
A γ1	4.22	dd	4.1, 12.0
A γ2	4.36	dd	5.9, 12.0
B γ1	4.32	dd	7.6, 11.1
B γ2	4.43	dd	5.4, 11.1
C γ	4.65	dd	1.3, 6.5
β	4.86	m	
B α	5.55	d	6.8
α	6.05	d	5.2
C β	6.23	dt	6.5, 15.8
C α	6.64	d	15.8
B6	6.91	dd	2.0, 8.3
B5	7.00	d	8.3
B2	7.07	d	2.0
A2	7.23	m	

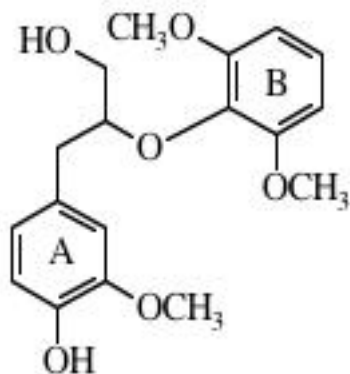
Notes:

S.Ralph  
VII-70A  
Assignments in acetone are based on  
360MHZ HMBC and HMQC expts.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.63	111	20.45	104	20.32	97
A αAc Me	20.74	107	20.60	88	20.40	84
B γAc Me	20.79	99	20.68	92	20.51	68
C γAc Me	20.96	141	20.80	86	20.62	73
A γAc Me	21.00	141	20.86	86	20.70	73
B β	50.37	59	51.24	65	49.34	25
OMe	55.88	100	56.28	130	55.71	125
OMe	55.91	121	56.28	130	55.71	125
OMe	56.00	69	56.28	130	55.71	125
γ	62.45	46	63.04	65	61.85	33
C γ	65.18	76	65.49	100	64.49	50
B γ	65.29	43	65.95	73	64.76	31
α	73.66	40	74.48	71	73.01	32
β	80.25	57	80.30	105	78.30	31
B α	88.23	41	88.54	59	87.17	29
B2	110.28	86	111.50	76	110.74	16
C2	110.60	67	112.17	95	110.93	28
A2	111.88	81	112.71	69	111.62	29
C6	115.31	75	116.33	85	115.26	27
B6	118.69	45	119.14	56	117.49	21
B5	119.18	76	119.41	77	118.30	15
A6	119.60	67	120.45	92	119.33	37
C β	121.24	80	122.23	100	121.34	40
A5	122.59	79	123.33	99	122.50	35
C5	127.49	58	129.01	72	127.89	25
C1	130.60	72	131.53	90	130.04	32
C α	134.30	94	134.71	111	133.49	35
A1	135.30	42	136.60	68	135.05	20
B1	135.80	53	137.06	50	135.26	28
A4	139.75	65	140.78	70	139.06	39
C3	144.41	66	145.39	78	143.84	38
B4	147.19	42	148.14	59	146.54	23
C4	148.20	51	149.31	53	147.53	29
B3	150.96	71	151.95	72	150.16	28
A3	151.19	71	152.08	71	150.54	49
A4 C=O	168.80	48	168.92	67	168.43	47
A αC=O	169.49	56	169.89	68	169.26	46
C γC=O	170.74	75	170.77	107	170.04	61
B γC=O	170.76	92	170.95	94	170.15	41
A γC=O	170.88	59	170.95	94	170.28	47

Compound Number 217

<sup>13</sup>C



3-(4-hydroxy-3-methoxyphenyl)-2-[2,6-dimethoxyphenoxy]propan-1-ol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	3.03	dd	13.6,5.4
γ	3.50	m	
A OMe	3.82	s	
B OMe	3.83	s	
β	4.17	m	
B 2,6	6.69	d	
A 5,6	6.74	m	
A2	6.90	s	
B1	7.01	dd	8.8
Ar OH	7.39	s	

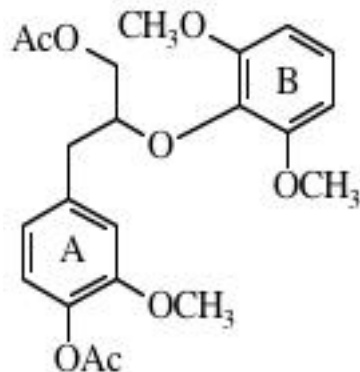
**Notes:**

T. Duch  
TDI-143, 39mg  
Assignments in acetone are based on  
HMBC and HMQC expts.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	37.30	43	37.97	23	36.86	22
OMe	55.90	61	56.19	27	55.52	34
OMe	56.09	91	56.45	40	55.86	61
OMe	56.09	91	56.45	40	55.86	61
γ	62.21	37	62.78	20	61.69	22
β	84.48	45	85.29	24	83.46	31
B2	105.42	83	106.49	38	105.65	36
B6	105.42	83	106.49	38	105.65	36
A2	112.31	44	113.89	22	113.58	29
A5	114.28	45	115.52	22	115.11	31
A6	122.09	43	122.81	24	121.68	30
B1	123.95	46	124.51	24	123.41	31
A1	130.13	30	130.76	17	129.32	26
B4	135.66	21	137.09	13	135.65	22
A4	144.12	28	145.71	15	144.64	25
A3	146.44	27	148.05	15	147.15	25
B3	153.60	41	154.61	18	153.29	38
B5	153.60	41	154.61	18	153.29	38

Compound Number 218

<sup>13</sup>C



Acetic acid 3-(4-acetoxy-3-methoxyphenyl)-2-[2,6-dimethoxyphenoxy] propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	3.06	t	11.5,6.5
B OMe	3.76	s	
OMe	3.79	s	
γ	4.11	d	4.8
β	4.51	m	
B 2,6	6.64	d	8.3
A6	6.86	dd	8.0,1.8
A5	6.95	d	8.2
B1	6.98	dd	8.2,8.0
A2	7.07	d	1.8

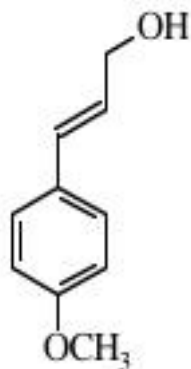
**Notes:**

T. Duch TDI-143 Ac'd,  
32mg Assignments in acetone are based on HMBC and HMQC expts.  
A1,B4, and A4 are too close to positively identify.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.70	42	20.49	44	20.37	38
Ac Me	20.85	31	20.65	35	20.46	38
α	38.26	31	38.82	33	37.51	23
OMe	55.97	76	56.12	40	55.60	35
OMe	55.97	76	56.30	77	55.74	53
OMe	55.97	76	56.30	77	55.74	53
γ	65.35	31	65.72	33	64.78	22
β	80.49	35	80.86	33	79.44	25
B2	105.20	68	106.29	59	105.39	42
B6	105.20	68	106.29	59	105.39	42
A2	113.95	33	114.77	32	113.76	25
A6	121.64	39	122.34	33	121.30	23
A5	122.30	36	123.12	38	122.27	27
B1	123.92	34	124.53	36	123.74	26
B4	135.89	18	137.12	17	137.28	18
A1	137.13	28	137.89	22	136.71	23
A4	138.26	21	139.37	17	137.69	19
A3	150.69	23	151.85	20	150.35	21
B3	153.66	35	154.65	26	153.16	32
B5	153.66	35	154.65	26	153.16	32
Ac C=O	169.17	22	169.08	21	168.60	21
γ Ac C=O	170.92	22	170.80	18	170.16	21

Compound Number 219

<sup>13</sup>C



*trans*

**p-Methoxy coumaryl alcohol**  
**4-methoxy cinnamyl alcohol**

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.76 (3.78)	s	
γ	4.20 (4.25)	bs	
β	6.24 (6.19)	dt	15.9, 5.4
α	6.53 (6.52)	d	15.9
3,5	6.86 (6.83)	d	8.7
2,6	7.33 (7.28)	d	8.7

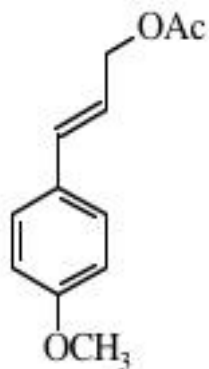
**Notes:**

S.Ralph 55mg  
SRVIII-45  
CDCl<sub>3</sub> 1H shifts in ( )'s

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.30	45	55.48	37	55.00	26
γ	63.76	42	63.36	33	61.62	33
3	113.99	78	114.73	67	113.96	62
5	113.99	78	114.73	67	113.96	62
2	127.69	82	128.24	67	127.27	66
6	127.69	82	128.24	67	127.27	66
β	126.43	44	128.61	33	128.20	43
α	130.82	32	129.76	34	128.27	32
1	129.57	14	130.78	9	129.51	15
4	159.32	12	160.05	8	158.57	13

Compound Number 220

<sup>13</sup>C



*trans*

p-Methoxy coumaryl alcohol acetate  
4-methoxy cinnamyl alcohol acetate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
OMe	3.78	s	
γ	4.65	dd	6.4, 1.2
β	6.19	dt	15.7, 6.4
3,5	6.89	d	8.8
2,6	7.38	d	8.8

**Notes:**

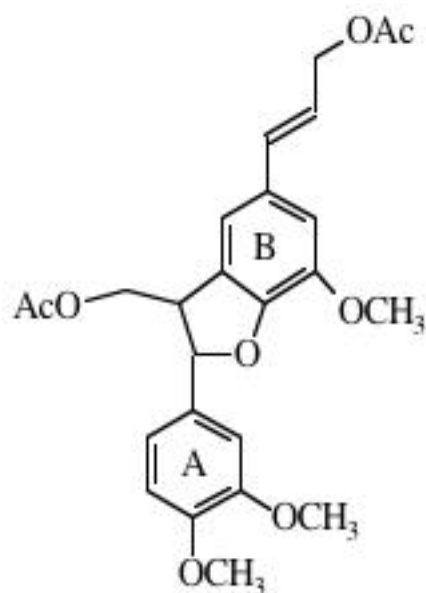
S.Ralph  
30mg  
gHSQC, gHMBC Acetone shifts confirmed

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.07	27	20.82	19	20.64	21
OMe	55.35	48	55.59	31	55.05	26
γ	65.39	46	65.52	32	64.48	26
3	114.13	86	114.91	55	114.02	50
5	114.13	86	114.91	55	114.02	50
β	121.00	40	122.21	33	121.17	25
2	127.94	85	128.69	65	127.74	53
6	127.94	85	128.69	65	127.74	53
1	130.17	11	130.80	7	129.86	7
α	134.10	41	134.32	28	133.00	24
4	159.73	13	160.71	5	159.13	10
Ac C=O	170.90	10	170.77	6	170.07	8



Compound Number 221

<sup>13</sup>C



V-c-CA

4-methoxy phenyl coumaran diacetate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.02	s	
OMe	3.79	s	
OMe	3.80	s	
OMe	3.88	s	
γ1	4.38	dd	11.1, 7.4
γ2	4.43	dd	11.1, 5.6
Bγ	4.66	dd	7.4, 0.9
Aα	5.54	d	7.0
Bβ	6.23	dt	15.8, 6.4
Bα	6.64	d	15.9

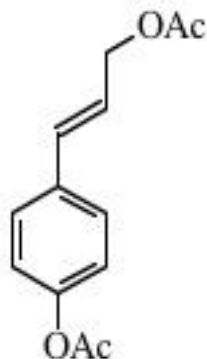
**Notes:**

S.Ralph 51mg  
 SRVII-104  
 HMBC and HMQC in acetone  
 gamma's and A3 and A4 are very close and may be switched

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.78	29	20.70	26	20.50	29
Ac Me	20.99	25	20.83	20	20.67	27
β	50.32	29	51.16	38	49.36	21
OMe	55.97	62	56.20	50	55.53	47
OMe	55.97	62	56.20	50	55.53	47
OMe	56.08	34	56.48	28	55.75	29
Bγ	65.19	31	65.52	29	64.51	27
γ	65.35	29	65.96	29	64.77	19
α	88.61	28	88.84	27	87.44	22
A2	109.39	30	110.95	26	109.96	23
B2	110.81	27	112.29	25	111.05	19
A5	111.21	30	112.77	26	111.76	24
B6	115.35	28	116.35	28	115.29	21
A6	118.78	31	119.35	28	118.47	25
Bβ	121.22	30	122.21	28	121.34	23
B5	127.76	13	129.18	13	128.06	20
B1	130.56	14	131.46	15	130.03	20
A1	132.94	18	134.53	14	132.88	20
Bα	134.35	29	134.75	28	133.55	22
B3	144.45	17	145.40	13	143.90	17
B4	148.35	11	149.40	8	147.67	12
A3	149.30	26	150.48	11	148.87	30
A4	149.30	26	150.55	10	148.87	30
Ac C=O	170.73	16	170.79	7	170.12	14
Ac C=O	170.73	10	170.94	12	170.26	20

Compound Number 222

<sup>13</sup>C



*trans*

4-hydroxy cinnamyl alcohol diacetate  
Coumaryl alcohol acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.98	31	20.78	27	20.63	30
4 Ac Me	21.12	47	20.96	38	20.86	40
γ	64.95	39	65.17	36	64.18	28
3	121.79	78	122.85	62	121.97	58
5	121.79	78	122.85	62	121.97	58
β	123.58	36	124.89	31	123.97	28
2	127.62	75	128.29	65	127.43	57
6	127.62	75	128.29	65	127.43	57
α	133.19	36	133.28	30	132.05	28
1	134.08	13	134.99	13	133.64	15
4	150.52	12	151.70	9	150.13	13
4 Ac C=O	169.32	14	169.55	10	169.03	13
γ Ac C=O	170.78	10	170.74	8	170.07	9

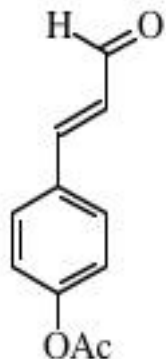
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	2.03	s	
4 Ac Me	2.24	s	
γ	4.69	dd	6.2, 1.3
β	6.32	dt	16.0, 6.2
α	6.69	d	16.0
3,5	7.08	d	8.6
2,6	7.47	d	8.6

**Notes:**

S.Ralph 37mg

Compound Number 223

<sup>13</sup>C*trans*

4-acetoxy cinnamaldehyde  
Coumaryl aldehyde acetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.11	70	20.98	25	20.65	45
3	122.43	125	123.40	64	122.33	100
5	122.43	125	123.40	64	122.33	100
β	128.73	86	129.60	27	128.41	47
2	129.70	125	130.60	62	129.81	98
6	129.70	125	130.60	62	129.81	98
1	131.75	27	132.91	10	131.59	20
α	151.44	72	152.21	25	151.73	44
4	152.90	25	154.01	9	152.41	18
Ac C=O	168.97	22	169.40	6	168.70	17
γ	193.44	65	193.95	26	193.97	49

<sup>1</sup>H (acetone)

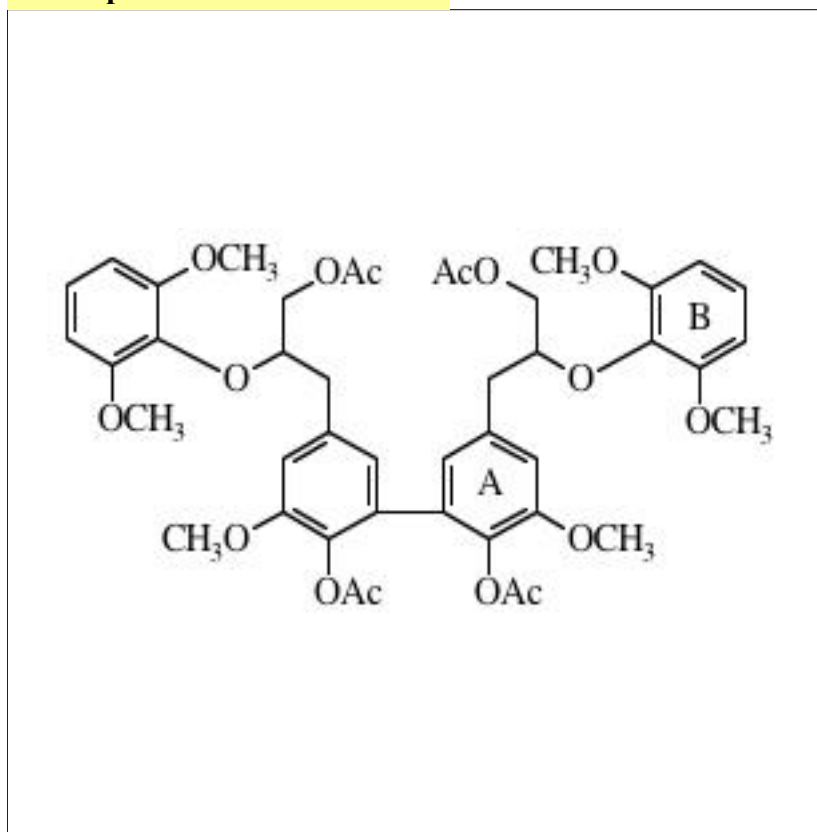
Atom	H Shifts	Mult	J
Ac Me	2.27	s	
β	6.73	dd	16.0, 7.6
3,5	7.22	d	8.6
α	7.66	d	16.0
2,6	7.76	d	8.5
γ	9.70	d	7.6

**Notes:**

S.Ralph  
27mg

Compound Number 224

<sup>13</sup>C



S-b-G-5,5-G-b-S ( $\alpha = \text{CH}_2$ )

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.34	30	20.32	18	19.88	34
Ac Me	20.80	37	20.68	20	20.35	59
$\alpha$	38.29	24	38.90	15	37.58	22
OMe	56.00	91	56.33	71	55.71	120
OMe	56.00	91	56.33	71	55.71	120
OMe	56.00	91	56.33	71	55.84	40
$\gamma$	65.26	25	65.69	17	64.70	28
$\beta$	80.43	28	80.91	18	79.49	31
B2	105.31	68	106.27	40	105.42	81
B6	105.31	68	106.27	40	105.42	81
A2	113.43	24	114.11	14	113.29	20
A6	128.48	23	124.07	11	122.66	20
B1	123.92	32	124.57	14	123.70	36
A5	131.10	18	131.92	8	130.30	23
B4	136.00	15	137.04	17	135.36	31
A1	136.19	29	137.04	17	135.42	31
A4	136.19	29	137.04	17	135.84	29
A3	151.02	20	152.12	12	150.67	26
B3	153.17	42	154.64	22	153.17	69
B5	153.17	42	154.64	22	153.17	69
4 Ac C=O	168.68	8	168.80	6	167.98	19
$\gamma$ Ac C=O	170.82	19	170.80	10	170.02	35

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.93	s	
Ac Me	1.99	s	
$\alpha$	3.07	m	
OMe	3.74	s	
OMe	3.82	s	
$\gamma$	4.14	d	4.8
$\beta$	4.51	bt	4.9
B2,6	6.62	d	8.4
A6	6.76	s	
A2	7.09	d	1.4

**Notes:**

S.Ralph SRVII 109D

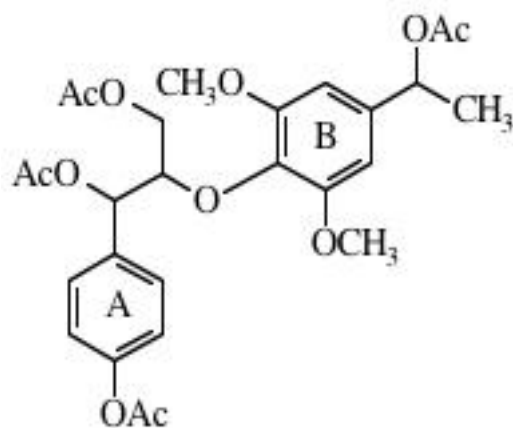
44mg

2D HMBC in CDCL3A4 and A1 identical chemical shift and B4 very close

As compound has a plane of symmetry thru A5 only half the shifts are reported

Compound Number 225

<sup>13</sup>C



*erythro*

H-b-S

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Bβ	1.47	d	6.6
Ac Me	1.84	s	
Ac Me	2.03	s	
Ac Me	2.12	s	
A4 Ac Me	2.25	s	
OMe	3.79	s	
γ1	4.15	dd	11.9, 4.2
γ2	4.38	dd	11.9, 5.9
β	4.69	m	
Bα	5.78	q	6.6
α	6.07	d	4.6
B2,6	6.68	s	
A3,5	7.11	d	8.5
A2,6	7.45	d	8.5

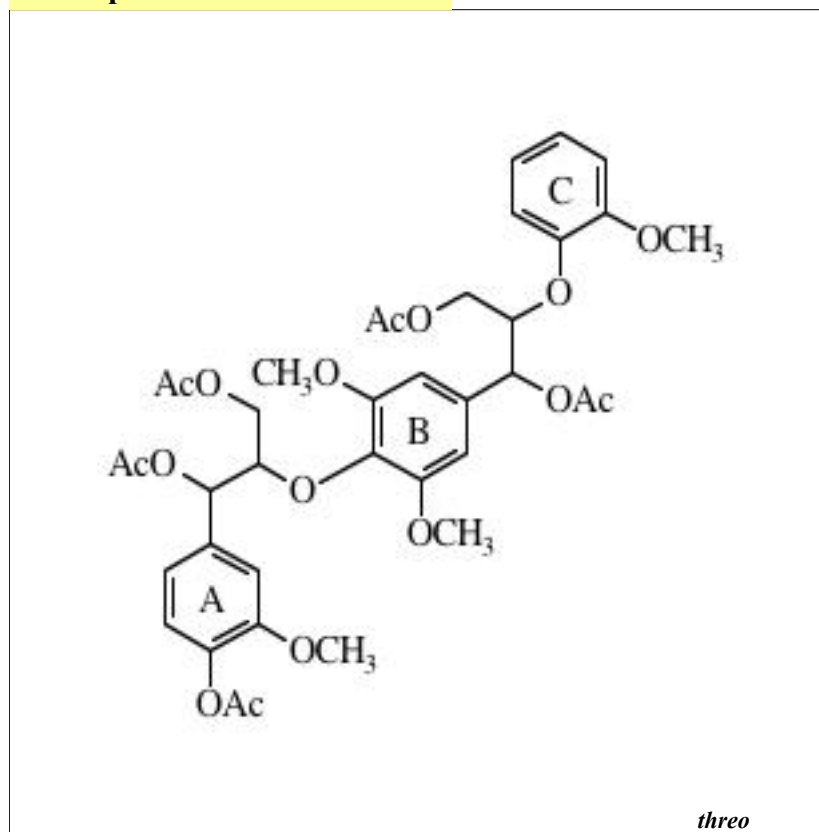
**Notes:**

S.Ralph  
 SRVII-139E3 18mg  
 gHMQC and gHMBC in acetone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.78	39	20.55	18	20.22	27
Ac Me	20.12	40	20.95	31	20.60	28
Ac Me	21.19	47	20.95	31	20.74	32
Ac Me	21.44	36	21.16	18	20.95	28
Bβ	22.26	34	22.60	21	21.99	25
OMe	56.08	78	56.38	44	55.75	54
OMe	56.08	78	56.38	44	55.75	54
γ	62.66	26	63.19	18	61.94	15
Bα	72.38	36	72.68	17	71.59	22
α	73.94	29	74.90	15	73.49	15
β	80.88	20	81.26	13	79.79	16
B2	103.29	67	103.98	38	102.85	39
B6	103.29	67	103.98	38	102.85	39
A3	121.36	57	122.33	37	121.56	45
A5	121.36	57	122.33	37	121.56	45
A2	128.06	42	128.89	30	128.72	37
A6	128.06	42	128.89	30	128.72	37
A1	134.69	14	135.64	7	134.26	10
B4	134.96	19	135.84	17	135.05	15
B1	137.91	21	139.17	11	137.40	15
A4	150.37	19	151.53	8	149.96	14
B3	153.22	40	154.08	17	152.52	29
B5	153.22	40	154.08	17	152.52	29
A4 Ac C=O	169.36	17	169.61	7	169.08	19
Aα Ac C=O	169.62	16	169.93	9	169.08	19
Bα Ac C=O	170.29	17	170.21	6	169.55	18
Aγ Ac C=O	170.29	17	170.66	10	169.90	19

Compound Number 226

<sup>13</sup>C



G-bt-S-bt-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.69	44	20.48	99	20.28	55
γAc Me	20.75	50	20.58	96	20.28	55
α Ac Me	20.79	43	20.67	96	22.41	41
αAc Me	21.09	70	20.92	103	22.41	50
4 Ac Me	21.09	70	20.96	116	20.65	50
OMe	55.80	44	56.19	115	55.48	45
OMe	55.90	44	56.24	119	55.62	43
OMe	56.04	71	56.43	127	55.78	66
OMe	56.04	71	56.43	127	55.78	66
Aγ	62.74	27	63.36	63	62.19	22
Bγ	63.16	28	63.72	71	62.56	21
Aα	73.99	29	75.07	69	73.74	25
Bα	74.87	28	75.71	54	74.60	19
Bβ	80.36	18	80.76	69	79.15	24
Aβ	80.78	21	81.38	70	79.94	23
B2	104.30	51	105.27	125	104.13	43
B6	104.30	51	105.27	125	104.13	43
A2	111.60	16	112.26	47	110.95	21
C2	112.49	33	113.68	75	112.61	34
C5	118.50	37	118.95	60	117.23	23
A6	119.24	19	120.01	60	118.78	23
C6	120.98	31	121.66	81	120.60	34
A5	122.37	25	123.26	78	122.46	43
C1	123.24	30	123.61	89	122.46	43
B1	132.59	12	133.70	37	132.42	17
B4	135.35	10	136.40	19	134.48	16
A1	136.03	16	137.04	41	135.59	18
A4	139.49	16	140.53	33	138.85	21
C4	148.00	16	149.14	34	147.58	21
C3	150.77	25	151.74	37	150.03	22
A3	150.77	25	152.01	35	150.53	21
B3	153.14	27	153.96	68	152.43	37
B5	153.14	27	153.96	68	152.43	37
A4 Ac C=O	168.84	17	168.95	37	168.40	20
α Ac C=O	169.49	18	169.92	49	169.29	26
α Ac C=O	169.76	17	169.99	49	169.29	36
γ Ac C=O	170.51	20	170.61	60	169.92	39
γAc C=O	170.82	19	170.61	60	169.92	39

<sup>1</sup>H (acetone)

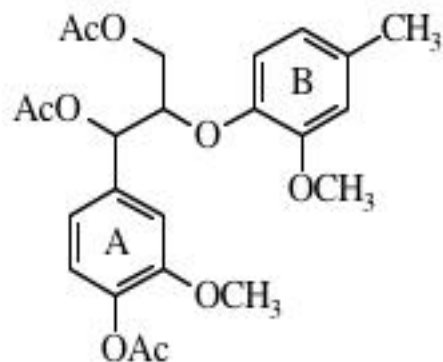
Atom	H Shifts	Mult	J
γ Ac Me	1.84		
γ Ac Me	1.98		
α Ac Me	2.00		
αAc Me	2.10		
A4 Ac Me	2.22		
OMe	3.80		
γ	4.03	m	
γ <sup>1,2</sup>	4.22	m	
γ	4.41	dd	11.8, 6.05
Aβ	4.71	m	
Bβ	4.79	m	
A,Bα	6.07	bd	6.31
B2,6	6.79	d	2.8

**Notes:**

S.Ralph SRVII-140C2  
30mg  
gHSQC and gHMBC in acetone

Compound Number 227

<sup>13</sup>C



*erythro*

G-b-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	66	20.47	61	20.31	30
Ac Me	20.74	48	20.62	51	20.40	30
Ac Me	20.99	48	20.89	45	20.62	42
B $\alpha$	21.09	58	21.07	45	20.68	20
OMe	55.70	74	56.14	62	55.47	23
OMe	55.89	57	56.27	55	55.69	20
$\gamma$	62.48	43	62.95	45	61.80	12
$\alpha$	73.70	45	74.58	44	73.10	17
$\beta$	80.57	59	80.63	45	78.71	19
A2	111.84	46	112.63	67	111.50	21
B2	113.49	46	114.61	50	113.60	15
B5	119.54	63	120.07	44	118.21	15
A6	119.69	49	120.30	51	119.17	17
B6	121.21	53	121.85	54	120.77	23
A5	122.55	46	123.36	45	122.50	14
B1	133.53	27	133.79	20	132.26	17
A1	135.62	28	136.82	27	135.45	17
A4	139.69	20	140.73	14	138.98	12
B4	144.76	22	145.94	15	144.24	13
B3	150.86	24	151.83	15	150.12	16
A3	150.95	25	152.11	17	150.53	15
A4 Ac C=O	168.79	23	168.92	18	168.41	14
$\alpha$ Ac C=O	169.50	24	169.91	17	169.26	14
$\gamma$ Ac C=O	170.78	22	170.76	15	170.03	12
threo isomer						
$\gamma$	63.04		63.58			
$\alpha$	74.54		75.38			
$\beta$	80.59		80.98			

<sup>1</sup>H (acetone)

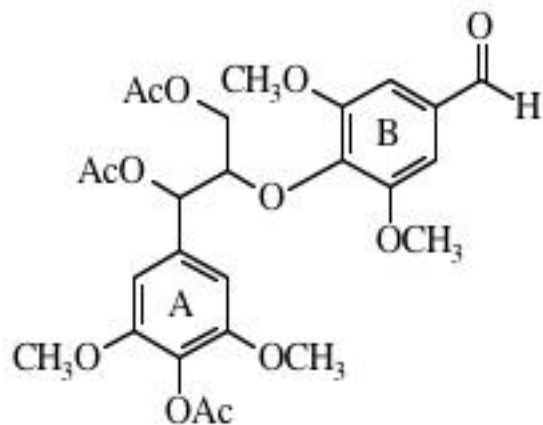
Atom	H Shifts	Mult	J
Ac Me	1.94	s	
Ac Me	2.08	s	
B $\alpha$	2.22	s	
Ac Me	2.25	s	
OMe	3.79	s	
OMe	3.83	s	
$\gamma$ 1	4.20	dd	11.9, 4.2
$\gamma$ 2	4.37	dd	11.9, 5.8
$\beta$	4.74	m	
$\alpha$	6.06	d	5.0
B6	6.65	bd	8.1
B2	6.82	bs	
B5	6.85	d	8.2
A5,6	7.04	m	
A2	7.23	s	
$\gamma$ 1 isomer	3.99		
$\gamma$ 2 isomer	4.25		
$\alpha$ isomer	6.10		

**Notes:**

S.Ralph  
 SRVII-141-1 31mg  
 gHSQC and gHMBC in acetone

Compound Number 228

<sup>13</sup>C



S-b-S

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.44	21	20.24	147	20.09	45
α AcMe	20.70	15	20.58	108	20.31	34
γ Ac Me	21.04	13	20.89	98	20.63	37
A OMe	56.18	49	56.50	270	55.93	79
A OMe	56.18	49	56.50	270	55.93	79
B OMe	56.18	49	56.58	279	55.99	87
B OMe	56.18	49	56.58	279	55.99	87
γ	62.90	11	63.40	96	62.26	18
α	74.17	12	75.17	93	73.81	22
β	80.87	12	81.67	98	80.21	20
A2	104.07	22	104.61	181	103.39	37
A6	104.07	22	104.61	181	103.39	37
B2	106.50	24	107.18	183	106.37	42
B6	106.50	24	107.18	183	106.37	42
A4	128.61	3	129.41	21	127.60	10
B1	132.08	8	133.26	54	131.82	18
A1	135.04	9	136.27	53	134.94	20
B4	140.89	4	141.81	28	140.06	16
A3	151.95	15	153.06	86	151.54	43
A5	151.95	15	153.06	86	151.54	43
B3	153.46	14	154.43	86	152.95	46
B5	153.46	14	154.43	86	152.95	46
A4 Ac C=O	168.60	7	168.52	48	168.03	21
α Ac C=O	169.46	9	169.94	50	169.35	25
γ Ac C=O	170.76	6	170.66	46	169.96	23
Bα	191.01	12	191.69	98	191.82	22

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.87	s	
α Ac Me	2.14	s	
A4 Ac Me	2.22	s	
OMe	3.82	s	
OMe	3.95	s	
γ 1	4.22	dd	11.9, 3.8
γ 2	4.47	dd	11.9, 6.2
β	4.95	dt	6.6, 4.2
α	6.09	d	4.2
A 2,6	6.81	s	
B 2,6	7.25	s	
Bα	9.90	s	

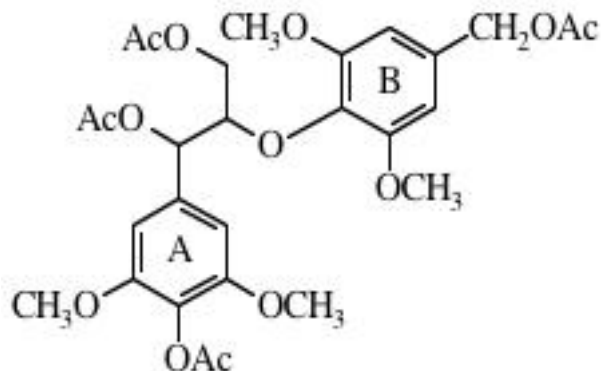
**Notes:**

L.Landucci LLL XXII-134C  
35mg  
gHSQC and gHMBC in acetone



Compound Number 229

<sup>13</sup>C



*erythro*

S-b-S

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.86	s	
Bα Ac Me	2.05	s	
a Ac Me	2.14	s	
A4 Ac Me	2.22	s	
OMe	3.81	s	
OMe	3.82	s	
γ1	4.18	dd	11.9, 4.2
γ2	4.43	dd	11.9, 6.0
β	4.74	dt	6.2, 4.2
Bα	5.02	s	
α	6.08	d	4.3
B 2,6	6.71	s	
A 2,6	6.78	s	

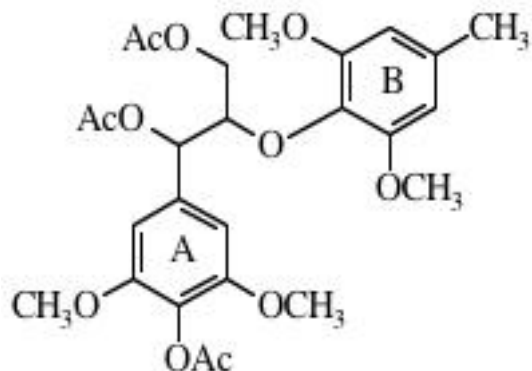
**Notes:**

S.Ralph SRIX-17D  
18mg  
gHSQC and gHMBC in acetone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.48	137	20.35	42	20.06	54
γ Ac Me	20.77	88	20.71	29	20.29	40
Bα Ac Me	21.06	92	20.93	20	20.64	52
α Ac Me	21.10	106	21.04	30	20.66	51
OMe	56.05	178	56.50	58	55.74	70
OMe	56.05	178	56.50	58	55.74	70
OMe	56.17	239	56.58	79	55.88	88
OMe	56.17	239	56.58	79	55.88	88
γ	62.73	71	63.42	23	62.09	18
Bα	66.45	67	66.71	22	65.58	27
α	74.19	75	75.41	23	73.88	24
β	80.79	65	81.55	25	79.96	22
A2	103.92	127	104.61	43	103.18	38
A6	103.92	127	104.61	43	103.18	38
B2	105.47	132	106.29	42	105.20	40
B6	105.47	132	106.29	42	105.20	40
A4	128.44	21	129.41	4	127.45	12
B1	132.02	49	133.40	11	131.90	19
B4	135.09	29	136.29	8	134.12	17
A1	135.59	48	136.76	13	135.26	18
A3	151.90	89	153.12	25	151.47	52
A5	151.90	89	153.12	25	151.47	52
B3	153.19	77	154.13	20	152.47	38
B5	153.19	77	154.13	20	152.47	38
A4 Ac C=O	168.64	44	168.64	13	168.10	26
α Ac C=O	169.54	43	170.09	13	169.35	28
γ Ac C=O	170.84	27	170.81	12	169.97	27
Bα Ac C=O	170.92	34	170.97	6	170.20	16

Compound Number 230

<sup>13</sup>C



*erythro*

S-b-S

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.43	29	20.24	41	20.04	79
γ Ac Me	20.76	23	20.62	28	20.30	63
αAc Me	21.06	21	20.93	27	20.61	61
Bα	21.82	21	21.76	28	21.32	56
OMe	55.90	45	56.25	63	55.57	117
OMe	55.91	45	56.25	63	55.57	117
OMe	56.12	49	56.46	82	55.84	126
OMe	56.12	49	56.46	82	55.84	126
γ	62.69	18	63.22	29	62.00	32
α	74.20	17	75.33	29	73.88	37
β	80.80	19	81.45	31	79.94	38
A2	103.81	36	104.43	54	103.08	70
A6	103.81	36	104.43	54	103.08	70
B2	105.95	34	106.85	60	105.77	82
B6	105.95	34	106.85	60	105.77	82
A4	128.33	5	129.25	6	127.39	20
B4	132.79	6	134.15	9	132.12	29
B1	134.13	13	134.52	16	133.35	37
A1	135.77	13	136.80	17	135.39	38
A3	151.86	21	153.01	27	151.45	73
A5	151.86	21	153.01	27	151.45	73
B3	152.87	22	153.84	29	152.27	71
B5	152.87	22	153.84	29	152.27	71
A4 Ac C=O	168.62	10	168.54	14	167.99	35
α Ac C=O	169.54	11	169.98	15	169.33	42
γ Ac C=O	170.94	9	170.72	13	169.95	41
threo isomer						
γ			63.53		64.13	
α			75.60		76.58	
β			80.87		81.65	

<sup>1</sup>H (acetone)

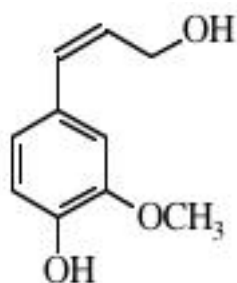
Atom	H Shifts	Mult	J
γ Ac Me	1.87	s	
αAc Me	2.14	s	
A4 Ac Me	2.22	s	
Bα	2.27	s	
OMe	3.78	s	
OMe	3.81	s	
γ1	4.18	dd	11.9, 4.4
γ2	4.40	dd	11.9, 6.2
β	4.66	dt	5.8, 4.4
α	6.06	d	4.4
B 2,6	6.49	s	
A 2,6	6.76	s	

**Notes:**

S.Ralph SRIX-17E  
40mg threo isomer shifts from SRIX-104D  
gHSQC and gHMBC in acetone

Compound Number 231

<sup>13</sup>C



*cis*

cis-coniferyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.97	23	56.13	91	55.47	96
γ	59.75	21	59.73	77	58.16	86
2	111.53	20	113.19	82	112.84	81
5	114.33	21	115.55	82	115.15	79
6	122.25	22	122.78	86	121.56	83
1	129.04	6	129.73	26	128.06	46
α	129.51	20	130.19	82	128.62	82
β	131.10	20	131.44	82	130.95	75
4	145.17	7	146.69	29	145.74	50
3	146.38	5	147.93	22	147.13	39

<sup>1</sup>H (acetone)

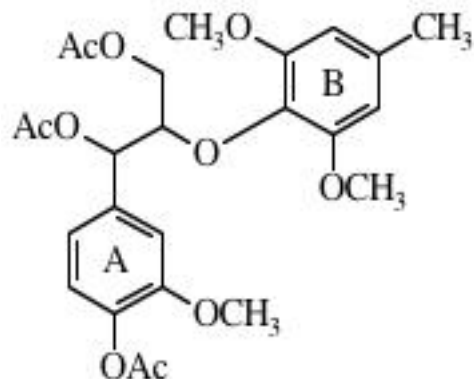
Atom	H Shifts	Mult	J
OMe	3.83	s	
γ	4.41	d	5.8
β	5.73	dt	11.9, 6.2
α	6.39	d	11.7
6	6.72	dd	8.2, 2.0
5	6.82	d	8.2
2	6.87	d	2.0
<u>CDCl<sub>3</sub></u>			
OMe	3.89	s	
γ	4.44	dd	6.4, 1.4
β	5.79	dt	11.5, 6.6
α	6.49	d	11.9
6	6.74	dd	8.2, 1.8
5	6.78	d	1.8
2	6.89	d	8.2

**Notes:**

J.Ralph  
10mg  
gHSQC and gHMBC in acetone  
gHSQC in DMSO

Compound Number 232

<sup>13</sup>C



*erythro*

G-b-S

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.67	211	20.46	138	20.34	166
Ac Me	20.78	188	20.59	116	20.34	166
Ac Me	21.09	174	20.92	119	20.67	97
Bα	21.87	170	21.77	111	21.40	85
OMe	55.94	494	56.25	329	55.66	200
OMe	55.94	494	56.25	329	55.66	200
OMe	55.94	494	56.25	329	55.70	135
γ	62.64	157	63.10	122	61.98	59
α	74.02	160	75.04	125	73.72	66
β	80.92	173	81.40	126	80.03	68
B2	106.02	314	106.87	224	105.90	140
B6	106.02	314	106.87	224	105.90	140
A2	111.46	150	112.07	101	110.83	64
A6	119.10	157	119.81	115	118.66	65
A5	122.43	179	123.29	122	122.61	71
B4	132.81	59	134.03	33	132.13	47
B1	134.16	112	134.56	65	133.51	62
A1	136.35	118	137.26	75	135.87	63
A4	139.44	72	140.56	40	138.86	50
A3	150.84	88	152.02	53	150.63	60
B3	152.96	183	153.86	104	152.42	128
B5	152.96	183	153.86	104	152.42	128
A4 Ac C=O	168.91	75	168.94	50	168.51	56
α Ac C=O	169.56	85	169.93	56	169.39	57
γ Ac C=O	170.92	79	170.67	50	170.03	64

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.85	s	
Ac Me	2.12	s	
Ac Me	2.22	s	
Bα	2.27	s	
B OMe	3.76	s	
A OMe	3.82	s	
γ1	4.16	dd	11.8, 4.4
γ2	4.43	dd	11.7, 5.8
β	4.67	dt	5.8, 4.2
α	6.10	d	4.2
B 2,6	6.51	s	
A6	6.99	dd	8.3, 1.8
A5	7.06	d	8.2
A2	7.18	d	1.8

**Notes:**

S.Ralph SRIX-43G  
55 mg  
HSQC and HMBC in d6-DMSO

Compound Number 233

<sup>13</sup>C



G-b1-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.67	47	20.43	46	20.32	24
Ac Me	20.67	47	20.43	46	20.32	24
Ac Me	20.92	21	20.66	20	20.55	9
β	52.08	21	52.37	21	50.52	8
OMe	56.03	49	56.29	27	55.80	11
OMe	56.03	49	56.40	28	55.95	13
γ	65.58	19	65.94	21	64.74	6
A2	111.99	21	113.14	23	112.35	8
B2	112.32	22	113.66	23	112.95	8
A6	120.95	124	121.30	24	120.26	8
B6	122.22	23	122.88	23	122.14	8
A5	122.94	25	123.95	24	123.28	16
B5	123.54	22	124.21	24	123.28	16
B1	133.94	15	135.54	14	134.26	7
A1	135.02	13	135.77	11	134.42	8
B4	139.64	10	140.53	8	138.79	6
A4	144.13	11	145.10	8	143.59	6
B3	151.54	12	152.52	11	151.11	13
A3	151.72	11	152.70	10	151.11	13
A4 Ac C=O	168.46	11	168.58	9	138.10	7
B4 Ac C=O	168.83	10	168.87	10	168.41	7
γ Ac C=O	170.89	11	170.75	10	170.10	6
α	195.95	13	196.63	11	195.91	7

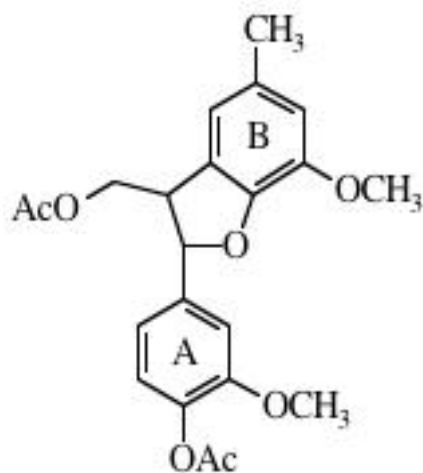
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.93	s	
Ac Me	2.20	s	
Ac Me	2.24	s	
OMe	3.81	s	
OMe	3.96	s	
γ1	4.33	dd	10.5, 5.8
γ2	4.76	dd	10.5, 8.5
β	5.19	dd	8.5, 5.7
B6	6.98	dd	8.0, 2.0
B5	7.03	d	8.0
A5	7.16	d	8.2
B2	7.22	d	1.8
A6	7.73	d	6.2, 1.8
A2	7.77	d	1.8

**Notes:**

S.Lempke I-31  
HSQC and HMBC in d6-acetone

Compound Number 234

<sup>13</sup>C

G-c-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.51	39	20.47	41	20.33	117
Ac Me	21.67	34	20.70	35	20.54	121
B $\alpha$	22.13	31	21.18	32	20.80	111
$\beta$	51.63	37	51.65	42	49.82	89
OMe	56.77	45	56.23	41	55.66	118
OMe	56.77	46	56.41	40	55.73	129
$\gamma$	66.49	38	66.19	44	65.03	75
$\alpha$	88.49	38	87.85	43	86.41	80
A2	110.89	34	111.02	40	110.39	85
B2	114.11	29	114.79	32	113.50	57
B6	117.76	38	117.92	40	116.90	84
A6	119.09	38	118.61	44	117.81	97
A5	123.68	39	123.72	43	122.87	89
B5	127.71	20	128.29	17	127.22	72
B1	132.29	21	131.92	20	130.68	78
A4	140.42	11	140.61	10	138.98	52
A1	140.73	22	141.40	22	139.88	77
B3	144.89	16	145.00	13	143.48	71
B4	146.62	9	146.96	10	145.26	44
A3	152.09	16	152.36	13	150.83	66
A4 Ac C=O	169.81	13	168.97	13	168.47	51
$\gamma$ Ac C=O	171.66	15	170.96	14	170.29	66

<sup>1</sup>H (acetone)

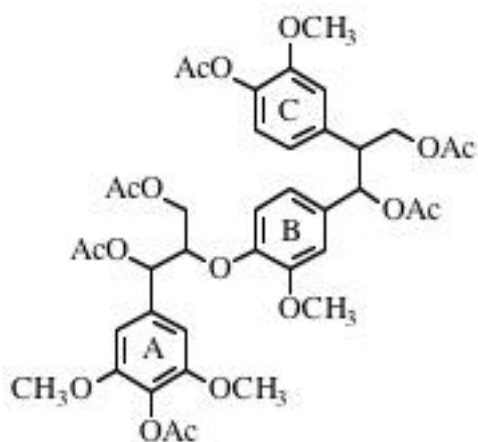
Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.22	s	
B $\alpha$	2.26	s	
$\beta$	3.74	m	
A OMe	3.80	s	
B OMe	3.83	s	
$\gamma$ 1	4.29	dd	11.1, 8.0
$\gamma$ 2	4.42	dd	10.9, 5.6
$\alpha$	5.55	d	6.6
B6	6.70	s	
B2	6.73	s	
A6	6.99	dd	8.2, 1.8
A5	7.05	d	8.2
A2	7.18	d	1.8

**Notes:**

S.Ralph  
 SRIX-46E  
 31mg  
 HSQC and HMBC in d6-acetone

Compound Number 235

<sup>13</sup>C



S-b-G-b1-G

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.89	s	
Ac Me	1.90	s	
Ac Me	2.04	s	
Ac Me	2.17	s	
Ac Me	2.18	s	
Bβ	3.46	m	
OMe	3.69	s	
OMe	3.72	s	
OMe	3.75	s	
OMe	3.76	s	
Bγ1	4.22	m	
Aγ1	4.31	m	
Bγ2	4.36	m	
Aγ2	4.38	m	
Aβ	4.82	m	
Aα	5.99	d	5.8
Bα	6.08	d	7.2
A2,6	6.80	s	
C2	6.97	s	

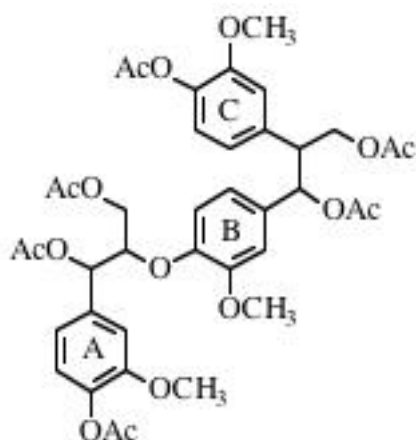
Notes:

S. Ralph SRIX-44D6  
 70mg HSQC and HMBC in d6-acetone  
 Bβ,Aβ,A2,A6,B5,B1,A1,and B4 appear as split signals  
 The shift reported is the average.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γAc Me	20.19	26	20.25	39	19.99	106
γAc Me	20.39	24	20.49	37	20.24	118
α Ac Me	20.52	24	20.63	37	20.30	108
α Ac Me	20.56	25	20.68	37	20.38	99
4 Ac Me	20.73	27	20.87	51	20.50	133
4 Ac Me	20.76	27	20.87	51	20.50	133
Bβ	49.86	9	50.93	17	49.21	40
OMe	55.59	24	56.22	68	55.54	97
OMe	55.67	25	56.22	68	55.59	125
OMe	55.97	49	56.51	71	55.87	179
OMe	55.97	49	56.51	71	55.87	179
Aγ	62.37	10	63.07	20	61.95	41
Bγ	64.04	14	65.02	19	64.07	36
Aα	73.74	15	74.77	22	73.39	46
Bα	74.82	13	75.66	22	74.62	42
Aβ	79.64	8	79.97	19	78.10	25
A2	104.20	19	105.11	37	104.04	93
A6	104.20	19	105.11	37	104.04	93
B2	111.11	11	112.37	18	111.22	33
C2	112.95	16	114.30	22	113.27	57
B5	118.27	10	118.61	11	116.86	19
B6	119.26	12	120.13	19	119.06	40
C6	120.99	16	122.06	20	120.84	56
C5	122.25	20	123.12	25	122.10	59
A4	128.50	6	129.52	8	127.83	40
B1	133.19	10	134.59	9	133.00	25
A1	134.81	9	136.05	12	134.76	33
C1	136.11	10	137.79	13	136.85	47
C4	138.85	10	139.98	13	138.27	48
B4	146.81	5	147.93	7	146.40	37
B3	150.44	9	151.43	9	149.76	33
C3	150.59	12	151.80	17	150.26	65
A3	151.84	24	153.01	31	151.47	120
A5	151.84	24	153.01	31	151.47	120
A4 Ac C=O	168.23	8	168.49	16	167.81	59
C4 Ac C=O	168.61	10	168.98	15	168.27	53
α Ac C=O	169.27	12	169.93	29	169.07	57
α Ac C=O	169.50	8	169.93	29	169.12	68
γ Ac C=O	170.42	11	170.74	19	169.89	111
γ Ac C=O	170.50	12	170.77	21	169.89	111

Compound Number 236

<sup>13</sup>C



G-b-G-b1-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.69	44	20.49	90	20.35	99
γ Ac Me	20.69	44	20.49	90	20.35	99
α Ac Me	20.78	24	20.62	53	20.35	99
α Ac Me	20.85	25	20.69	55	20.50	53
4 Ac Me	21.03	33	20.87	84	20.61	88
4 Ac Me	21.03	33	20.87	84	20.61	88
Bβ	50.07	6	50.96	24	49.13	22
OMe	55.83	21	56.25	96	55.63	45
OMe	55.94	33	56.25	96	55.68	67
OMe	55.97	35	56.30	77	55.72	62
Aγ	62.52	12	63.04	29	61.94	20
Bγ	64.29	14	65.05	32	64.17	20
Aα	73.72	15	74.55	30	73.14	22
Bα	75.07	12	75.70	26	74.68	21
Aβ	80.01	7	80.16	34	78.15	17
B2	111.36	14	112.43	31	111.27	19
A2	111.98	8	112.78	22	111.68	20
C2	113.12	15	114.34	37	113.32	28
B5	118.74	11	118.93	17	116.97	11
B6	119.48	15	120.14	35	119.12	24
A6	119.73	11	120.46	34	119.40	26
C6	121.22	15	122.10	28	120.89	26
C5	122.50	19	123.13	41	122.19	28
A5	122.62	18	123.36	37	122.51	27
B1	133.41	7	134.76	13	133.13	15
A1	135.34	4	136.60	16	135.26	20
C1	136.29	5	137.84	16	137.02	25
C4	139.06	9	140.02	17	138.21	27
A4	139.82	9	140.80	15	139.10	25
B4	147.00	5	147.92	9	146.35	18
B3	150.75	11	151.55	15	149.81	21
C3	150.80	14	151.83	22	150.26	31
A3	151.02	10	152.11	17	150.57	24
4 Ac C=O	168.84	10	168.92	21	168.46	39
4 Ac C=O	168.90	12	168.98	24	168.46	39
α Ac C=O	169.55	10	169.93	29	169.23	33
α Ac C=O	169.78	10	169.93	29	169.28	32
γ Ac C=O	170.74	11	170.75	31	170.06	55
γ Ac C=O	170.80	11	170.75	31	170.06	55

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.95	s	
α Ac Me	2.07	s	
4 Ac Me	2.15	s	
Bβ	3.50	m	
OMe	3.74	s	
OMe	3.78	s	
OMe	3.83	s	
Bγ 1	4.21	m	
Aγ 1	4.27	m	
Bγ 2	4.33	m	
Aγ 2	4.37	m	
Aβ	4.85	m	
Aα	6.06	d	5.0
Bα	6.13	d	7.0
B2	6.81	s	
B,C 6	6.82	m	
B,C 5	6.96	m	
C2	7.02	d	
A 5,6	7.05	m	
A2	7.25, 7.26		2 signals

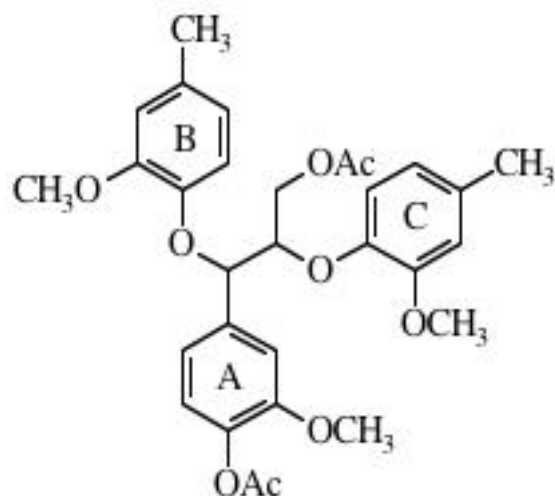
Notes:

SRIX-47C2  
 21 mg  
 Bβ,Aβ,A2,B5,B1,B4 appear assplit signals, the shift reported is the average.  
 HSQC and HMBC in d6-acetone



Compound Number 237

<sup>13</sup>C



G-a-G-b-G

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.90	s	
Ac Me	2.20	s	
B or C α	2.20	s	
B or C α	2.24	s	
OMe	3.75	s	
OMe	3.79	s	
OMe	3.83	s	
γ1	4.43	dd	11.7, 3.8
γ2	4.54	dd	11.7, 5.8
β	4.74	m	
α	5.55	d	5.4
C6	6.53	dd	8.2, 1.6
B6	6.61	dd	8.0, 1.4
C5	6.76	d	
B,C 2	6.78	s	
B5	6.83	d	8.0
A5	6.98	d	8.0
A6	7.05	dd	8.0, 1.8
A2	7.33	d	1.8

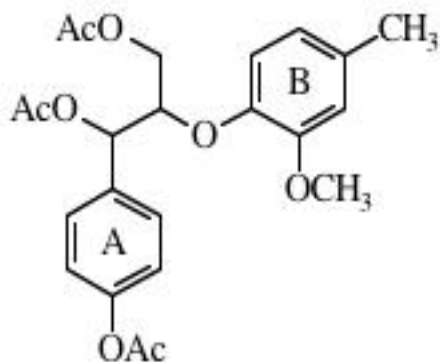
**Notes:**

SRIX-46DB  
 33mg  
 HSQC and HMBC in d<sub>6</sub>-acetone  
 Shifts for B and C α's, 2's and 6's were too close to assign with confidence

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.69	24	20.46	29	20.34	129
Ac Me	20.82	24	20.65	27	20.44	134
Cα	21.05	23	20.96	28	20.56	136
Bα	21.12	23	21.05	28	20.61	136
OMe	55.71	25	56.11	33	55.48	131
OMe	55.96	49	56.19	36	55.63	193
OMe	55.96	49	56.28	32	55.63	193
γ	63.56	21	65.62	30	62.46	86
α	80.41	21	81.09	24	79.08	93
β	82.44	21	82.14	32	80.19	98
A2	111.53	21	112.70	21	111.79	86
B2	113.37	28	114.51	34	113.58	190
C2	113.41	27	114.54	29	113.58	190
C5	116.77	21	117.73	24	116.22	109
B5	119.45	24	119.80	31	117.84	118
A6	119.72	23	120.54	29	119.51	88
B6	121.01	24	121.64	30	120.67	117
C6	121.21	25	121.80	30	120.77	125
A5	122.36	22	123.13	30	122.30	87
C1	131.97	15	132.54	14	131.23	93
B1	133.11	15	133.32	15	131.83	89
A1	138.62	16	138.11	17	136.70	93
A4	139.42	10	140.48	9	138.81	79
C4	145.22	12	146.01	10	144.25	89
B4	145.32	12	146.37	11	144.77	88
C3	149.95	12	151.12	11	149.52	85
B3	150.79	12	151.69	11	150.00	86
A3	151.02	13	152.03	14	150.45	89
A4 Ac C=O	168.85	11	168.89	10	168.39	65
γ Ac C=O	170.91	12	170.81	12	170.13	70

Compound Number 238

<sup>13</sup>C



*erythro*

H-b-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.82	21	20.59	46	20.34	66
α Ac Me	21.06	21	20.88	45	20.58	94
A4 Ac Me	21.18	47	20.95	88	20.58	94
Bα	21.18	47	21.07	48	20.73	78
OMe	55.79	28	56.13	57	55.46	58
γ	62.48	18	62.84	45	61.67	32
α	73.67	19	74.43	46	72.93	37
β	80.80	21	80.84	46	78.98	37
B2	113.60	20	114.65	47	113.64	42
B5	120.09	19	120.44	46	118.60	42
B6	121.27	25	121.85	60	120.77	51
A3	121.53	41	122.41	96	121.56	83
A5	121.53	41	122.41	96	121.56	83
A2	128.41	39	129.25	86	128.13	77
A6	128.41	39	129.25	86	128.13	77
B1	133.72	10	133.96	20	132.43	32
A1	134.44	12	135.53	23	134.05	34
B4	144.75	8	145.86	14	144.14	30
A4	150.59	9	151.71	20	150.11	28
B3	151.03	8	151.95	17	150.23	35
A4 Ac C=O	169.29	10	169.57	20	169.05	32
α Ac C=O	169.60	10	169.90	17	169.21	31
γ Ac C=O	170.87	9	170.73	16	169.97	30
minor isomer						
γ	63.10		63.56		62.38	
α	74.53		75.24		74.03	
β	80.73		81.06		79.39	

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.92	s	
α Ac Me	2.07	s	
A4 Ac Me	2.24	s	
Bα	2.25	s	
OMe	3.77	s	
γ1	4.17	dd	11.9, 4.4
γ2	4.37	dd	11.9, 5.6
β	4.69	m	
α	6.06	d	5.0
B6	6.64	m	
B 2,5	6.85	m	
A 3,5	7.12	m	
A 2,6	7.50	m	

**Notes:**

SRIX-51D-C

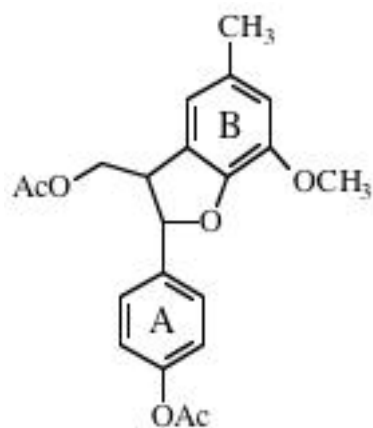
13mg HMBC,HSQC,selective INEPT in acetone

<sup>1</sup>H in acetone (threo isomer) γ1 3.96, dd J = 11.8,5.6 γ2 4.24, dd J = 11.8,4.2

α 6.12,d J = 6.8

Compound Number 239

<sup>13</sup>C



H-c-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.89	25	20.68	53	20.48	26
A4 Ac Me	21.21	36	20.95	77	20.73	56
Bα	21.35	33	21.18	49	20.73	56
β	50.94	21	51.78	54	49.85	19
OMe	56.11	30	56.38	43	55.56	19
γ	65.83	22	66.29	57	65.02	20
α	87.46	21	87.57	53	85.95	20
B2	113.35	23	114.79	52	113.40	18
B6	117.04	23	118.02	51	116.88	21
A3	121.81	53	122.82	112	121.90	46
A5	121.81	53	122.82	112	121.90	46
A2	127.10	45	127.64	107	126.83	47
A6	127.10	45	127.64	107	126.83	47
B5	128.30	9	128.12	26	127.67	8
B1	131.59	12	131.95	21	130.59	14
A1	138.76	10	140.15	22	138.55	16
B3	144.09	7	145.03	14	143.38	11
B4	145.86	5	146.96	11	145.14	7
A4	150.54	9	151.66	16	150.07	11
A4 Ac C=O	169.44	10	169.62	19	169.08	17
γ Ac C=O	170.88	9	170.94	18	170.21	12

<sup>1</sup>H (acetone)

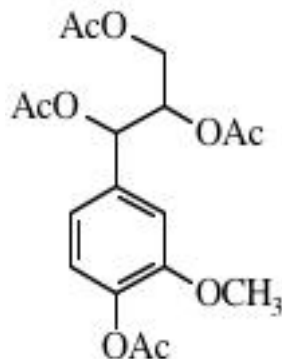
Atom	H Shifts	Mult	J
γ Ac Me	2.00	s	
A4 Ac Me	2.24	s	
Bα	2.26	s	
β	3.73	m	
OMe	3.83	s	
γ1	4.27	dd	10.9, 8.0
γ2	4.41	dd	10.9, 5.6
α	5.58	d	6.4
B2	6.70	bs	
B6	6.73	bs	
A3,5	7.11	d	8.5
A2,6	7.44	d	8.5

**Notes:**

SRIX-53E 2mg  
HSQC and HMBC in acetone

Compound Number 240

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.67	167	20.44	216	20.36	57
Ac Me	20.67	167	20.52	182	20.41	54
Ac Me	20.80	126	20.66	173	20.46	47
Ac Me	20.96	111	20.79	172	20.66	41
OMe	56.02	134	56.34	192	55.84	41
γ	62.11	93	62.81	156	61.93	24
β	72.22	95	72.92	167	71.68	27
α	73.43	96	74.15	151	72.90	25
2	111.30	106	112.29	169	111.25	27
6	119.75	102	120.15	161	119.00	26
5	123.10	104	123.72	155	122.81	29
1	134.70	62	136.28	74	135.20	22
4	140.20	36	140.98	45	139.19	21
3	151.37	41	152.30	54	150.72	22
4 Ac C=O	168.77	40	168.95	61	168.40	22
α Ac C=O	169.65	39	170.08	70	169.44	39
β Ac C=O	170.04	44	170.30	63	169.44	39
γ Ac C=O	170.43	40	170.73	66	169.97	22
minor isomer						
γ			62.31			
β			72.92			
α			73.53			

<sup>1</sup>H (acetone)

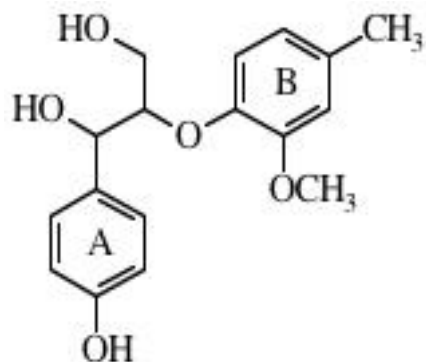
Atom	H Shifts	Mult	J
Ac Me	1.98	s	
Ac Me	1.99	s	
Ac Me	2.08	s	
Ac Me	2.22	s	
OMe	3.83	s	
γ1	3.90	dd	11.9, 6.2
γ2	4.24	dd	11.9, 4.0
β	5.42	m	
α	5.97	d	6.6
6	7.00	dd	8.2, 1.6
5	7.06	d	8.2
2	7.17	d	1.6

**Notes:**

SRIX-69E  
7mg  
gHSQCand gHMBC d6-acetone

Compound Number 241

<sup>13</sup>C



*threo*

H-b-G

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B α	2.27	s	
γ2	3.43	m	
γ1	3.64	m	
OMe	3.85	s	
β	4.03	m	
α	4.83	dd	6.9, 3.2
B6	6.66	m	
A3,5	6.79	d	8.7
B2	6.85	d	2.0
B5	7.07	d	8.0
A2,6	7.28	d	8.7
A4 OH	8.26	s	

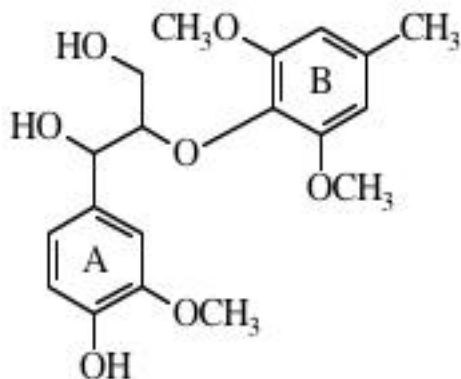
**Notes:**

SRIX-84  
35mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	21.16	16	21.08	21	20.51	31
OMe	55.81	19	56.24	28	55.55	37
γ	60.79	11	61.73	22	60.00	17
α	73.72	13	73.84	21	70.94	19
β	89.12	14	89.41	22	85.34	20
B2	113.07	17	114.18	19	113.46	25
A3	115.53	31	115.62	46	114.35	44
A5	115.53	31	115.62	46	114.35	44
B5	120.78	19	120.73	23	116.69	24
B6	121.96	16	122.21	25	120.75	31
A2	128.42	28	129.10	45	127.75	47
A6	128.42	28	129.10	45	127.75	47
A1	131.29	6	133.16	10	130.38	20
B1	133.99	11	133.35	11	132.21	17
B4	145.21	7	147.33	7	146.17	17
B3	150.97	8	151.67	5	149.60	17
A4	156.37	9	157.63	11	156.19	20
erythro isomer						
γ	60.79		61.64		59.89	
α	72.72		73.55		71.41	
β	87.06		87.53		84.57	

Compound Number 242

<sup>13</sup>C



*threo*

G-b-S

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B α	2.29	s	
γ1	3.28	dd	12.5, 3.2
γ2	3.64	dd	12.6, 3.6
OMe	3.80	s	
β	3.88	m	
OMe	3.85	s	
α	5.00	d	7.6
B2,6	6.55	s	
A5	6.79	d	8.34
A6	6.92	dd	8.3, 1.8
A2	7.07	d	1.8

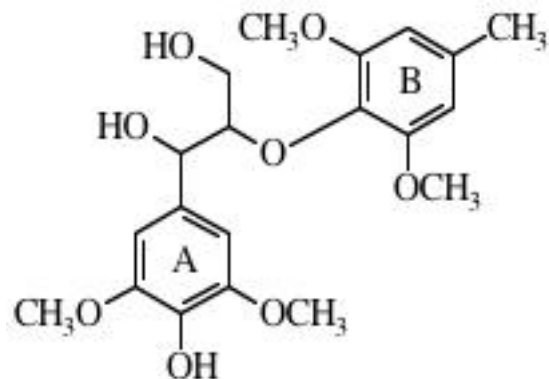
**Notes:**

SRIX-86B,C  
40 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	21.99	36	21.77	39	21.31	74
OMe	56.01	58	56.16	46	55.48	93
OMe	56.14	111	56.46	86	55.82	168
OMe	56.14	111	56.46	86	55.82	168
γ	60.51	30	61.19	35	60.11	29
α	74.20	32	74.08	38	71.53	37
β	89.20	33	89.83	37	87.29	41
B2	106.10	95	107.09	76	106.28	100
B6	106.10	95	107.09	76	106.28	100
A2	109.92	33	111.45	36	111.01	44
A5	114.36	37	115.22	43	114.62	43
A6	120.47	34	120.73	38	119.22	47
A1	132.06	18	133.60	22	132.79	44
B4	133.04	10	134.65	14	132.90	34
B1	134.67	23	134.82	22	133.80	27
A4	145.46	17	146.75	24	145.29	33
A3	146.58	16	147.90	19	146.83	32
B3	152.75	29	153.60	34	152.27	59
B5	152.75	29	153.60	34	152.27	59
erythro isomer						
γ	60.63		60.86		59.57	
α	72.49		73.26		71.93	
β	87.13		87.90		86.11	

Compound Number 243

<sup>13</sup>C



*threo*

S-b-S

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B α	2.29	s	
OMe	3.80	s	
OMe	3.86	s	
α	4.99	d	6.8
A2,6	6.54	s	
B2,6	6.77	s	
A4 OH	7.08	s	

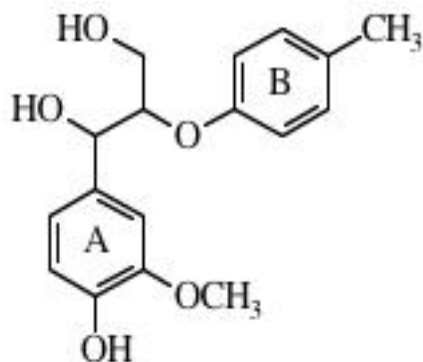
**Notes:**

SRIX-88SSB  
54mg B1,B4,A4,A1  
gHSQC, gHMBC in acetone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	21.85	42	21.78	78	21.31	91
OMe	56.02	94	56.48	173	55.88	252
OMe	56.02	94	56.48	173	55.88	252
OMe	56.25	94	56.56	175	55.90	266
OMe	56.25	94	56.56	175	55.90	266
γ	60.37	33	61.31	47	60.18	49
α	74.33	39	74.29	52	71.59	62
β	89.04	40	89.56	62	87.18	61
A2	104.04	77	105.39	150	104.30	124
A6	104.04	77	105.39	150	104.30	124
B2	105.99	87	107.05	169	106.34	155
B6	105.99	87	107.05	169	106.34	155
A1	131.04	27	132.54	37	132.13	59
B1	132.90	18	134.55	28	132.88	57
B4	134.43	26	134.78	47	133.92	46
A4	134.58	28	136.00	35	134.32	43
A3	146.99	54	148.23	68	147.37	112
A5	146.99	54	148.23	68	147.37	112
B3	152.63	46	153.52	74	152.34	113
B5	152.63	46	153.52	74	152.34	113
erythro isomer						
γ	60.50		61.23			
a	72.50		73.43			
β	87.03		86.32			

Compound Number 244

<sup>13</sup>C



*threo*

G-b-H

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B $\alpha$	2.22	s	
OMe	3.79	s	
$\gamma$ 1	3.54	m	
$\gamma$ 2	3.78	m	
$\beta$	4.39	m	
$\alpha$	4.94	m	
A5	6.77	d	8.2
A2	7.08	bs	
A4 OH	7.44	s	

**Notes:**

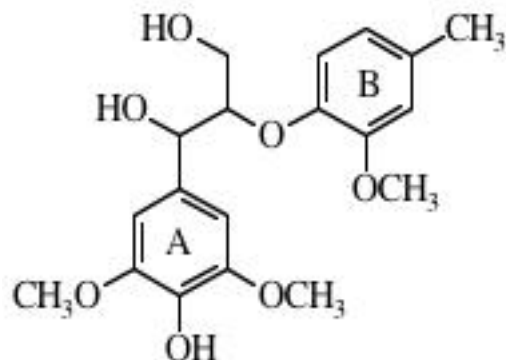
SRIX-88GHB  
36mg A1 and B1 may be interchanged  
gHSQC, gHMBC in acetone and CDCl<sub>3</sub>

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B $\alpha$	20.53	27	20.46	42	20.05	125
OMe	55.98	34	56.20	49	55.49	119
$\gamma$	61.11	18	61.67	36	60.04	63
$\alpha$	73.81	20	73.36	36	70.92	75
$\beta$	83.38	21	84.30	36	83.25	74
A2	109.56	21	111.36	48	110.95	79
A5	114.43	24	115.17	43	114.73	83
B3	116.57	47	117.08	79	115.88	199
B5	116.57	47	117.08	79	115.88	199
A6	120.00	21	120.36	40	119.01	80
B2	130.18	49	130.47	89	129.55	210
B6	130.18	49	130.47	89	129.55	210
B1	131.43	13	130.55	30	128.97	83
A1	131.76	14	134.24	20	133.25	66
A4	145.59	14	146.66	19	145.41	67
A3	146.75	13	147.93	17	146.99	68
B4	155.98	11	157.98	15	156.93	67
erythro isomer						
$\gamma$	61.44		62.03		60.17	
$\alpha$	73.94		74.03		71.55	
b	81.22		83.98		83.37	



Compound Number 245

<sup>13</sup>C



*threo*

S-b-G

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B $\alpha$	2.25	s	
$\gamma$ 1	3.48	m	
A OMe	3.78	s	
B OMe	3.84	s	
$\gamma$ 2	4.10	m	
$\beta$	4.48	d	3.8
$\alpha$	4.85	dd	3.6, 6.4
B6	6.65	m	
A2,6	6.76	s	
B2	6.83	d	1.8
B5	7.04	d	8.2

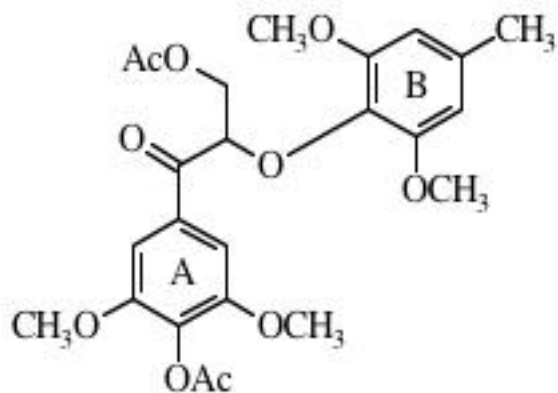
**Notes:**

SRIX-95BR  
HSQC and HMBC in CDCl<sub>3</sub>

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B $\alpha$	21.73	21	21.06	41	20.57	38
B OMe	55.85	24	56.26	49	55.50	46
A OMe	56.34	48	56.60	97	55.80	77
A OMe	56.34	48	56.60	97	55.80	77
$\gamma$	60.99	15	61.89	40	60.05	27
$\alpha$	74.18	19	74.05	42	70.90	28
$\beta$	89.51	21	88.73	45	84.58	27
A2	103.86	39	105.41	95	104.15	56
A6	103.86	39	105.41	95	104.15	56
B2	113.06	23	114.20	45	113.34	33
B5	120.90	22	120.10	45	115.95	31
B6	121.96	22	122.19	48	120.76	34
A1	130.82	12	132.84	23	130.21	25
B1	134.17	14	133.10	22	132.00	27
A4	134.58	10	136.15	18	134.33	25
B4	145.25	10	147.36	18	145.98	25
A3	147.12	23	148.40	38	147.39	52
A5	147.12	23	148.40	38	147.39	52
B3	150.93	11	151.50	18	149.46	25
erythro shifts						
$\gamma$	60.76		61.75		59.94	
$\alpha$	72.87		73.98		71.90	
$\beta$	87.70		87.09		83.97	

Compound Number 246

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.43	25	20.22	129	20.08	149
γ Ac Me	20.75	21	20.60	113	20.42	139
Bα	21.82	20	21.73	109	21.32	130
B OMe	55.86	49	56.19	268	55.65	293
B OMe	55.86	49	56.19	268	55.65	293
A OMe	56.29	48	56.60	249	56.12	272
A OMe	56.29	48	56.60	249	56.12	272
γ	64.15	22	64.34	117	63.26	88
β	81.65	24	81.24	119	79.70	97
B2	105.93	48	106.75	280	105.93	196
B6	105.93	48	106.75	280	105.93	196
A2	106.25	46	106.80	283	105.58	191
A6	106.25	46	106.80	283	105.58	191
A4	133.03	6	133.82	33	132.20	40
B4	133.50	15	134.25	35	132.74	68
A1	133.57	14	134.72	63	133.61	100
B1	134.31	14	134.88	67	133.33	102
A3	152.09	25	153.11	110	151.75	193
A5	152.09	25	153.11	110	151.75	193
B3	152.49	24	153.51	107	152.05	180
B5	152.49	24	153.51	107	152.05	180
A4 Ac C=O	168.14	11	168.20	55	167.79	81
γ Ac C=O	170.75	11	170.73	52	170.03	99
α	194.84	13	195.23	57	194.40	87

<sup>1</sup>H (acetone)

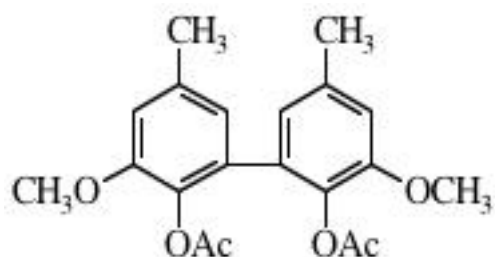
Atom	H Shifts	Mult	J
A4 Ac Me	1.90	s	
Bα	2.08	s	
γ Ac Me	2.26	s	
B OMe	3.70	s	
A OMe	3.85	s	
γ	4.49	m	
β	5.50	t	5.4
B2,6	6.47	s	
A2,6	7.49	s	

**Notes:**

SRTSII-131-Ac 12mg  
 A2,6 and B2,6 ; A1 and B1 switch in DMSO  
 HSQC and HMBC in Acetone, CDCl<sub>3</sub> and DMSO

Compound Number 247

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me α	20.54	24	20.36	84	20.10	63
	21.51	24	21.32	82	20.87	64
OMe	56.08	36	56.28	114	55.83	67
2	112.75	23	113.52	98	112.90	55
6	123.17	27	123.44	95	122.22	48
5	131.30	9	132.13	29	130.49	34
4	135.39	4	136.48	58	134.74	21
1	136.02	14	136.48	58	135.52	46
3	150.95	12	152.17	31	150.64	38
Ac C=O	168.96	9	168.67	21	168.00	26

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me α	2.00	s	
	2.33	s	
OMe	3.81	s	
6	6.60	bdd	2.0, 0.8
2	6.92	bd	1.6

**Notes:**

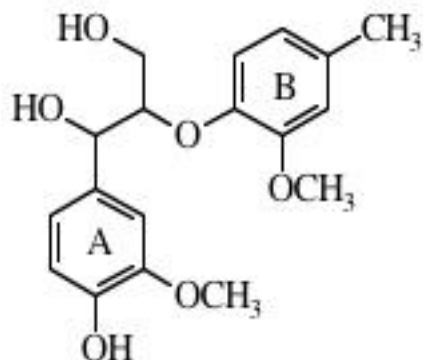
LLL-XXIII-76DA

37mg

As this dimer contains a plane of symmetry the CSs are reported for one unit.

Compound Number 248

<sup>13</sup>C



*threo*

G-b-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bα	21.21	31	21.06	36	20.63	80
OMe	55.85	39	56.19	44	55.45	79
OMe	55.93	41	56.26	54	55.58	93
γ	60.96	17	61.82	26	60.10	47
α	73.96	24	73.95	28	70.96	52
β	89.52	23	88.90	33	84.95	44
A2	109.59	28	111.40	34	111.05	54
B2	113.05	32	114.17	36	113.43	52
A5	114.39	28	115.23	37	114.69	56
B5	120.22	30	120.23	37	116.28	48
A6	120.87	28	120.57	38	119.04	56
B6	121.94	33	122.19	41	120.84	71
A1	131.64	15	133.16	19	130.36	49
B1	134.08	18	133.82	16	133.01	52
B4	145.31	14	146.80	16	145.44	57
A4	145.58	15	147.82	14	146.13	44
A3	146.75	15	148.02	16	147.00	53
B3	150.86	13	151.47	12	149.57	45
erythro isomer						
γ	60.69		61.69		59.97	
α	72.71		73.78		71.72	
β	87.33		87.08		84.21	

<sup>1</sup>H (acetone)

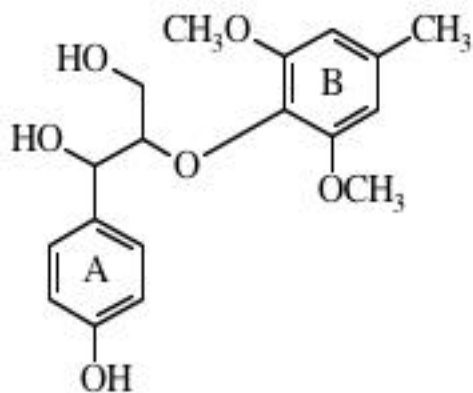
Atom	H Shifts	Mult	J
Bα	2.27	s	
γ1	3.51	m	
γ2	3.68	m	
OMe	3.81	s	
OMe	3.85	s	
β	4.07	m	
α	4.88	d	6.0
B6	6.66	bd	7.3
B5	6.87	bd	8.0
A4 OH	7.37	s	

**Notes:**

SRIX-98 27mg  
 B5 and A6 may be switched  
 HSQC and HMBC in CDCl<sub>3</sub>

Compound Number 249

<sup>13</sup>C



*threo*

H-b-S

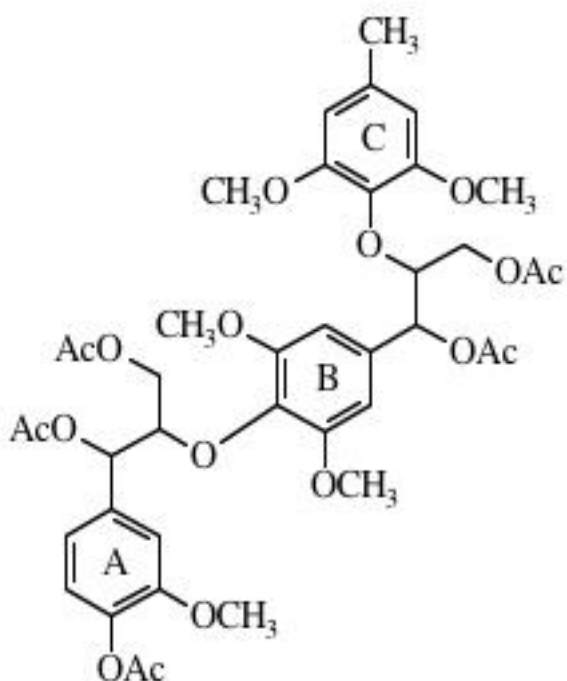
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B $\alpha$	2.28	s	
$\gamma$ 1	3.21	dd	12.3, 3.2
$\gamma$ 2	3.60	dd	12.3, 3.2
$\beta$	3.82	m	
OMe	3.85	s	
$\alpha$	4.98	d	7.8
B2,6	6.55	s	
A3,5	6.78	d	8.5
A2,6	7.27	d	8.5
<u>CDCI3</u>			
B $\alpha$	2.36		
$\gamma$ 1	3.32		
$\gamma$ 2	3.57		
$\beta$	3.87		
OMe	3.90		
$\alpha$	5.03		
B2,6	6.47		
A3,5	6.72		
A2,6	7.26		

**Notes:**

SRIX-101B 21mg  
 HSQC acetone  
 HSQC & HMBC CDCl<sub>3</sub>

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B $\alpha$	22.01	25	21.78	21	21.34	35
OMe	56.19	58	56.48	50	55.86	77
OMe	56.19	58	56.48	50	55.86	77
$\gamma$	60.50	18	61.06	21	60.08	23
$\alpha$	74.10	23	73.95	22	71.53	27
$\beta$	89.14	23	89.98	23	87.36	28
B2	106.16	48	107.12	42	106.33	57
B6	106.16	48	107.12	42	106.33	57
A3	115.56	48	115.58	48	114.37	59
A5	115.56	48	115.58	48	114.37	59
A2	128.75	45	129.22	46	127.88	61
A6	128.75	45	129.22	46	127.88	61
A1	131.26	17	133.06	10	132.21	23
B4	133.02	11	134.67	7	132.86	24
B1	134.77	15	134.84	10	133.93	17
B3	152.69	27	153.67	15	152.32	42
B5	152.69	27	153.67	15	152.32	42
A4	156.28	18	157.68	12	156.23	26
erythro isomer						
$\gamma$	60.6		60.8			
$\alpha$	72.4		73.1			
$\beta$	87.0		87.8			

**Compound Number 250**
<sup>13</sup>C

**G-b-S-b-S**

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.85	47	20.48	55	20.27	35
γ Ac Me	20.67	46	20.59	48	20.35	47
γ Ac Me	20.73	41	20.74	41	20.48	36
α Ac Me	21.08	75	20.93	53	20.67	41
α Ac Me	21.08	75	21.02	48	20.73	40
Cα	21.85	39	21.74	47	21.37	35
B OMe	55.99	109	56.32	91	55.71	115
B OMe	55.99	109	56.32	91	55.71	115
C OMe	55.99	109	56.45	123	55.71	115
C OMe	55.99	109	56.45	123	55.71	115
A OMe	56.07	84	56.86	104	55.85	72
Aγ	62.76	21	63.39	39	62.25	19
Bγ	63.74	25	64.30	36	63.20	15
Aα	74.06	23	75.15	44	73.83	22
Bα	75.99	29	76.75	28	75.77	13
Aβ	80.89	57	81.45	34	80.00	17
Bβ	80.89	57	81.76	28	80.50	15
B2	104.44	53	105.27	79	104.01	36
B6	104.44	53	105.27	79	104.01	36
C2	106.05	70	106.99	89	105.89	53
C6	106.05	70	106.99	89	105.89	53
A2	111.60	17	112.30	33	111.04	21
A6	119.23	24	120.02	25	118.85	13
A5	122.42	33	123.30	41	122.57	21
C1	133.37	20	134.17	27	133.02	39
B1	133.74	25	134.36	27	133.02	39
C4	134.40	18	135.56	14	133.79	13
B4	135.22	11	136.33	18	134.35	20
A1	136.15	25	137.10	24	135.67	19
A4	139.50	19	140.57	20	138.92	23
A3	150.85	23	152.05	25	150.59	27
C3	152.65	41	153.67	49	152.13	48
C5	152.65	41	153.67	49	152.13	48
B3	153.06	41	153.91	53	152.43	42
B5	153.06	41	153.91	53	152.43	42
A4 Ac C=O	168.89	20	168.96	23	168.49	26
α Ac C=O	169.55	23	169.90	29	169.29	28
α Ac C=O	169.85	21	169.95	34	169.38	29
γ Ac C=O	170.54	21	170.69	45	169.99	34
γAc C=O	170.88	21	170.69	45	169.99	34

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.84	d	1.6
α Ac Me	1.93	d	1.4
γ Ac Me	2.00	d	3.0
αAc Me	2.11	d	1.0
A4 Ac Me	2.21	s	
Cα	2.28	s	
OMe	3.77	s	
OMe	3.79	s	
OMe	3.81	s	
Bγ 1	3.83	m	
Aγ 1	4.16	dd	11.7, 4.2
Bγ 2	4.22	ddd	11.7, 3.8, 1.8
Aγ 2	4.40	dd	11.7, 6.0
Bβ	4.52	m	
Aβ	4.70	m	
Aα	6.06	d	overlapping
Bα	6.06	d	overlapping
C2,6	6.49	s	
B2,6	6.74	d	
A5,6	7.00	m	1.6
A2	7.16	d	1.4

**Notes:**

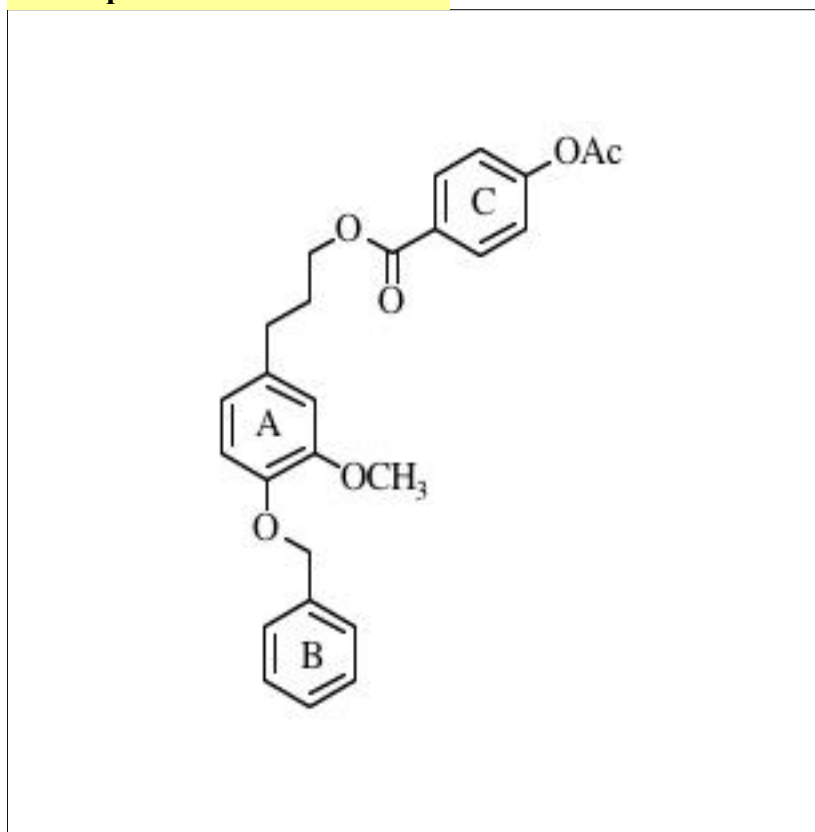
SRIX-105 30mg

 Order of Ac Me changes in CDCl<sub>3</sub>

 HSQC and HMBC in CDCl<sub>3</sub> and d<sub>6</sub>-acetone The first β-O-4 linkage appears to be erythro and the second linkage appears to be threo.

Compound Number 251

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			21.00	21		
β			31.15	12		
α			32.42	15		
OMe			56.13	18		
γ			64.98	14		
Bα			71.56	11		
A2			113.72	12		
A5			115.39	11		
A6			121.14	12		
C3			122.79	36		
C5			122.79	36		
B2			128.40	33		
B6			128.40	33		
B4			128.40	33		
C1			128.72	6		
B3			129.11	23		
B5			129.11	23		
C2			131.62	29		
C6			131.62	29		
A1			135.56	6		
B1			138.76	4		
A4			147.68	4		
A3			150.88	4		
C4			155.53	7		
Cα			166.03	4		
Ac C=O			169.26	8		

<sup>1</sup>H (acetone)

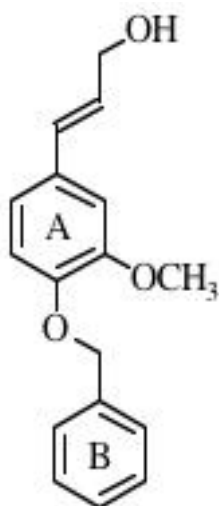
Atom	H Shifts	Mult	J
β	2.08	s	
Ac Me	2.28	d	< 1.0
α	2.74	bt	8.0
OMe	3.79	s	
γ	4.31	bt	6.4
Bα	5.05	s	
A6	6.75	m	
A2,5	6.91	m	
C3,5	7.25	d	8.5
B3,4,5	7.35	m	
B2,6	7.47	bd	7.4
C2,6	8.05	d	8.5

**Notes:**

L.Landucci XXIII-143 39mg.  
HSQC and HMBC in acetone d-6

Compound Number 252

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.16	34		
γ			63.26	17		
Bα			71.47	30		
A2			110.73	29		
A5			115.12	28		
A6			120.11	32		
B2			128.46	61		
B6			128.46	61		
B4			128.54	38		
B3			129.19	77		
B5			129.19	77		
β			129.19	77		
α			130.01	31		
A1			131.94	13		
B1			138.60	13		
A4			148.98	7		
A3			151.02	10		

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.84	s	
γ	4.19	dd	5.4, 1.4
Bα	5.09	s	
β	6.26	dt	16.1, 5.4
α	6.52	dt	9.9, 1.7
A6	6.88	dd	8.3, 2.0
A5	6.96	d	8.3
A2	7.08	d	2.0
B2-6	7.3-7.5	m	

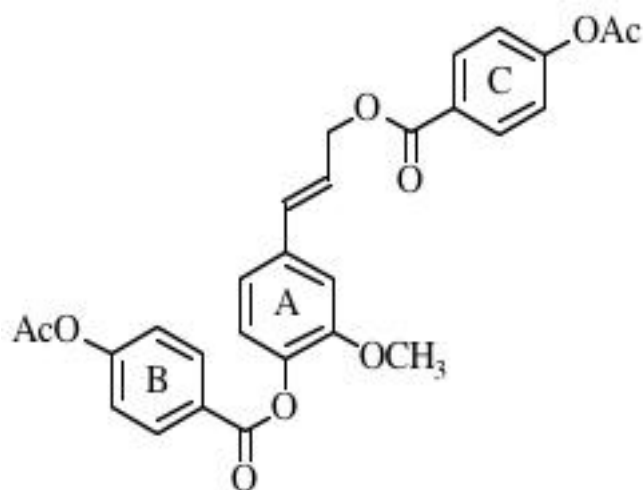
**Notes:**

L.Landucci XXIII-127G 48 mg  
HSQC and HMBC in acetone d-6



Compound Number 253

<sup>13</sup>C



<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.29	s	
Ac Me	2.31	s	
OMe	3.84	s	
γ	5.00	bd	6.0
β	6.55	dt	16.0, 6.0
α	6.85	bd	16.0
A6	7.13	dd	8.3, 1.8
A5	7.20	d	8.3
C3,5	7.28	d	8.7
A2	7.33	bs	
B3,5	7.35	d	8.7
C2,6	8.11	d	8.7
B2,6	8.21	d	8.7

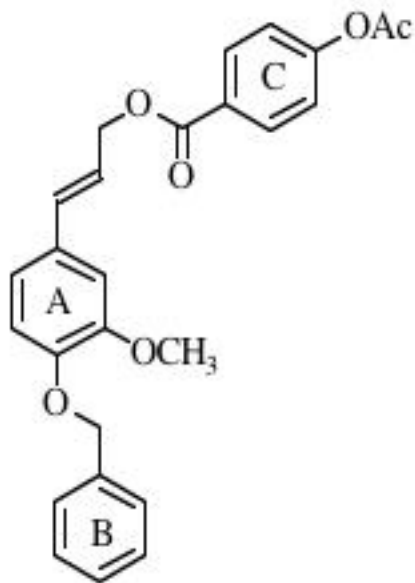
**Notes:**

L.Landucci XXIII-114B 16 mg  
HSQC and HMBC in acetone d-6

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.98	39		
Ac Me			20.98	39		
OMe			56.30	32		
γ			66.01	22		
A2			111.31	21		
A6			120.16	17		
C3			122.93	45		
C5			122.93	45		
B3			123.16	48		
B5			123.16	48		
A5			123.95	23		
β			124.89	21		
B1			127.72	8		
C1			128.57	7		
C2			131.77	48		
C6			131.77	48		
B2			132.34	46		
B6			132.34	46		
α			134.01	23		
A1			136.55	15		
A4			140.81	14		
A3			152.54	16		
C4			155.72	11		
B4			156.13	15		
B <sub>α</sub>			164.23	4		
C <sub>α</sub>			165.84	6		
Ac C=O			169.29	19		
Ac C=O			169.29	19		

Compound Number 254

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			21.00	39		
OMe			56.31	30		
γ			66.34	34		
Bα			71.53	26		
A2			111.16	18		
A5			115.17	18		
A6			120.82	37		
β			122.39	34		
C3			122.83	78		
C5			122.83	78		
B2			128.45	78		
B6			128.45	78		
B4			128.57	38		
C1			128.69	14		
B3			129.20	68		
B5			129.20	68		
A1			131.00	14		
C2			131.74	73		
C6			131.74	73		
α			134.95	36		
B1			138.49	15		
A4			149.70	13		
A3			151.13	12		
C4			155.68	13		
Cα			165.93	13		
Ac C=O			169.25	13		

<sup>1</sup>H (acetone)

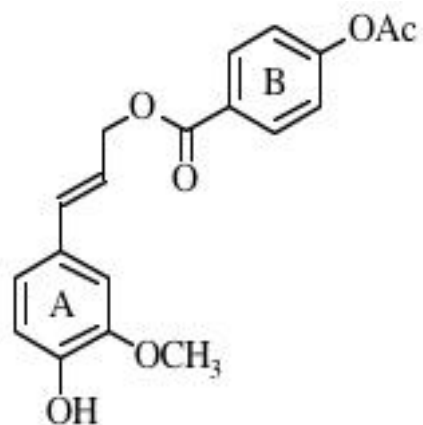
Atom	H Shifts	Mult	J
Ac Me	2.28	s	
OMe	3.85	s	
γ	4.95	dd	6.4, 1.3
Bα	5.10	s	
β	6.38	dt	15.9, 6.4
α	6.74	d	15.9
A5,6	6.97	m	
A2	7.16	bs	
C3,5	7.26	d	8.7
B3,4,5	7.31-7.41	m	
B2,6	7.47	bd	7.4
C2,6	8.09	d	8.7

**Notes:**

L.Landucci XXIII-129B 57mg  
HSQC and HMBC in acetone d-6

Compound Number 255

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.98	32		
OMe			56.24	28		
γ			66.47	28		
A2			110.24	23		
A5			115.83	22		
A6			121.33	47		
β			121.33	47		
B3			122.90	62		
B5			122.90	62		
B1			128.70	9		
A1			129.35	10		
B2			131.73	62		
B6			131.73	62		
α			135.40	26		
A4			147.91	11		
A3			148.55	6		
B4			155.68	9		
Bα			165.90	8		
Ac C=O			169.29	11		

<sup>1</sup>H (acetone)

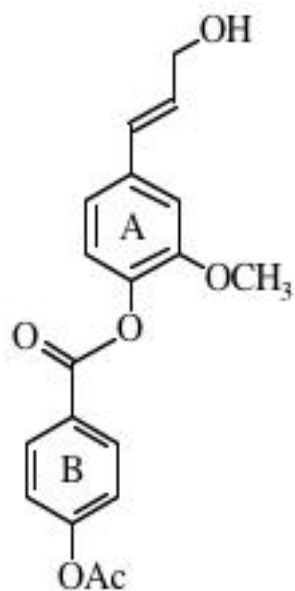
Atom	H Shifts	Mult	J
Ac Me	2.28	s	
OMe	3.86	s	
γ	4.94	dd	6.6, 1.2
β	6.33	dt	16.0, 6.6
α	6.72	d	16.0
A5	6.79	d	8.3
A6	6.93	dd	8.3, 2.1
A2	7.14	d	2.1
B3,5	7.27	d	8.9
B2,6	8.09	d	8.9

**Notes:**

L.Landucci XXIII-114D2 8mg  
HSQC and HMBC in acetone d-6

Compound Number 256

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.99	35		
OMe			56.22	39		
γ			63.10	29		
A2			111.04	37		
A6			119.58	36		
B3			123.15	76		
B5			123.15	76		
A5			123.81	38		
B1			127.80	16		
α			129.30	36		
β			131.61	37		
B2			132.32	73		
B6			132.32	73		
A1			137.50	17		
A4			140.16	11		
A3			152.44	16		
B4			156.10	13		
Bα			164.29	8		
Ac C=O			169.30	13		

<sup>1</sup>H (acetone)

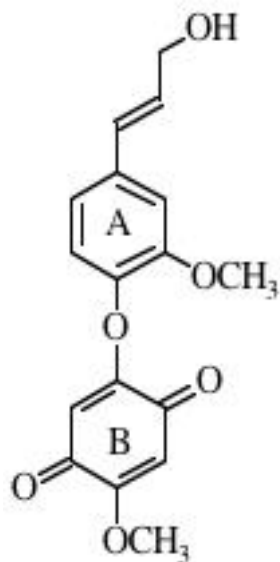
Atom	H Shifts	Mult	J
Ac Me	2.31	s	
OMe	3.84	s	
OH	3.90	t	
γ	4.25	dt	5.2, 1.4
β	6.43	dt	15.9, 5.2
α	6.64	d	15.9
A6	7.05	dd	8.3, 1.9
A5	7.15	d	8.3
A2	7.23	d	1.9
B3,5	7.34	d	8.9
B2,6	8.20	d	8.9

**Notes:**

L.Landucci XXIII-114D1 4mg  
HSQC and HMBC in acetone d-6

Compound Number 257

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A OMe			56.27	26		
B OMe			57.07	27		
γ			62.98	26		
B2			106.32	28		
B5			108.77	26		
A2			111.75	24		
A6			120.19	27		
A5			122.94	27		
α			128.91	24		
β			132.31	26		
A1			138.15	13		
A4			140.96	6		
A3			151.65	9		
B6			159.23	6		
B3			160.39	9		
B4			181.63	9		
B1			182.05	7		

<sup>1</sup>H (acetone)

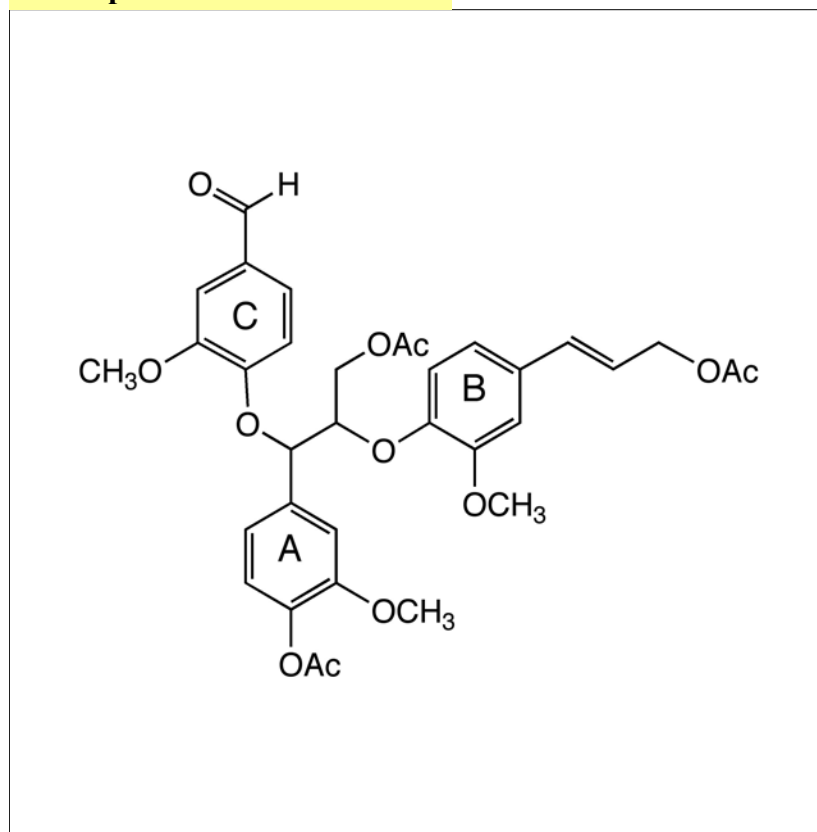
Atom	H Shifts	Mult	J
A OMe	3.85	s	
B OMe	3.86	s	
γ	4.24	bs	
B2	5.40	s	
B5	6.02	s	
β	6.44	dt	15.9, 5.0
α	6.63	dt	16.1, 1.7
A5,6	7.09	m	
A2	7.27	bs	

**Notes:**

L.Landucci XXIII-93CC 17mg  
HSQC and HMBC in acetone d-6

Compound Number 258

<sup>13</sup>C



Vanillin-a-G-b-CA

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.74	32	20.46	29		
γAc Me	20.82	31	20.62	27		
BγAc Me	21.10	19	20.80	22		
OMe	55.84	28	56.24	36		
OMe	56.09	38	56.29	31		
OMe	56.13	42	56.51	31		
γ	63.12	23	63.32	26		
Bγ	65.17	25	65.38	29		
α	79.98	23	80.55	26		
β	82.11	23	81.82	27		
B2	109.93	24	111.36	51		
C2	110.29	24	111.36	51		
A2	111.14	23	112.68	26		
C5	114.77	21	115.94	27		
B5	119.31	22	119.62	26		
A6	119.46	26	120.33	27		
B6	119.93	24	120.53	28		
Bβ	122.39	22	123.35	27		
A5	122.94	25	123.53	27		
C6	126.32	22	126.04	26		
C1	130.99	14	132.08	14		
B1	132.03	13	132.61	14		
Bα	133.93	21	134.20	25		
A1	136.05	16	136.78	17		
A4	139.89	12	140.85	11		
B4	147.31	12	148.54	12		
C3	150.68	13	151.58	12		
A3	151.13	11	152.02	12		
B3	151.43	12	152.28	12		
C4	152.81	11	153.36	12		
A4 Ac C=O	168.86	11	168.87	11		
γAc C=O	170.82	12	170.77	18		
γAc C=O	170.95	10	170.77	18		
Cα	190.96	25	191.26	30		

<sup>1</sup>H (acetone)

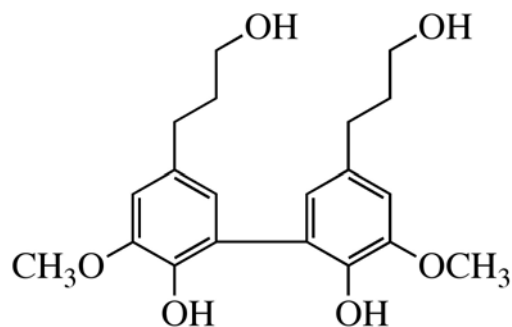
Atom	H Shifts	Mult	J
Ac Me's	1.91, 2.03, 2.07	s's	
OMe	3.81	s	
OMe	3.83	s	
OMe	3.97	s	
γ1	4.45	dd	11.9, 4.0
γ2	4.56	dd	11.9, 5.8
Bγ	4.67	dd	6.4, 1.2
β	4.91	m	
α	5.84	d	5.2
Bβ	6.27	dt	15.9, 6.4
Bα	6.63	d	15.9
B6	6.93	dd	8.2, 1.6
B5	7.01	d	8.3
A5	7.03	d	8.2
A6	7.14	dd	8.2, 1.8
B2	7.15	d	2.0
C5	7.15	d	8.3
A2	7.36	d	2.4
C6	7.39	dd	8.2, 1.8
C2	7.46	d	1.8
Cα	9.81	s	

**Notes:**

SRIX-116E 3mg  
gHSQC and gHMBC in acetone  
proton CS's for A6,C5 and A2 determined by simulation (Acorn MacNuts)

Compound Number 259

<sup>13</sup>C



dihydrodiconiferyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	31.94	37	32.53	33	31.34	34
β	34.45	35	35.75	31	34.59	39
OMe	56.20	52	56.42	45	55.85	63
γ	62.38	34	61.85	22	60.24	48
2	110.71	32	111.75	31	110.77	28
6	123.04	40	123.94	32	122.73	32
5	124.52	13	126.47	11	125.89	18
1	133.76	16	134.15	19	132.26	30
4	140.83	17	142.49	13	141.36	24
3	147.33	18	148.64	14	147.61	20

<sup>1</sup>H (acetone)

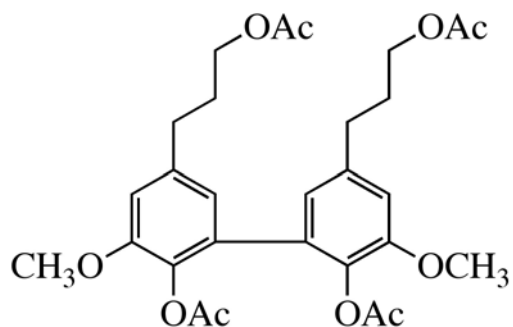
Atom	H Shifts	Mult	J
β	1.81	m	
α	2.64	m	
γ	3.58	t	
OMe	3.85	s	6.6
6	6.72	d	2.1
2	6.82	d	2.0

**Notes:**

L.Landucci  
 XXIII-52H 25 mg  
 As this dimer contains a plane of symmetry the CSs are reported for one unit.

Compound Number 260

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.39	32	20.46	44	19.99	11
Ac Me	20.91	27	20.78	37	20.56	12
α	30.30	19	30.99	28	29.58	8
β	32.15	19	32.61	33	31.32	7
OMe	56.02	34	56.34	44	55.79	10
γ	63.72	21	64.04	30	63.10	9
2	111.95	13	112.93	21	112.16	4
6	122.27	15	122.80	19	121.46	4
5	131.36	8	132.20	9	130.51	4
4	135.76	7	136.81	8	135.09	4
1	139.28	10	140.33	12	139.20	4
3	151.13	11	152.37	14	150.82	5
4 Ac C=O	168.76	8	168.76	12	167.98	4
γ Ac C=O	171.08	9	171.00	11	170.25	5

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	1.97	m	
Ac Me	1.98	s	
Ac Me	2.01	s	
α	2.70	bt	8.0
OMe	3.83	s	
γ	4.07	t	6.4
6	6.66	d	1.8
2	6.99	d	1.8

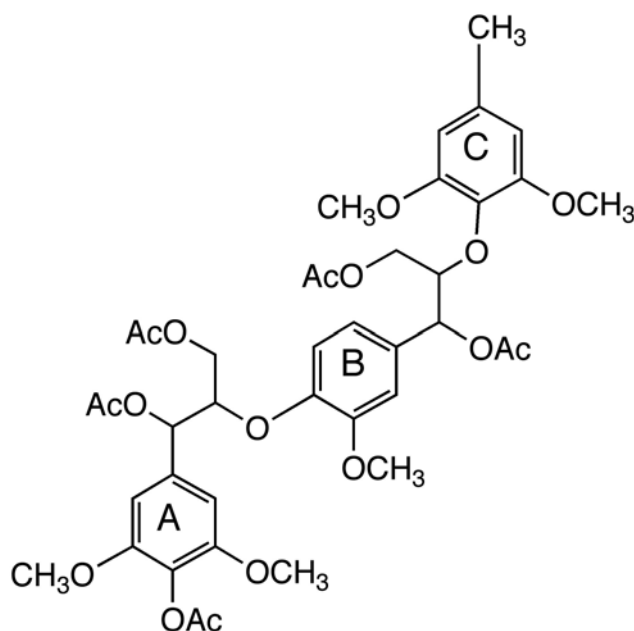
**Notes:**

L.Landucci

XXIII-146ACH

As this dimer contains a plane of symmetry the CS's are reported for one unit.





S-b(t)-G-b(e)-S5

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.88	s	
γ Ac Me	1.97	s	
α Ac Me	2.01	d	
αAc Me	2.12	d	
A4 Ac Me	2.21	s	
Cα	2.27	s	
OMe's	3.77, 3.80, 3.84	s's	
Aγ 1	4.05	dd	11.9, 5.4
Bγ 1	4.13	dd	11.5, 3.2
Aγ 2	4.26	m	
Bγ 2	4.39	m	
Bβ	4.65	m	
Aβ	4.81	m	
Bα	6.01	d	4.2
Aα	6.08	d	6.6
C 2,6	6.48	s	
A 2,6	6.85	s	
B6	6.90	m	
B5	7.02	d	8.3
B2	7.06	m	

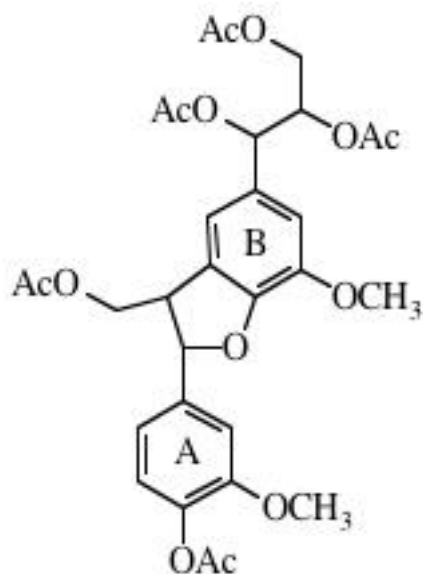
**Notes:**

S.Ralph  
 SRIX-115BAc 30 mg CS's indicate A-threo-B-erythro-C  
 gHSQC and gHMBC in acetone, some signals split due to isomers

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.48	32	20.24	46	20.05	27
γ Ac Me	20.75	26	20.64	81	20.35	38
γ Ac Me	20.84	35	20.64	81	20.35	38
α Ac Me	21.08	26	20.96	68	20.62	37
αAc Me	21.14	29	20.96	68	20.62	37
Cα	21.90	31	21.77	51	21.35	24
OMe	55.97	70	56.28	125	55.61	66
OMe	55.97	70	56.28	125	55.61	66
OMe	55.97	70	56.28	125	55.61	66
OMe	56.28	61	56.28	125	55.98	38
OMe	56.28	61	56.55	84	55.98	38
Bγ	62.82	15	63.35	26	62.12	15
Aγ	63.09	15	63.63	19	62.46	12
Bα	74.33	19	75.22	27	73.76	14
Aα	74.48	18	75.68	27	74.59	10
Aβ	80.20	18	80.65	15	78.96	10
Bβ	80.84	21	81.16	33	79.94	16
A2	104.16	30	104.97	46	103.97	23
A6	104.16	30	104.97	46	103.97	23
C2	106.09	50	106.92	88	105.87	41
C6	106.09	50	106.92	88	105.87	41
B2	111.59	10	112.49	16	110.87	9
B5	118.00	16	118.39	13	116.75	7
B6	119.52	18	120.29	16	118.89	10
A4	128.90	9	129.69	12	127.84	9
B1	132.33	8	132.98	10	131.07	6
C4	132.90	10	134.16	13	132.16	8
C1	134.14	15	134.48	20	133.32	14
A1	134.78	15	136.15	19	134.92	12
B4	147.69	8	148.70	14	147.19	8
B3	150.46	8	151.38	14	149.68	8
A3	152.26	28	153.20	35	151.58	22
A5	152.26	28	153.20	35	151.58	22
C3	152.98	35	153.88	48	152.34	29
C5	152.98	35	153.88	48	152.34	29
A4 Ac C=O	168.52	14	168.45	18	167.91	11
α Ac C=O	169.75	16	169.96	27	169.26	17
αAc C=O	169.79	12	170.01	27	169.33	17
γ Ac C=O	170.62	14	170.70	32	169.94	25
γ Ac C=O	170.91	14	170.70	32	169.94	25

Compound Number 262

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.76	82	20.47	67		
Ac Me	20.76	82	20.56	56		
Ac Me	20.76	82	20.73	60		
Ac Me	20.85	68	20.73	64		
A4 Ac Me	21.07	46	20.89	49		
Aβ	50.64	23	51.45	43		
A OMe	56.02	42	56.29	62		
B OMe	56.26	38	56.59	52		
Bγ	62.36	23	63.00	38		
Aγ	64.98	13	65.79	19		
Bβ	72.47	22	73.27	36		
Bα	73.95	17	74.55	17		
Aα	88.20	22	88.40	27		
A2	110.13	21	111.11	28		
B2	111.74	13	113.19	20		
B6	115.87	13	116.84	20		
A6	118.40	19	118.78	27		
A5	122.97	31	123.80	54		
B5	127.58	14	128.83	13		
B1	129.80	14	131.06	14		
A1	139.29	11	140.82	14		
A4	139.84	10	140.92	15		
B3	144.61	10	145.31	9		
B4	148.54	7	149.38	7		
A3	151.39	15	152.46	21		
A4 Ac C=O	168.96	15	168.96	24		
Bα Ac C=O	169.87	14	170.01	17		
Bβ Ac C=O	170.10	15	170.26	17		
Bγ Ac C=O	170.45	15	170.63	20		
Aγ Ac C=O	170.75	18	170.95	23		

<sup>1</sup>H (acetone)

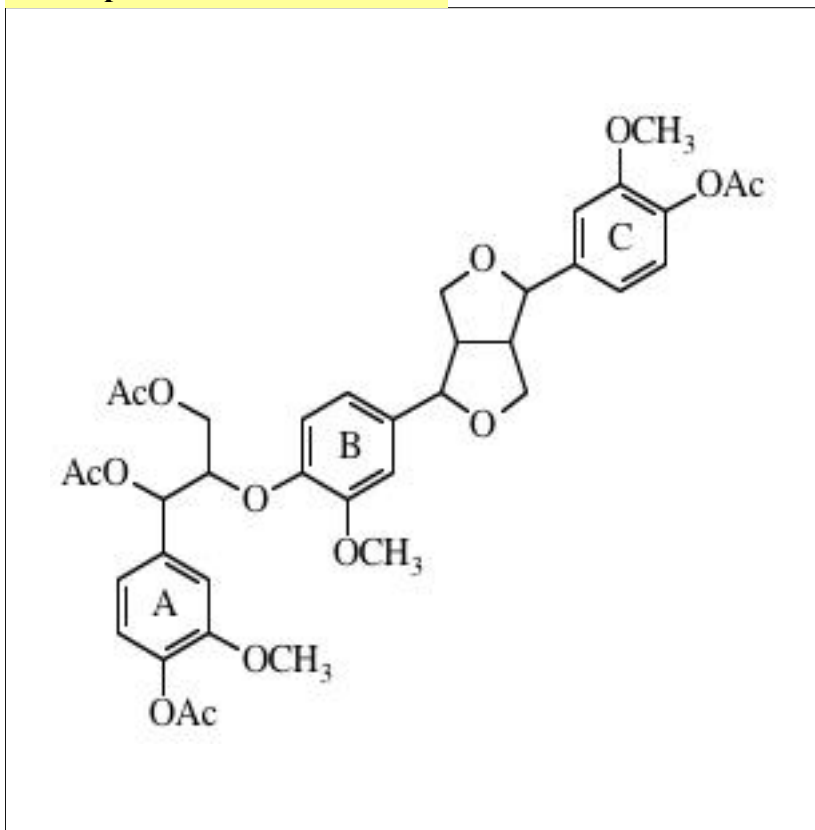
Atom	H Shifts	Mult	J
Ac Me	1.98	m	
Ac Me	2.00	m	
Ac Me	2.03	s	
Ac Me	2.04	s	
A4 Ac Me	2.21	s	
Aβ	3.78	m	
A OMe	3.79	s	
B γ1	3.82	m	
B OMe	3.87	s	
B γ2	4.17	m	
Aγ	4.38	m	
Bβ	5.38	m	
Aα	5.61	d	6.8
Bα	5.92	dd	7.2, 2.8
B2,6,A6	6.99	m	
A5	7.04	d	8.2
A2	7.18	bs	

**Notes:**

SRVII-91D 8mg HSQC and HMBC in acetone and CDCl<sub>3</sub>  
 A1 and A4 tentative assignments, some signals split due to isomers

Compound Number 263

<sup>13</sup>C



<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
C4 Ac Me			20.48	71		
A4 Ac Me			20.48	71		
Aα Ac Me			20.63	29		
Aγ Ac Me			20.89	17		
Bβ			55.27	23		
Cβ			55.41	23		
OMe			56.21	41		
OMe			56.26	38		
OMe			56.28	19		
Aγ			63.03	14		
Bγ			72.50	40		
Cγ			72.62	40		
Aα			74.54	13		
Aβ			80.31	15		
Bα			86.17	42		
Cα			86.17	42		
C2			111.08	32		
B2			111.58	18		
A2			112.74	16		
C6			118.61	16		
B5			119.03	17		
B6			119.42	10		
A6			120.48	10		
A5			123.33	14		
C5			123.47	14		
A1			136.69	12		
B1			136.69	12		
C4			140.12	13		
A4			141.08	14		
C1			141.88	15		
B4			147.48	7		
B3			151.88	7		
C3			152.27	21		
A3			152.27	21		
A4 Ac C=O			168.92	14		
C4 Ac C=O			169.05	20		
Aα Ac C=O			169.91	7		
Aγ Ac C=O			170.77	7		
<i>threo</i> isomer						
Aγ			63.58			
Aα			75.33			
Aβ			80.74			

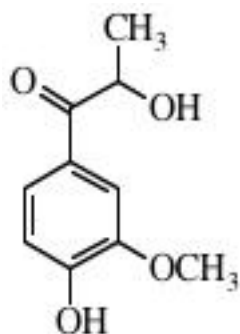
**Notes:**

SRVII-143D 13 mg

*Erythro* isomer shifts reported

sample contains small amt of 5,5 resinol tetramer.

Compound Number 264

<sup>13</sup>C

alpha,4-dihydroxy-3-methoxypropiophenone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	22.91	48	22.69	58	21.17	37
OMe	56.19	50	56.33	68	55.57	36
β	68.89	46	69.42	50	68.10	30
2	110.64	47	112.20	56	111.74	23
5	114.30	48	115.60	68	114.89	34
6	124.08	49	124.65	75	123.51	35
1	125.91	15	127.08	17	126.15	20
3	147.10	15	148.48	18	147.48	21
4	151.41	19	152.84	24	151.73	25
α	200.75	16	201.10	18	199.72	20

<sup>1</sup>H (acetone)

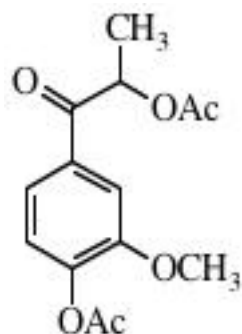
Atom	H Shifts	Mult	J
γ	1.35	d	6.8
OMe	3.91	s	
β-OH	4.10	d	6.4
β	5.13	m	
5	6.94	d	8.2
2	7.57	d	2.0
6	7.60	dd	8.2, 2.0
4-OH	8.61	bs	
<u>CDCl<sub>3</sub></u>			
γ	1.46	d	6.6
OMe	3.96	s	
β	5.13	m	
4-OH	6.61	bs	
5	6.98	d	8.2
6	7.48	dd	8.2, 2.0
2	7.54	d	2.0

**Notes:**

FPL - Pearl collection  
 25 mg  
 HSQC and HMBC in acetone

Compound Number 265

<sup>13</sup>C



alpha,4-diacetoxy-3-methoxypropiophenone

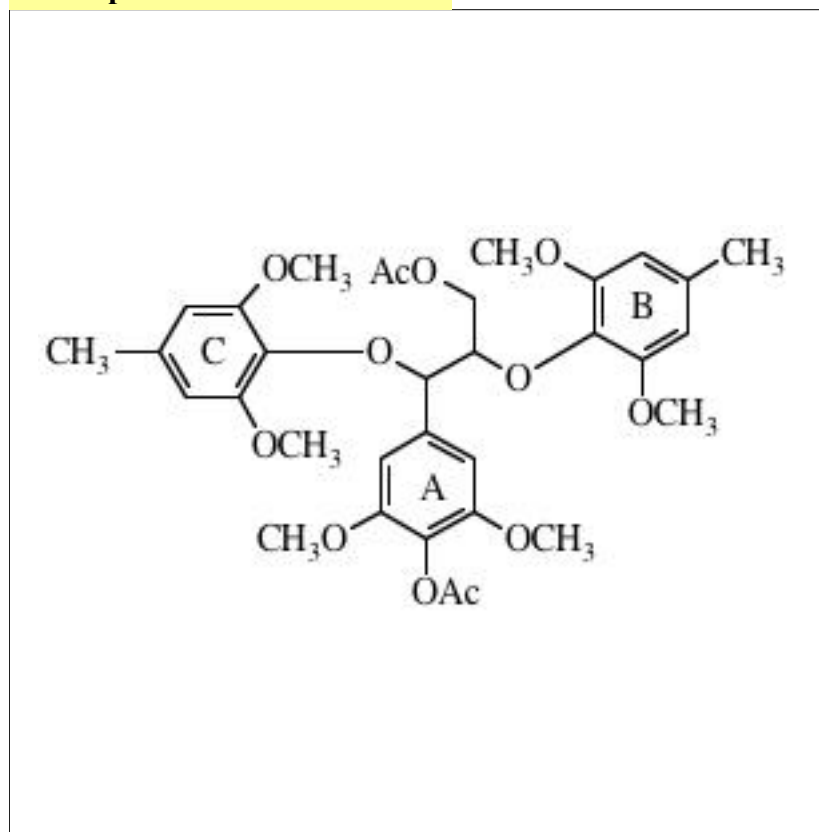
Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	17.16	63	17.41	76	16.90	26
β Ac Me	20.56	55	20.47	61	20.26	49
4 Ac Me	20.66	57	20.54	62	20.26	49
OMe	56.02	67	56.46	82	55.94	27
β	71.23	61	72.21	69	71.26	23
2	112.09	62	112.79	71	111.85	21
6	121.55	66	122.34	73	121.56	22
5	122.97	66	124.10	76	123.32	23
1	133.03	25	134.07	23	132.46	14
4	144.22	19	145.25	17	143.69	12
3	151.66	24	152.72	21	151.23	14
4 Ac C=O	168.31	22	168.62	22	168.02	11
β Ac C=O	170.32	23	170.54	22	169.74	13
α	195.65	23	196.21	24	195.52	13

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	1.48	d	7.0
β Ac Me	2.06	s	
4 Ac Me	2.27	s	
OMe	3.90	s	
β	6.00	q	7.0
5	7.23	d	8.0
2	7.64	O/Lap	
6	7.66	O/Lap	
<u>CDCl<sub>3</sub></u>			
γ	1.53	d	7.0
β Ac Me	2.14	s	
4 Ac Me	2.33	s	
OMe	3.89	s	
β	3.93	q	7.0
5	7.14	dd	8.1
6	7.55	dd	8.1, 2.0
2	7.59	d	2.0

**Notes:**

FPL - Pearl Collection  
25 mg  
HSQC and HMBC in acetone

**Compound Number 266**
<sup>13</sup>C

**S-a-S-b-S**
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.83 (1.95)	s	
A4 Ac Me	2.17 (2.30)	s	
C α	2.18 (2.24)	s	
B α	2.22 (2.23)	s	
B OMe	3.69 (3.58)	s	
A/C OMe	3.73 (3.67)	s	
C/A OMe	3.74 (3.71)	s	
γ1	4.53 (4.64)	dd	11.7, 2.8
γ2	4.63 (4.72)	m	
β	4.73 (4.72)	m	
α	5.72 (5.60)	d	6.2
C 2,6	6.37 (6.26)	s	
B 2,6	6.40 (6.25)	s	
A 2,6	6.81 (6.76)	s	

**Notes:**

SRIX-138A2

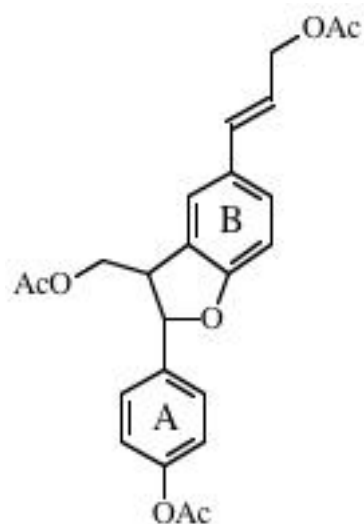
3mg 1H CDCl3 shifts in ( )s

HSQC and HMBC in acetone. A and C OMe shifts may be switched, B and C CH3's may be switchd

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.56	34	20.27	37	20.05	13
γ Ac Me	20.87	36	20.69	29	20.30	13
B α	21.76	35	21.61	31	21.18	12
C α	21.82	42	21.68	30	21.25	13
B OMe	55.87	79	56.27	86	55.46	25
B OMe	55.87	79	56.27	86	55.46	25
A OMe	55.96	93	56.35	94	55.62	32
A OMe	55.96	93	56.35	94	55.62	32
C OMe	56.12	86	56.39	90	55.67	29
C OMe	56.12	86	56.39	90	55.67	29
γ	64.44	30	64.64	33	62.98	8
β	81.52	31	82.68	36	80.92	9
α	81.89	34	83.16	37	81.36	8
A2	105.52	65	105.94	69	104.49	17
A6	105.52	65	105.94	69	104.49	17
B2	105.81	69	107.01	72	105.74	20
B6	105.81	69	107.01	72	105.74	20
C2	106.22	67	107.26	69	106.08	18
C6	106.22	67	107.26	69	106.08	18
A4	128.10	8	129.11	7	127.23	5
C1	133.01	20	133.61	19	132.21	6
B1	133.48	27	133.87	15	132.47	8
C4	133.48	27	134.38	10	132.72	10
B4	133.62	18	135.03	8	132.75	10
A1	138.02	20	138.47	20	136.90	7
A3	150.94	35	152.21	27	150.59	15
A5	150.94	35	152.21	27	150.59	15
C3	152.47	33	153.62	30	151.95	16
C5	152.47	33	153.62	30	151.95	16
B3	152.87	34	153.87	30	152.22	16
B5	152.87	34	153.87	30	152.22	16
A4 Ac C=O	168.75	18	168.52	13	167.91	7
γ Ac C=O	168.75	16	170.78	16	167.91	8

Compound Number 267

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.89	40	20.67	29		
Ac Me	21.11	34	20.81	23		
Ac Me	21.19	58	20.94	41		
β	50.26	40	51.06	30		
B <sub>γ</sub>	65.35	42	65.51	33		
A <sub>γ</sub>	65.68	40	66.10	31		
α	87.22	40	87.85	32		
B3	109.86	40	110.20	29		
Bβ	121.03	41	122.13	33		
A3	121.98	94	122.88	58		
A5	121.98	94	122.88	58		
B6	122.89	38	123.88	30		
A2	126.89	88	127.70	55		
A6	126.89	88	127.70	55		
B5	126.49	23	127.98	14		
B2	128.55	42	129.19	29		
B1	129.87	21	130.82	14		
Bα	134.16	38	134.43	30		
A1	138.63	19	139.84	12		
A4	150.64	15	151.77	12		
B4	159.85	14	160.77	10		
A4 C=O	169.44	17	169.62	13		
B <sub>γ</sub> C=O	170.96	12	170.77	8		
A <sub>γ</sub> C=O	170.84	20	170.94	13		

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00 (2.07)	s	
Ac Me	2.01 (2.10)	s	
Ac Me	2.24(2.30)	s	
β	3.74 (3.70)	m	
γ1	4.34 (4.29)	dd	11.1, 7.8
γ2	4.46 (4.46)	dd	11.1, 5.4
B <sub>γ</sub>	4.66 (4.71)	dd	6.4, 1.4
α	5.64 (5.54)	d	6.4
Bβ	6.23 (6.14)	dt	15.9, 6.4
Bα	6.66 (6.61)	d	15.9
B3	6.85 (6.85)	d	8.3
A 3,5	7.13 (7.09)	d	8.5
B2	7.33 (7.27)	dd	8.3, 2.0
A 2,6	7.45 (7.27)	d	8.5
B6	7.45 (7.37)		

**Notes:**

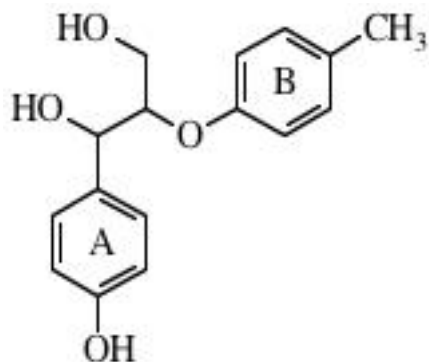
LLL XXV-17A-E 11mg

<sup>1</sup>H CDCl<sub>3</sub> shifts in ( )s

Note: B5 and B<sub>γ</sub> C=O move in CDCl<sub>3</sub> to lower ppm relative to acetone shifts

HSQC and HMBC run in Acetone

Compound Number 268

<sup>13</sup>C*erythro*

H-b-H5e

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bα	20.58	58	20.45	28	20.07	43
γ	61.32	34	61.90	22	60.07	26
α	73.89	35	73.81	20	71.36	26
β	82.25	40	84.15	27	83.58	27
A3	115.52	83	115.50	64	114.46	64
A5	115.52	83	115.50	64	114.46	64
B3	116.79	90	117.33	49	116.22	64
B5	116.79	90	117.33	49	116.22	64
A2	127.71	81	128.89	80	128.01	58
A6	127.71	81	128.89	80	128.01	58
B2	130.18	98	130.44	60	129.52	68
B6	130.18	98	130.44	60	129.52	68
B1	131.41	27	130.61	14	129.03	26
A1	132.13	27	133.98	11	132.76	22
A4	155.78	28	157.43	13	156.25	30
B4	155.53	23	157.65	8	156.67	20

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Bα	2.19	s	
γ1	3.77	dd	11.7, 4.4
γ2	3.85	dd	11.7, 5.2
β	4.34	m	
α	4.89	d	5.6
A,B 3,5	6.78		
B 2,6	6.99		8.5
A 2,6	7.28		8.5
CDCl <sub>3</sub>			
Bα	2.25	s	
γ1	3.80	dd	11.9, 4.0
γ2	3.90	dd	11.9, 4.4
β	4.28	m	
α	4.98	d	5.2
A,B 3,5	6.74		
A 2,6	7.02	d	8.3
B 2,6	7.20	d	8.3

**Notes:**

S. Ralph SRIX-62

24mg, 70% erythro

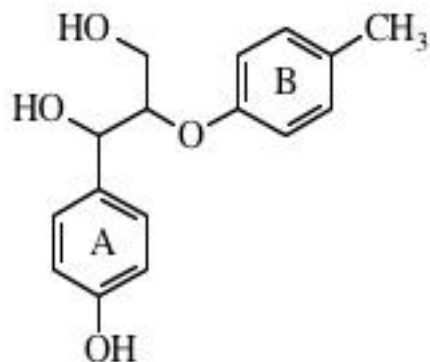
A4 and B4 switch in CDCl<sub>3</sub>, B1 falls between A and B 2,6 in DMSO

HSQC and HMBC in all solvents



Compound Number 269

<sup>13</sup>C



*threo*

H-b-H5t

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B $\alpha$	2.21	s	
$\gamma$ 1	3.48	dd	11.5, 5.4
$\gamma$ 2	3.78	dd	11.5, 4.2
$\beta$	4.35	m	
$\alpha$	4.94	d	5.2
A 3,5	6.78		
B 3,5	6.87		
B 2,6	7.02		
A 2,6	7.27		
<u>CDCI3</u>			
B $\alpha$	2.25	s	
$\gamma$ 1	3.46	dd	12.1, 3.8
$\gamma$ 2	3.73	dd	12.1, 4.0
$\beta$	4.28	m	
$\alpha$	4.91	d	6.8
A 3,5	6.72		
B 3,5	6.84		
A 2,6	7.01		
B 2,6	7.18		

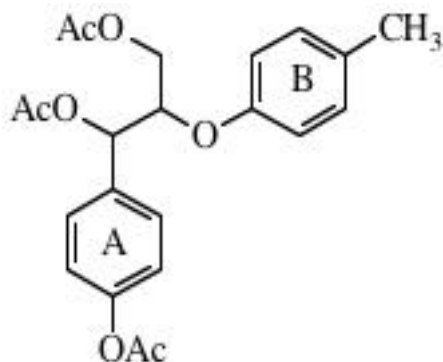
**Notes:**

SRIX-62 20mg  
 75% threo, HSQC and HMBC in DMSO  
 B1 falls between A and B 2,6 in DMSO  
 A4 and B4 may be switched in CDCl3

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B $\alpha$	20.53	44	20.46	28	20.05	45
$\gamma$	60.95	27	61.54	24	59.99	18
$\alpha$	73.64	26	73.15	19	70.79	25
$\beta$	83.32	28	84.43	25	83.41	27
A3	115.61	68	115.52	63	114.45	62
A5	115.61	68	115.52	63	114.45	62
B3	116.64	79	117.15	47	115.96	71
B5	116.64	79	117.15	47	115.96	71
A2	128.38	66	128.87	75	127.68	63
A6	128.38	66	128.87	75	127.68	63
B2	130.19	87	130.47	61	129.55	74
B6	130.19	87	130.47	61	129.55	74
B1	131.17	20	130.56	16	128.99	28
A1	131.42	25	133.58	13	132.50	19
A4	155.95	20	157.51	15	156.22	24
B4	156.21	26	159.00	10	156.95	20

Compound Number 270

<sup>13</sup>C



*erythro*

H-b-H5c

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B $\alpha$	20.31	64	20.49	46	20.04	42
A $\gamma$ Ac Me	20.50	52	20.58	41	20.40	42
A $\alpha$ Ac Me	20.77	67	20.86	41	20.63	42
A4 Ac Me	20.88	74	20.94	52	20.77	48
$\gamma$	62.15	49	62.86	36	61.77	21
$\alpha$	73.33	50	74.12	34	72.74	24
$\beta$	78.69	53	79.27	52	77.41	23
B3	116.76	103	117.56	68	116.37	61
B5	116.76	103	117.56	68	116.37	61
A3	121.44	110	122.49	74	121.66	52
A5	121.44	110	122.49	74	121.66	52
A2	128.30	133	129.31	92	128.31	54
A6	128.30	133	129.31	92	128.31	54
B2	129.88	148	130.74	107	130.33	71
B6	129.88	148	130.74	107	130.33	71
B1	131.39	25	131.85	12	130.51	21
A1	133.83	30	135.33	18	134.09	24
A4	150.54	23	151.79	12	150.23	19
B4	155.77	22	157.04	12	155.46	19
A4 Ac C=O	168.99	22	169.53	16	169.05	19
$\alpha$ Ac C=O	169.31	22	169.86	11	169.21	19
$\gamma$ Ac C=O	170.48	20	170.76	11	170.04	18

<sup>1</sup>H (acetone)

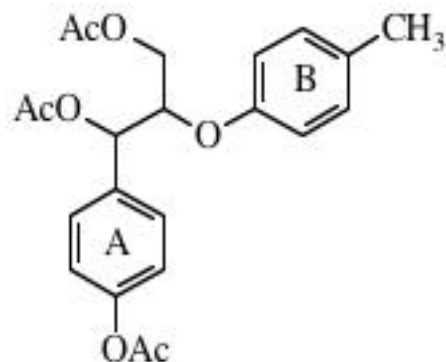
Atom	H Shifts	Mult	J
A $\gamma$ Ac Me	1.94 (2.02)	s	
A $\alpha$ Ac Me	2.06 (2.09)	s	
B $\alpha$	2.23 (2.28)	s	
A4 Ac Me	2.23 (2.28)	s	
$\gamma$ 1	4.23 (4.20)	dd	11.9, 4.2
$\gamma$ 2	4.34 (4.37)	dd	11.9, 6.0
$\beta$	4.83 (4.66)	m	
$\alpha$	6.04 (6.04)	d	5.4
B 3,5	6.85 (6.77)	m	
B 2,6	7.08 (7.07)	m	
A 3,5	7.08 (7.07)	m	
A 2,6	7.51 (7.42)	d	8.7

**Notes:**

SRIX-62 25mg  
<sup>1</sup>H CDCl<sub>3</sub> shifts in ( )s  
 70% erythro  
 HSQC and HMBC in acetone

Compound Number 271

<sup>13</sup>C



*threo*

H-b-H5t

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B $\alpha$	20.49	65	20.49	59	20.03	
A $\gamma$ Ac Me	20.64	54	20.55	54	20.39	
A $\alpha$ Ac Me	20.97	65	20.88	57	20.64	
A4 Ac Me	21.08	75	20.94	72	20.77	
$\gamma$	62.68	56	63.27	53	62.23	
$\alpha$	73.94	55	74.88	55	73.77	
$\beta$	78.49	64	79.27	76	77.74	
B3	116.48	124	117.24	104	116.09	
B5	116.48	124	117.24	104	116.09	
A3	121.78	118	122.67	109	121.81	
A5	121.78	118	122.67	109	121.81	
A2	128.47	141	129.33	124	128.37	
A6	128.47	141	129.33	124	128.37	
B2	130.04	154	130.74	137	129.81	
B6	130.04	154	130.74	137	129.81	
B1	131.37	29	131.66	22	130.33	
A1	133.81	33	135.22	25	134.04	
A4	150.84	28	151.94	21	150.36	
B4	156.33	24	157.59	20	156.12	
A4 Ac C=O	169.15	21	169.52	21	169.04	
$\alpha$ Ac C=O	169.73	24	170.04	19	169.41	
$\gamma$ Ac C=O	170.57	24	170.68	17	169.98	

<sup>1</sup>H (acetone)

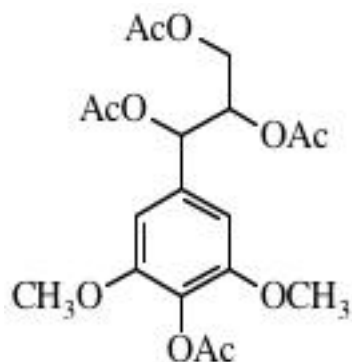
Atom	H Shifts	Mult	J
A $\gamma$ Ac Me	1.94 (1.98)	s	
A $\alpha$ Ac Me	2.01 (2.05)	s	
B $\alpha$	2.24 (2.28)	s	
A4 Ac Me	2.24 (2.28)	s	
$\gamma$ 1	4.01 (4.00)	dd	11.9, 5.8
$\gamma$ 2	4.23 (4.26)	dd	11.9, 4.2
$\beta$	4.83 (4.64)	m	
$\alpha$	6.10 (6.09)	d	6.4
B 3,5	6.90 (6.85)		
B 2,6	7.10 (7.07)		
A 3,5	7.10 (7.07)		
A 2,6	7.51 (7.42)	d	8.5

**Notes:**

SRIX-62 25mg  
75% threo  
1H CDCl<sub>3</sub> shifts in ( )s

Compound Number 272

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.48	82	20.23	94	20.08	33
γ Ac Me	20.72	56	20.55	73	20.39	31
β Ac Me	20.85	74	20.71	80	20.46	29
α Ac Me	21.01	71	20.83	81	20.65	33
OMe	56.31	166	56.58	179	56.03	62
OMe	56.31	166	56.58	179	56.03	62
γ	62.17	45	62.85	65	61.92	14
β	72.24	46	72.99	73	71.73	16
α	73.78	47	74.45	60	73.17	16
2	104.05	97	104.76	125	103.59	33
6	104.05	97	104.76	125	103.59	33
4	129.13	9	129.79	8	127.83	8
1	134.19	30	135.85	28	134.79	15
3	152.45	45	153.30	48	151.64	29
5	152.45	45	153.30	48	151.64	29
A4 Ac C=O	168.51	20	168.42	22	167.93	13
α Ac C=O	169.67	22	170.00	23	169.43	23
β Ac C=O	170.09	24	170.21	22	169.43	23
γ Ac C=O	170.43	19	170.65	21	169.95	11
minor isomer						
γ	61.42		62.34			
β	72.48		72.99			
α	73.03		73.76			
2, 6	103.75		104.67			
1	134.19		135.63			
3, 5	152.27		153.19			

<sup>1</sup>H (acetone)

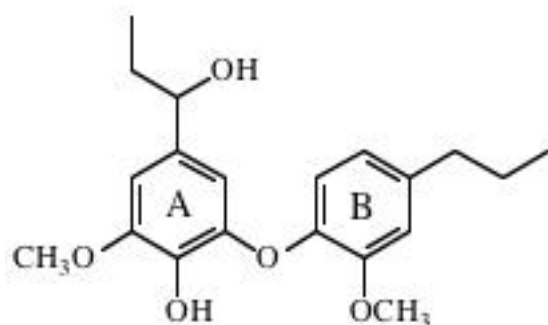
Atom	H Shifts	Mult	J
γ Ac Me	1.99	s	
β Ac Me	2.01	s	
α Ac Me	2.08	s	
A4 Ac Me	2.21	s	
OMe	3.81	s	
γ1	3.91	dd	12.1, 6.2
γ2	4.23	dd	12.1, 3.8
β	5.41	m	
α	5.95	d	6.8
2,6	6.80	s	
<u>CDCl<sub>3</sub></u>			
γ Ac Me	2.06	s	
β Ac Me	2.08	s	
α Ac Me	2.10	s	
A4 Ac Me	2.33	s	
OMe	3.83	s	
γ1	3.83		hidden
γ2	4.26	dd	12.1, 3.6
β	5.42	m	
α	5.92	d	7.6
2,6	6.61	s	

**Notes:**

L. Landucci XXII-138D7 19mg  
2:1 mix of isomers

Compound Number 273

<sup>13</sup>C



G-5-O-4-G

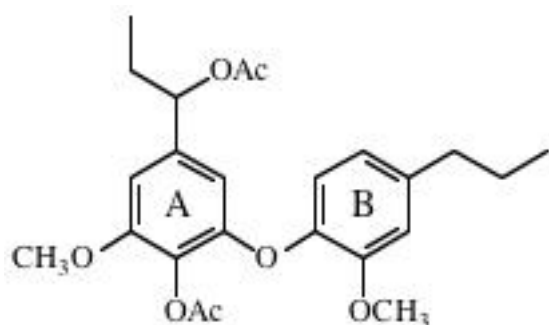
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A $\gamma$	0.83	t	J = 7.3
B $\gamma$	0.93	t	J = 7.3
A $\beta$ ,B $\beta$	1.62	m	
B $\alpha$	2.56	bt	J = 7.6
OMe	3.81	s	
OMe	3.86	s	
A $\alpha$	4.39	bt	J = 6.1
A6	6.45	d	J = 1.5
B6	6.70	dd	J = 8.1, 1.5
B5	6.75	d	J = 8.1
A2	6.76	d	J = 1.5
B2	6.94	d	J = 1.5
A4-OH	7.39	s	

**Notes:**

FPL Collection 11mg  
 Both A5 and A1 change order in CDCl<sub>3</sub> compared to acetone-d<sub>6</sub>  
 B4 and A4 assignments taken from 2D in CDCl<sub>3</sub>  
 gHSQC and gHMBC in all solvents

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A $\gamma$	10.16	38	10.48	51	10.06	40
B $\gamma$	13.85	47	14.05	49	13.68	40
B $\beta$	24.61	37	25.41	47	24.15	39
A $\beta$	31.83	34	33.20	43	32.05	30
B $\alpha$	37.87	37	38.33	50	38.50	34
B OMe	55.95	36	56.27	49	55.57	37
A OMe	56.29	34	56.56	49	55.91	37
A $\alpha$	75.94	30	75.40	27	73.36	30
A2	104.43	33	105.66	47	104.81	27
A6	109.38	34	109.81	49	108.57	28
B2	112.88	34	114.27	49	113.19	28
B5	119.57	33	119.64	48	118.00	29
B6	120.77	35	121.35	50	120.25	31
A4	136.18	12	137.28	9	135.77	23
A1	135.83	18	137.69	23	136.52	24
B1	139.42	17	139.25	21	137.60	24
B4	143.63	10	145.23	18	143.69	20
A5	144.59	11	145.44	18	144.24	20
A3	148.01	13	149.29	18	148.46	22
B3	150.27	13	151.45	20	149.79	21
Proton shifts in CDCl <sub>3</sub>	CDCl <sub>3</sub> ppm	mult	CDCl <sub>3</sub> J =			
A $\gamma$	0.86	t	7.6			
B $\gamma$	0.95	t	7.6			
A $\beta$ ,B $\beta$	1.67	m				
B $\alpha$	2.56	bt	7.6			
OMe	3.85	s				
OMe	3.91	s				
A $\alpha$	4.43	bt	6.6			
A6	6.53	d	1.8			
A2,B6	6.69	m				
B2	6.79	d	2.0			
B5	6.88	d	8.1			



G-5-O-4-G diacetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A $\gamma$	9.90	37	10.12	63	9.75	35
B $\gamma$	13.81	36	14.00	64	13.63	32
A4 Ac Me	20.42	33	20.22	54	20.09	32
A $\alpha$ Ac Me	21.19	31	20.94	50	20.78	31
B $\beta$	24.62	37	25.36	64	24.14	34
A $\beta$	29.31	36	30.11	60	28.91	27
B $\alpha$	37.87	36	38.36	64	37.05	31
B OMe	55.98	36	56.18	61	55.64	36
A OMe	56.22	36	56.56	63	56.17	30
A $\alpha$	76.92	35	77.23	60	76.07	22
A2	104.58	33	104.97	58	104.20	19
A6	108.53	33	107.93	58	106.52	25
B2	113.11	34	114.36	59	113.48	23
B6	120.49	34	121.58	64	120.55	25
B5	120.86	37	121.73	67	120.68	26
A4	129.59	8	129.57	8	128.30	11
A1	138.79	20	140.24	30	139.23	22
B1	139.73	18	141.00	28	139.90	22
B4	142.84	13	143.37	17	141.62	20
A5	150.39	14	151.63	19	150.02	16
B3	150.72	14	152.15	21	150.66	11
A3	152.46	15	153.60	20	152.18	17
A4 Ac C=O	168.48	12	168.46	19	168.05	19
A $\alpha$ Ac C=O	170.26	15	170.25	19	169.76	17

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A $\gamma$	0.82	t	J = 7.3
B $\gamma$	0.93	t	J = 7.3
B $\beta$	1.64	m	
A $\beta$	1.73	m	
A $\alpha$ Ac Me	1.96	s	
A4 Ac Me	2.18	s	
B $\alpha$	2.58	bt	J = 7.3
B OMe	3.76	s	
A OMe	3.84	s	
A $\alpha$	5.48	m	
A6	6.32	m	overlapped
B6	6.75	m	overlapped
A2	6.77	m	overlapped
B5	6.84	d	J = 8.1
B2	6.96	d	J = 1.7

Proton shifts in CDCl<sub>3</sub>

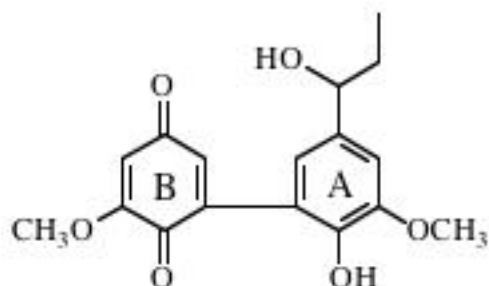
Atom	CDCl <sub>3</sub>	Mult	J
A $\gamma$	0.84	t	J = 7.6
B $\gamma$	0.95	t	J = 7.6
B $\beta$	1.65	m	
A $\beta$	1.76	m	
A $\alpha$ Ac Me	2.03	s	
A4 Ac Me	2.24	s	
B $\alpha$	2.57	bt	J = 7.6
B OMe	3.80	s	
A OMe	3.85	s	
A $\alpha$	5.52	bt	J = 6.8
A6	6.38	d	J = 1.7
A2	6.63	d	J = 2.0
B6	6.69	dd	2.0, 8.1
B2	6.78	d	J = 1.7
B5	6.84	d	J = 8.1

**Notes:**

FPL Collection 6 mg  
gHSQC and gHMBC in CDCl<sub>3</sub> and acetone-d<sub>6</sub>  
A4 upon acetylation appears as cluster of signals  
in acetone-d<sub>6</sub> B5 and B6 too close to assign definitively

Compound Number 275

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.21	28	10.64	45	10.30	29
β	31.90	24	33.21	38	32.03	24
B OMe	56.19	24	56.46	45	55.87	28
A OMe	56.39	28	56.84	44	56.57	27
α	75.72	22	75.40	30	73.45	26
B2	107.16	26	107.77	42	107.06	23
A2	109.43	25	110.91	43	110.48	20
A5	118.56	14	120.61	63	120.06	22
A6	120.19	26	120.61	63	119.35	22
B6	135.42	26	135.34	38	134.11	20
A1	136.30	19	138.14	32	136.85	23
A4	143.07	16	144.12	24	144.04	14
B5	142.53	14	144.79	24	142.84	19
A3	146.78	17	148.08	25	147.29	18
B3	159.02	15	160.27	26	159.09	18
B4	180.27	12	180.63	19	179.87	3
B1	187.51	17	188.03	25	187.39	16

Proton shifts in DMSO			
Atom	H Shifts	Mult	J
γ	0.82	t	J = 7.1
β	1.58	m	
OMe	3.80	s	
α	4.33	m	
α OH	5.06	d	J = 3.9
B2	6.14	d	J = 1.7
B6	6.61	d	J = 1.7
A6	6.64	s	
A2	6.96	s	
A4-OH	8.81	s	

<sup>1</sup>H (acetone)

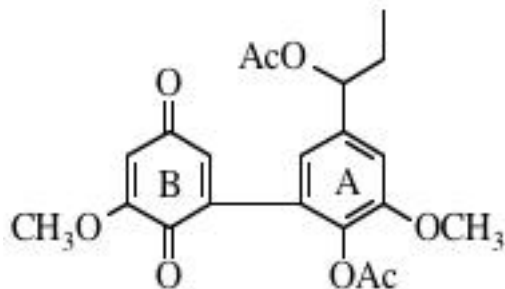
Atom	H Shifts	Mult	J
γ	0.91	t	J = 7.4
β	1.70	m	
A OMe	3.88	s	
B OMe	3.89	s	
α	4.50	bt	J = 6.4
B2	6.07	d	J = 2.2
B6	6.69	d	J = 2.2
A6	6.77	d	J = 1.7
A2	7.07	d	J = 1.7
A4-OH	7.76	s	
<u>CDCl<sub>3</sub></u>			
γ	0.93	t	J = 7.6
β	1.76	m	
B OMe	3.86	s	
A OMe	3.93	s	
α	4.54	bt	J = 6.9
α OH	5.93		
B2	5.98	d	J = 2.2
A6	6.74	bd	J = 1.2
B6	6.83	d	J = 2.2
A2	6.98	bd	J = 1.2

**Notes:**

FPL Collection SRX-84 5 mg  
 gHSQC and gHMBC in all solvents, A5 is coincident with A6 in acetone-d<sub>6</sub>  
 B5 and A4 change order in CDCl<sub>3</sub>, A6 and A5 change order in DMSO  
 A and B OMe not definitively assigned in <sup>13</sup>C DMSO-d<sub>6</sub>

Compound Number 276

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.06	60	10.22	29	9.84	13
A4 Ac Me	20.56	55	20.31	27	20.13	13
Aα Ac Me	21.28	55	21.02	26	20.88	15
β	29.33	61	30.13	01	28.85	9
A OMe	56.26	61	56.55	39	56.15	9
B OMe	56.53	59	56.91	28	56.60	9
α	77.29	60	77.01	27	75.82	6
B2	107.40	54	108.00	27	107.33	7
A2	112.23	50	112.42	26	111.63	6
A6	120.36	51	120.65	27	119.58	7
A5	126.86	46	128.45	9	127.00	5
B6	135.67	51	135.94	28	134.85	7
A4	137.30	27	138.05	5	136.35	3
A1	139.15	54	140.40	16	139.08	7
B5	141.95	39	142.79	9	141.15	5
A3	151.44	49	152.38	13	150.83	5
B3	158.88	47	159.98	10	158.74	4
A4 Ac C=O	168.19	46	168.42	10	167.88	6
Aα Ac C=O	170.44	46	170.38	10	169.95	8
B4	179.90	41	180.40	7	179.51	3
B1	186.98	45	187.46	11	186.80	5

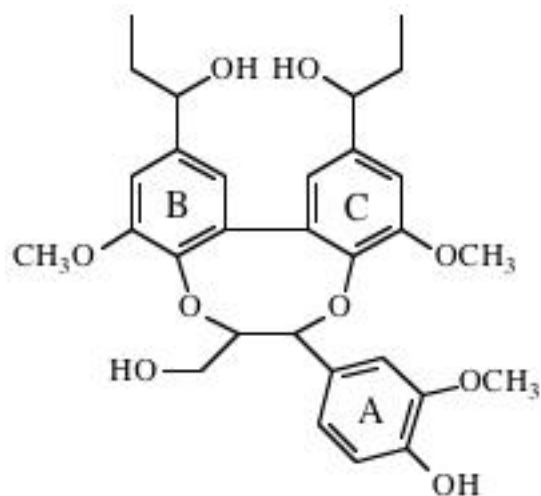
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	0.91	t	J = 7.3
β	1.88	m	
Aα Ac Me	2.06	s	
A4 Ac Me	2.11	s	
A OMe	3.87	s	
B OMe	3.89	s	
α	5.68	t	J = 6.9
B2	6.10	d	J = 2.2
B6	6.59	d	J = 2.2
A6	6.94	d	J = 1.7
A2	7.19	d	J = 1.7
<u>CDCl<sub>3</sub></u>			
γ	0.93		
β	1.86		
Aα Ac Me	2.10		
A4 Ac Me	2.18		
A OMe	3.86		
α	5.66	t	J = 6.9
B2	5.99	d	J = 2.5
B6	6.70	d	J = 2.5
A6	6.81	d	J = 2.2
A2	7.00	d	J = 2.0

**Notes:**

FPL Collection SRX-84 5 mg  
 beta carbon shift taken from DEPT-135, obscured by solvent in <sup>13</sup>C acetone-d<sub>6</sub>  
 Compound began to degrade after being taken up in CDCl<sub>3</sub>, shifts taken from  
 mixture with unknown for CDCl<sub>3</sub> and DMSO-d<sub>6</sub>





dibenzodioxicin

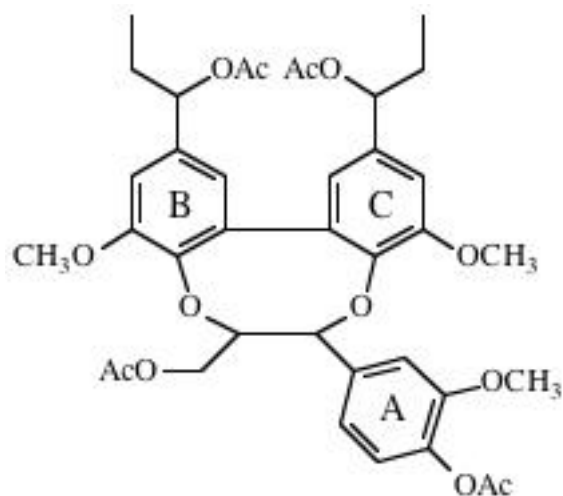
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B,C γ	0.96	m	
B,C β	1.75	m	
Aγ1	3.48	m	
Aγ2	3.70	m	
OMe	3.77	s	
OMe	3.83	s	
OMe	3.92	s	
A β	4.03	m	
B,C α	4.60	m	
Aα	4.77	d	J = 10.0
A5	6.84	d	J = 8.1
A6	6.89	dd	J = 8.1, 1.7
C6	6.96	m	
A2	7.01	d	J = 1.7
B6	7.05	m	
C2	7.06, 7.08	d's	J = 2.0
B2	7.14, 7.16	d's	J = 2.0

**Notes:**

SRVII-81 16mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B or C γ	10.34	97	10.71	60	10.39	32
B or C γ	10.38	97	10.77	60	10.49	31
B or C β	31.88	41	33.23	45	32.11	34
B or C β	32.08	48	33.30	45	32.11	34
OMe	55.78	108	56.06	50	55.54	31
A OMe	55.85	105	56.29	75	55.69	39
OMe	56.00	105	56.33	90	55.80	35
Aγ	62.97	47	62.97	32	60.66	16
B or C α	75.84	63	75.52	51	73.63	32
B or C α	75.84	63	75.52	51	73.63	32
Aα	84.82	38	85.18	29	83.34	13
A β	86.93	39	87.71	27	85.57	13
B2	108.86	23	110.17	19	109.45	16
C2	109.47	54	110.55	22	109.57	15
A2	109.47	54	111.94	38	111.82	18
A5	114.41	52	115.56	42	115.14	22
C6	118.92	41	119.26	31	117.93	21
B6	119.35	22	119.57	20	117.93	21
A6	120.90	52	121.33	41	120.11	17
A1	130.01	45	131.38	30	129.59	13
C5	133.19	15	133.24	14	131.87	10
B5	132.12	23	133.91	11	132.08	7
C1	141.36	21	143.38	18	142.41	12
B1	141.74	20	143.72	16	142.41	12
B4	144.75	22	145.95	16	144.87	9
C4	145.98	56	146.73	21	145.04	9
A4	145.98	56	147.43	35	146.31	20
A3	146.80	45	148.16	34	147.18	19
B3	151.72	22	152.75	15	151.68	21
C3	152.24	38	153.15	30	151.68	21
Proton shifts in CDCl <sub>3</sub>						
B,C γ			0.97			
B,C β			1.81			
Aγ			3.55			
OMe			3.76			
OMe			3.84			
OMe			3.92			
A β			4.14			
A,B,C α			4.59			
DMSO						
B,C γ			0.90			
B,C β			1.66			
Aγ1			3.22			
Aγ2			3.86			
A β			3.84			
B,C α			4.47			
Aα			4.81			



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B <sub>γ</sub>	10.19	90	10.43	66	10.02	40
C <sub>γ</sub>	10.19	90	10.43	66	10.02	40
A4 Ac Me	20.74	98	20.50	71	20.36	42
A <sub>α</sub> Ac Me	20.84	75	20.58	61	20.42	37
B Ac Me	21.40	85	21.10	63	20.90	34
C Ac Me	21.40	85	21.10	63	20.90	34
B or C β	29.28	31	30.08	20	28.75	26
B or C β	29.38	33	30.43	18	29.22	23
OMe	56.10	84	56.19	53	55.74	55
OMe	56.17	70	56.32	77	55.94	61
OMe	56.22	84	56.38	62	56.02	47
A <sub>γ</sub>	63.93	41	64.33	33	63.14	28
B or C <sub>α</sub>	77.26	24	77.49	31	76.34	32
B or C <sub>α</sub>	77.51	24	77.62	30	76.39	32
A β	82.76	24	83.41	25	81.80	17
A <sub>α</sub>	84.45	25	85.33	27	84.06	21
B or C2	110.27	20	110.79	15	109.96	18
B or C2	111.03	20	111.19	14	110.43	16
A2	111.51	32	112.78	34	112.08	26
B or C6	119.26	14	119.35	12	118.00	10
B or C6	119.74	14	120.00	16	118.71	12
A6	119.91	49	120.74	33	119.98	26
A5	122.76	43	123.46	39	122.61	35
B or C5	132.63	23	133.22	13	131.58	10
B or C5	132.63	23	133.42	13	131.77	14
A1	137.13	45	138.06	20	136.45	29
B or C1	137.28	26	138.57	14	137.33	15
B or C1	137.28	26	138.75	14	137.60	12
A4	139.95	39	140.80	22	139.23	34
B4	146.17	18	146.86	14	145.13	17
C4	146.57	16	147.24	13	145.55	22
A3	151.32	33	152.14	27	150.63	39
B or C3	152.32	27	153.35	22	151.98	19
B or C3	152.52	36	153.53	19	152.16	20
A4 Ac C=O	168.84	46	168.94	33	168.47	43
BorC <sub>α</sub> C=O	170.48	27	170.45	28	169.89	44
BorC <sub>α</sub> C=O	170.58	26	170.45	28	169.92	44
A <sub>γ</sub> Ac C=O	170.76	44	170.74	30	170.07	50
Proton shifts in CDCl <sub>3</sub>						
B <sub>γ</sub> C <sub>γ</sub>	0.94					
B <sub>γ</sub> C <sub>β</sub>	1.88					
Ac Me	1.97					
Ac Me	2.08					
Ac Me	2.12					
Ac Me	2.30					
OMe	3.74					
OMe	3.82					
OMe	3.90					
γ1	4.08					
β	4.14					
γ2	4.49					
α	4.85					
B <sub>γ</sub> C <sub>α</sub>	5.70					
aromatic H	6.87-7.05					

<sup>1</sup>H (acetone)

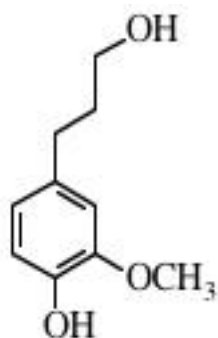
Atom	H Shifts	Mult	J
B <sub>γ</sub> C <sub>γ</sub>	0.93	m	
B <sub>γ</sub> C <sub>β</sub>	1.91	m	
γAc Me	1.91	s	
B <sub>γ</sub> C <sub>α</sub> AcMe	2.07	s	
A4 Ac Me	2.24	s	
OMe	3.79	s	
OMe	3.94	s	
γ1	4.05	dd	J = 12.0, 3.4
β	4.30	m	
γ2	4.43	dd	J = 12.0, 3.4
α	4.93	d	J = 10.0
B <sub>γ</sub> C <sub>α</sub>	5.71	m	
A5, A, B, C6	7.00-7.06	m	from HSQC
B or C 2	7.09	m	from HSQC
B or C 2	7.13	m	from HSQC
A2	7.17	m	from HSQC

**Notes:**

SRVII-81Ac  
gHSQC and gHMBC in d<sub>6</sub>-acetone and CDCl<sub>3</sub>

Compound Number 279

<sup>13</sup>C



dihydro-coniferyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	31.72	24	32.44	33	32.62	26
β	34.43	24	35.85	27	35.99	26
OMe	55.84	25	56.21	31	56.95	30
γ	62.22	25	61.83	28	61.58	28
2	111.03	22	112.87	28	113.96	24
5	114.27	25	115.59	30	116.67	26
6	120.90	24	121.55	32	121.71	26
1	133.70	11	134.61	14	134.38	19
4	143.72	12	145.47	14	145.77	20
3	146.43	10	148.17	10	148.77	17

<sup>1</sup>H (acetone)

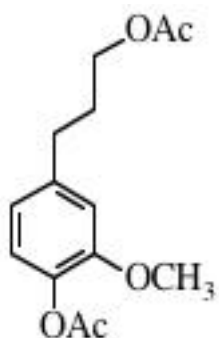
Atom	H Shifts	Mult	J
β	1.78 (1.86)	m	
α	2.60 (2.63)	bt	J = 8.0
γ	3.55 (3.67)	bt	J = 5.4
OMe	3.82 (3.86)	s	
6	6.64 (6.68)	dd	J = 8.1, 1.7
5	6.73 (6.70)	d	J = 8.1
2	6.81 (6.81)	d	J = 1.7
<u>DMSO</u>			
β	1.66		
α	2.48		
γ	3.40		
OMe	3.73		
γ OH	4.40		
6	6.55		
5	6.65		
2	6.72		
phenolic OH	8.60		

**Notes:**

J. Ralph 16 mg  
gHSQC, gHMBC in d6-acetone

Compound Number 280

<sup>13</sup>C



dihydro-coniferyl alcohol diacetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.49	65	20.79	36	20.31	46
γ Ac Me	20.78	52	20.50	44	20.61	47
β	30.02	80	31.08	50	29.67	45
α	32.03	79	32.63	54	31.34	41
OMe	55.68	81	56.14	52	55.59	48
γ	63.63	79	64.10	54	63.21	48
2	112.45	61	113.63	46	112.76	42
6	120.30	83	121.05	54	120.06	44
5	122.43	79	123.39	52	122.41	46
4	137.84	25	139.17	14	137.45	25
1	140.06	47	141.27	27	140.14	33
3	150.77	36	152.14	18	150.60	32
A4 Ac C=O	169.01	27	169.07	18	168.56	29
γAc C=O	170.94	23	171.00	15	170.38	25

<sup>1</sup>H (acetone)

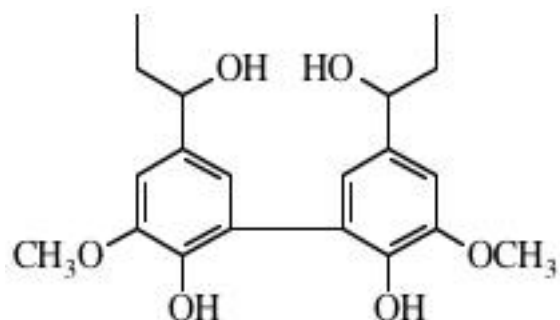
Atom	H Shifts	Mult	J
β	1.94	m	
γ Ac Me	1.99	s	
A4 Ac Me	2.21	s	
α	2.68	bt	J = 7.8
OMe	3.79	s	
γ	4.05	t	J = 6.6
6	6.78	dd	J = 8.1, 1.7
5	6.94	d	J = 8.1
2	6.97	d	J = 1.7
<b>CDCl<sub>3</sub></b>			
β	1.95	m	
γ Ac Me	2.05	s	
A4 Ac Me	2.29	s	
α	2.67	bt	J = 7.8
OMe	3.81	s	
γ	4.10	t	J = 6.6
6	6.75	bdd	8.1, 1.5
2	6.78	bs	
5	6.93	d	J = 8.1

**Notes:**

JRalph 25mg  
gHSQC, gHMBC in d<sub>6</sub>-acetone

Compound Number 281

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.40	45	10.70	52	10.33	36
β	31.89	39	33.21	44	32.06	25
OMe	56.22	49	56.43	60	55.81	37
α	76.08	39	75.70	30	73.71	21
2	108.03	35	109.18	39	108.28	17
6	121.13	36	121.81	43	120.58	19
5	124.15	20	126.11	15	125.54	16
1	136.76	32	138.09	31	136.43	22
4	142.08	22	143.38	16	142.10	18
3	147.47	25	148.56	22	147.36	21

<sup>1</sup>H (acetone)

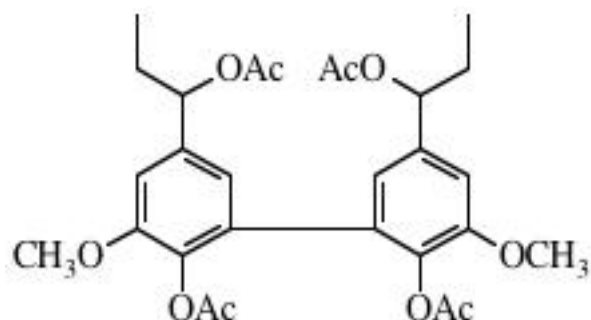
Atom	H Shifts	Mult	J
γ	0.91	t	J = 7.3
β	1.71	m	
OMe	3.88	s	
α	4.50	t	J = 6.36
6	6.85	d	J = 2.0
2	6.99	d	J = 2.0
<u>CDCl<sub>3</sub></u>			
γ	0.93	t	J = 7.3
β	1.79	m	
OMe	3.92	s	
α	4.54	t	J = 6.36
6	6.87	d	J = 2.0
2	6.93	d	J = 2.0
<u>DMSO</u>			
γ	0.84	t	J = 7.34
β	1.60	m	
OMe	3.81	s	
α	4.34	bs	
α OH	4.98	s	
6	6.66	d	J = 1.71
2	6.87	d	J = 1.71
4-OH	8.20	s	

**Notes:**

FPL Collection 10 mg  
Compound has plane of symmetry

Compound Number 282

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.01	46	10.27	61	9.81	41
4 Ac Me	20.37	55	20.33	71	19.99	52
α Ac Me	21.23	43	21.04	63	20.82	42
β	29.46	34	30.20	70	28.90	30
OMe	56.10	48	56.46	66	56.04	40
α	76.86	49	77.29	56	76.03	30
2	110.14	29	110.87	44	110.20	19
6	120.24	19	120.41	24	118.88	13
5	131.15	20	131.87	26	130.12	22
4	137.00	14	137.91	17	136.15	18
1	138.66	21	140.04	31	138.82	23
3	151.37	24	152.64	38	151.14	27
Ac C=O	168.76	15	168.99	18	168.33	14
α Ac C=O	170.36	25	170.46	35	169.84	30

<sup>1</sup>H (acetone)

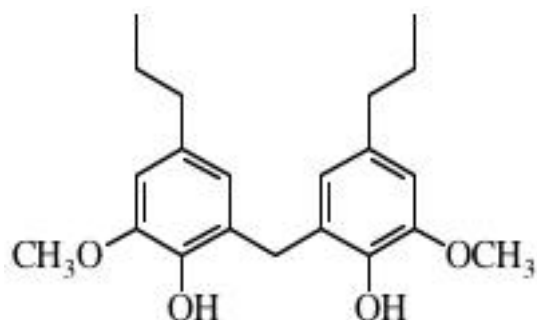
Atom	H Shifts	Mult	J
γ	0.91 (0.86)	t	J = 7.34
β	1.87 (1.81)	m	
4 Ac Me	2.03 (2.02)	s	
α Ac Me	2.07 (2.07)	s	
OMe	3.87 (3.81)	s	
α	5.63 (5.58)	t	J = 6.6
6	6.79 (6.67)	bs	
2	7.11 (7.11)	bs	
<b>CDCl<sub>3</sub></b>			
γ	0.90	t	J = 7.34
β	1.85	m	
4 Ac Me	2.08	s	
α Ac Me	2.09	s	
OMe	3.86	s	
α	5.63	t	J = 6.7
6	6.81	d	J = 1.7
2	6.90	d	J = 1.7

**Notes:**

FPL Collection 8mg  
<sup>1</sup>H DMSO shifts in ( )s. Compound has plane of symmetry  
 beta shifts in acetone taken from DEPT 135 spectrum  
 g-HSQC, g-HMBC all solvents

Compound Number 283

<sup>13</sup>C



biphenyl methane

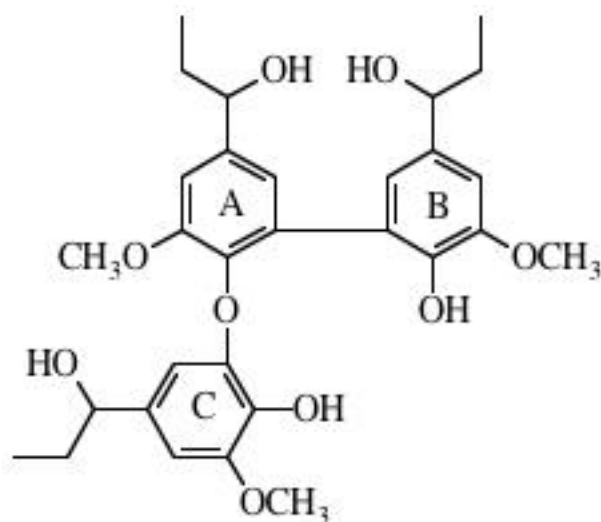
Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	13.78	39	14.04	47	13.59	23
β	24.79	32	25.57	45	24.34	20
CH <sub>2</sub>	29.39	20	29.56	34	28.74	10
α	27.80	38	38.42	49	37.10	21
OMe	55.93	43	56.27	49	55.73	23
2	109.14	39	110.18	37	109.62	17
6	122.36	33	123.13	45	121.77	18
5	126.13	22	127.59	31	127.08	17
1	134.02	18	133.74	31	132.02	18
4	141.01	13	142.84	30	141.72	14
3	146.41	21	147.75	29	147.05	15

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	0.87 (0.91)	t	J = 7.34
β	1.53 (1.57)	m	J = 7.34
α	2.41 (2.46)	dd	J = 7.34
OMe	3.79 (3.85)	s	
CH <sub>2</sub>	3.94 (3.93)	bs	
6	6.57 (6.55)	bd	J = 1.71
2	6.63 (6.61)	bd	J = 1.71
OH	7.23 (6.00)	bs	
<u>DMSO</u>			
γ	0.82	t	J = 7.34
β	1.47	m	J = 7.34
α	2.35	bt	
OMe	3.75	s	
CH <sub>2</sub>	3.74	s	
6	6.37	bd	J = 1.71
2	6.59	bd	J = 1.71
OH	8.22	s	

**Notes:**

FPL Collection 20 mg  
<sup>1</sup>H CDCl<sub>3</sub> shifts in ( )s. Plane of symmetry runs through molecule  
 CH<sub>2</sub> shift obscured by solvent in acetone, taken from Dept 135  
 2 and 6 switch places in <sup>1</sup>H in CDCl<sub>3</sub>



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.15	84	10.51	64	9.95	46
γ	10.25	100	10.59	74	10.06	39
γ	10.30	88	10.59	74	10.26	43
B β	31.42	59	32.97	45	32.06	61
C β	31.48	69	33.11	44	32.06	61
A β	32.00	66	33.27	56	32.06	61
OMe	56.15	108	55.34	81	55.68	60
OMe	56.15	108	55.34	81	55.74	51
OMe	56.30	75	56.52	43	55.83	65
A α	75.80	74	75.42	46	73.51	40
B α	75.80	74	75.57	45	73.60	39
C α	76.02	56	75.66	40	73.66	35
C2	103.82	17	104.50	32	103.06	16
C6	106.66	17	106.31	30	104.51	20
B2	108.03	27	109.13	31	108.35	17
A2	109.45	47	110.37	36	109.50	20
B6	120.98	35	121.58	36	120.18	19
A6	121.20	35	122.17	46	121.16	17
B5	123.38	11	124.87	13	124.13	18
A5	132.06	14	133.71	16	132.72	16
C4	134.74	16	135.37	14	133.50	24
C1	135.22	20	136.74	19	135.41	18
B1	136.04	15	137.33	26	135.91	21
A4	141.12	6	141.12	9	139.14	14
B4	142.24	22	143.44	17	142.18	17
A1	142.01	20	143.71	19	142.47	23
C5	145.59	13	147.29	19	146.54	19
B3	146.79	22	148.14	23	147.28	19
C3	147.44	21	148.53	16	147.59	23
A3	152.39	19	153.21	17	151.70	18
1H--DMSO						
B,C γ	0.66					
A γ	0.88					
B,C β	1.40					
A β	1.65					
B,C α	4.13					
A α	4.45					
C6	6.02					
C2	6.45					
B6	6.59					
B2	6.82					
A6	6.88					
A2	7.04					
C4 OH	7.93					
B4 OH	8.14					

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B,C γ	0.76	m	
A γ	0.96	t	
B,C β	1.53	m	
A β	1.74	m	
OMe	3.75	s	
OMe	3.81	s	
C α	4.23 (4.25)	t	J = 6.36
B α	4.35 (4.40)	t	J = 6.36
A α	4.60 (4.63)	t	J = 6.36
C6	6.18 (6.14)	d	J = 1.7
C2	6.52 (6.41)	bd	J = 1.7
B6	6.75 (6.76)	d	J = 1.7
B2	6.86 (6.78)	d	J = 1.7
A6	6.98 (6.97)	d	J = 1.7
A2	7.11 (7.04)	d	J = 1.7

**Notes:**

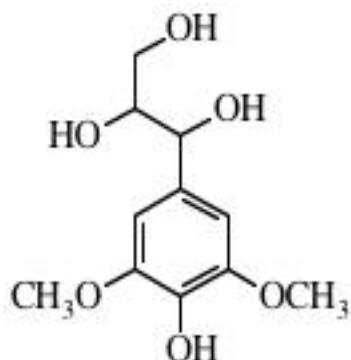
FPL Collection 5 mg

1H--CDCl<sub>3</sub> shifts in ( )s. g-HSQC and g-HMBC all solventsObscured 1H shifts taken from g-HSQC in CDCl<sub>3</sub>A1 and B4 may switch order in CDCl<sub>3</sub>



Compound Number 285

<sup>13</sup>C



$\alpha$ -(4-hydroxy-3,5-dimethoxyphenyl)-glycerol

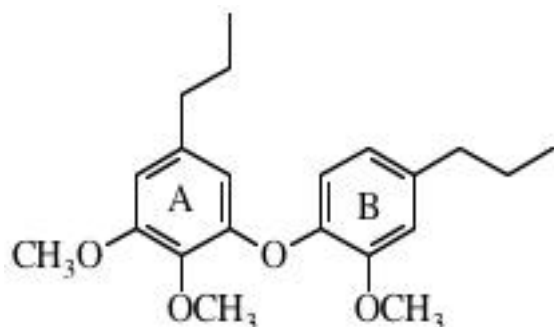
Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.40	47	56.60	13	55.99	49
OMe	56.40	47	56.60	13	55.99	49
$\gamma$	63.24	19	64.24	6	63.10	20
$\beta$	74.69	20	76.26	9	75.49	20
$\alpha$	75.99	22	76.26	9	74.24	20
2	103.03	42	105.32	12	104.72	39
6	103.03	42	105.32	12	104.72	39
1	131.60	10	133.98	4	133.58	18
4	134.57	10	135.90	3	134.31	19
3	147.28	20	148.32	7	147.42	34
5	147.28	20	148.32	7	147.42	34

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
$\gamma$	3.63	d	J = 6.11
$\beta$	3.72	m	
OMe	3.81	s	
$\alpha$	4.60	d	J = 6.11
2,6	6.71	s	
4 OH	7.09	bs	
<u>CDCl<sub>3</sub></u>			
$\gamma$	3.77		
$\beta$	3.81		
OMe	3.91		
$\alpha$	4.77		
2,6	6.64		
<u>DMSO</u>			
$\gamma$	3.42		
$\beta$	3.49		
OMe	3.72		
$\alpha$	4.34		
2,6	6.58		

**Notes:**

FPL Collection 20 mg  
 Marginally soluble in CDCl<sub>3</sub> and acetone-d<sub>6</sub>, g-HSQC and g-HMBC in all solvents  
<sup>1</sup>H shifts for  $\beta$  and  $\gamma$  taken from HSQC in DMSO  
 $\beta$  and  $\alpha$  <sup>13</sup>C shifts change order in DMSO (HSQC data)



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Aγ	13.67	29	13.93	10	13.54	38
Bγ	13.78	32	14.04	11	13.70	36
Aβ	24.42	28	25.26	10	24.08	33
Bβ	24.57	32	25.39	11	24.18	34
Bα	37.80	35	38.36	12	37.08	33
Aα	37.99	29	38.58	10	37.28	30
OMe	55.95	33	56.24	10	55.70	31
OMe	56.04	30	56.38	10	55.88	31
A4 OMe	60.94	22	60.67	7	60.21	26
A2	107.18	27	108.19	10	107.36	25
A6	111.16	27	111.12	10	109.83	26
B2	113.01	23	114.37	9	113.43	27
B5	119.20	27	120.54	10	119.39	28
B6	120.55	28	121.41	10	120.50	28
A4	137.70	5	138.59	2	136.89	11
A1	138.19	15	138.86	4	137.90	20
B1	138.63	14	139.80	4	138.71	20
B4	143.82	9	144.64	3	142.89	17
B3	150.37	9	151.82	3	150.31	34
A5	150.48	10	151.94	3	150.31	34
A3	153.27	10	154.67	3	153.26	18
1H-CDCl <sub>3</sub>						
γ	0.88					
γ	0.95					
Aβ	1.55					
Bβ	1.65					
Aα	2.43					
Bα	2.56					
B3 OMe	3.83					
A 3,4 OMe	3.87					
A6	6.26					
A2	6.47					
B6	6.68					
B 2,5	6.79					
1H-DMSO						
γ	0.82					
γ	0.90					
β	1.47					
β	1.60					
Aα	2.37					
Bα	2.53					
A4 OMe	3.67					
B3 OMe	3.73					
A3 OMe	3.79					
A6	6.09					
A2	6.58					
B6	6.70					
B5	6.75					
B2	6.94					

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Aγ	0.85	t	7.3
Bγ	0.93	t	7.3
Aβ	1.52	m	7.3
Bβ	1.64	m	7.3
Aα	2.41	bt	7.3
Bα	2.57	bt	7.3
A4 OMe	3.74	s	
B3 OMe	3.78	s	
A3 OMe	3.83	s	
A6	6.17	d	2.0
A2	6.58	d	2.0
B6	6.72	dd	1.7, 8.1
B5	6.78	d	8.1
B2	6.95	d	1.7

**Notes:**

SRX-110

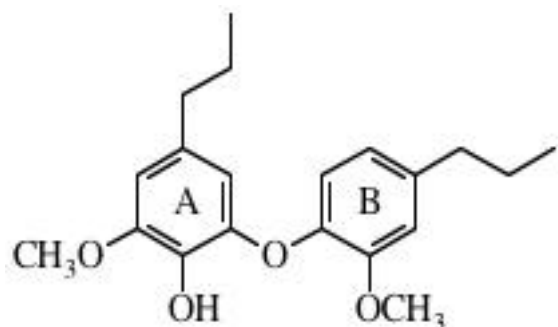
12 mg

α,β,γ and B3, A5 are too close to assign with certainty

HSCQ and HMBC all solvents

Compound Number 287

<sup>13</sup>C



4-O-5

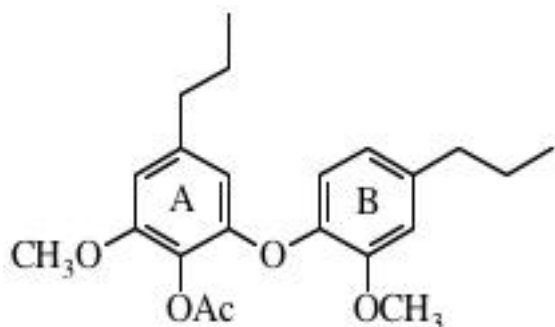
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	0.85	t	7.3
γ	0.98	t	7.3
A β	1.52	m	7.3
B β	1.62	m	7.3
A α	2.41	bt	7.3
B α	2.55	bt	7.3
B OMe	3.80	s	
A OMe	3.83	s	
A6	6.25	d	2.0
A2	6.58	d	2.0
B6	6.69	dd	1.7, 8.3
B5	6.74	d	8.3
B2	6.92	d	1.7

**Notes:**

FPL Collection  
 12 mg  
 A5 and B4 may be switched in acetone but confirmed in CDCl<sub>3</sub> by 4-OH correlation to A5

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	13.49	63	13.91	38	13.48	31
γ	13.63	61	14.04	39	13.67	32
β	24.44	72	25.42	53	24.17	59
β	24.47	73	25.42	53	24.17	59
α	37.67	120	38.34	60	36.96	37
α	37.67	120	38.34	60	36.98	39
OMe	55.81	63	56.28	37	55.57	28
OMe	56.04	59	56.57	36	55.90	29
A2	107.05	57	108.23	36	107.39	23
A6	111.46	58	112.07	37	110.95	23
B2	112.75	60	114.27	34	113.17	24
B5	119.17	30	119.60	34	117.84	24
B6	120.53	61	121.37	33	120.27	25
A1	133.56	24	133.80	21	132.29	20
A4	134.79	20	136.58	10	135.22	19
B1	138.87	29	139.23	18	137.53	19
B4	143.84	19	145.27	14	143.77	16
A5	144.28	18	145.58	12	144.34	18
A3	147.59	20	149.43	13	148.71	19
B3	150.10	22	151.43	16	149.71	18
<sup>1</sup> H CDCl <sub>3</sub>						
γ	0.80					
γ	0.86					
A β	1.47					
B β	1.56					
A α	2.35					
B α	2.47					
B OMe	3.78					
A OMe	3.80					
4 OH	5.94					
A6	6.30					
A2	6.41					
B6	6.60					
B5	6.71					
B2	6.78					
<sup>1</sup> H DMSO						
γ	0.80					
γ	0.87					
A β	1.45					
B β	1.57					
A α	2.34					
B α	2.49					
B OMe	3.74					
A OMe	3.76					
A6	6.11					
A2	6.53					
B6	6.57					
B5	6.64					
B2	6.89					
4 OH	8.39					



4-O-5

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A γ	13.73	43	13.94	34	13.52	40
B γ	13.78	38	14.02	32	13.61	40
Ac Me	20.39	32	20.25	27	20.05	36
A β	24.33	38	25.22	31	24.00	36
B β	24.57	37	25.37	33	24.09	38
B α	37.83	36	38.37	32	37.03	32
A α	38.23	37	38.73	32	37.36	32
B OMe	56.08	62	56.24	30	55.63	37
A OMe	56.08	62	56.44	32	55.96	36
A2	106.59	36	107.26	31	106.58	26
A6	110.36	36	110.24	30	108.99	26
B2	113.16	35	114.39	28	113.39	28
B5	120.40	36	121.55	63	120.23	30
B6	120.82	36	121.55	63	120.53	21
A4	128.18	9	129.04	5	127.29	15
B1	139.36	20	140.62	14	139.39	16
A1	141.02	21	141.66	15	140.63	28
B4	143.25	15	143.86	9	142.07	22
A5	150.12	16	151.45	9	149.76	23
B3	150.73	17	152.14	11	150.53	25
A3	152.11	17	153.44	10	151.94	25
OAc C=O	168.70	14	168.57	9	168.04	19
1H--CDCl <sub>3</sub>						
γ	0.89					
γ	0.95					
A β	1.55					
B β	1.65					
Ac Me	2.24					
A α	2.45					
B α	2.56					
B OMe	3.82					
A OMe	3.82					
A6	6.25					
A2	6.49					
B6	6.68					
B2	6.78					
B5	6.85					
1H--DMSO						
γ	0.81					
γ	0.88					
A β	1.47					
B β	1.58					
Ac Me	2.15					
A α	2.39					
B α	2.51					
B OMe	3.70					
A OMe	3.74					
A6	6.09					
A2	6.62					
B6	6.69					
B5	6.74					
B2	6.92					

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	0.86	t	7.3
Bγ	0.93	t	7.3
A β	1.53	m	7.3
B β	1.64	m	7.3
Ac Me	2.20	s	
A α	2.45	bt	7.3
B α	2.57	bt	7.3
B OMe	3.77	s	
A OMe	3.81	s	
A6	6.18	d	1.7
A2	6.63	d	1.7
B6	6.73	dd	2.0, 8.3
B5	6.82	d	8.3
B2	6.96	d	2.0

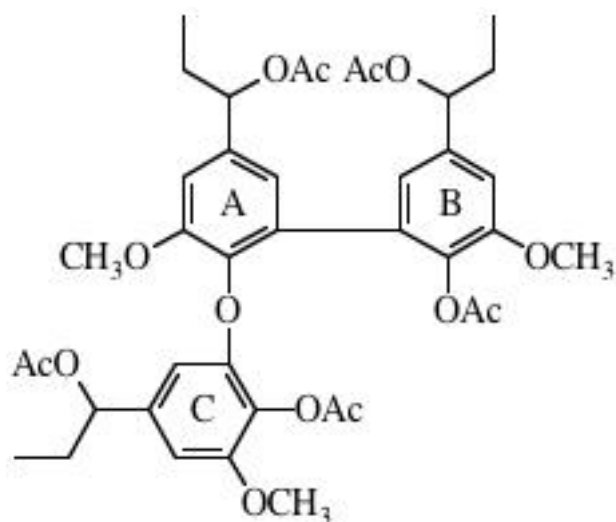
**Notes:**

SRX-110Bac

12 mg

α, β, γ shifts are too close to assign with absolute certainty

B2 and B5 change order in CDCl<sub>3</sub> 1H

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	0.78		
γ	0.82		
B γ	0.91		
A, C β	1.73		
B β	1.88		
AcMe Cα	1.95		
AcMe Aα	2.04		
AcMe Bα	2.05		
AcMe B4	2.10		
AcMe C4	2.16		
OMe	3.73		
OMe	3.76		
OMe	3.81		
Cα	5.46		
Aα	5.55		
Bα	5.65		
C6	6.20		
C2	6.64		
B6	6.81		
A6	6.83		
A2	6.99		
B2	7.13		

**Notes:**

FPL Collection 2 mg

COSY, HSQC and HMBC in acetone at 600MHz

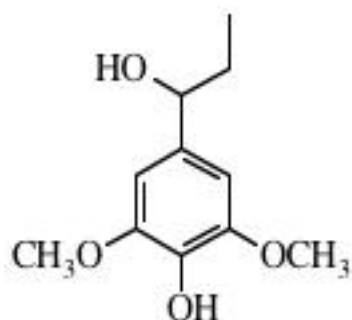
<sup>1</sup>H in CDCl<sub>3</sub> some shifts taken from HSQC and HMBC

Aromatic carbon shifts in DMSO are weak, no 2D spectra in DMSO

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	9.79	39	10.19	65	9.57	63
γ	9.85	35	10.19	65	9.57	63
γ	9.90	40	10.19	65	9.57	63
C4AcMe	20.21	32	20.18	27	19.77	27
B4AcMe	20.32	26	20.18	27	19.88	23
AαAcMe	21.12	25	20.46	20	20.59	18
CαAcMe	21.16	36	21.25	40	20.68	27
BαAcMe	21.22	29	21.36	27	20.80	29
β	28.94	17	29.77	20	28.50	22
β	29.21	12	29.97	20	28.68	15
B β	29.46	25	30.18	20	28.84	24
OMe	56.00	46	56.38	46	55.89	34
OMe	56.00	46	56.38	46	55.89	34
OMe	56.07	32	56.65	32	55.89	34
α	76.83	27	77.28	35	75.94	37
α	76.88	27	77.28	35	75.94	37
α	76.88	27	77.28	35	75.94	37
C2	103.60	8	104.30	12	103.38	8
C6	105.82	11	106.11	10	106.53	8
A2	110.40	16	110.99	14	110.12	8
B2	110.70	15	111.63	12	110.88	11
B6	120.30	12	119.42	12	119.39	6
A6	120.78	14	120.81	15	119.64	15
C4	128.02	3	128.90	7	127.11	7
A5	130.86	8	131.83	8	130.23	8
B5	131.77	12	133.47	6	130.83	6
A4	136.95	6	137.91	7	136.20	10
B1	137.84	7	139.40	10	138.03	10
A1	138.16	16	139.65	13	138.31	15
C1	138.16	16	139.65	13	138.50	10
B4	140.05	6	140.78	8	138.96	9
C5	150.42	8	151.59	10	149.99	4
A3	151.11	9	152.36	9	150.84	13
B3	152.20	20	153.33	14	151.80	14
C3	152.20	20	153.33	14	151.80	14
C4AcC=O	167.92	8	167.62	7	167.29	8
B4AcC=O	168.77	9	169.09	8	168.23	9
AαAcC=O	170.30	12	169.09	9	169.71	18
CαAcC=O	170.40	17	170.37	12	169.71	18
BαAcC=O	170.40	17	170.50	15	169.71	18
<u><sup>1</sup>H CDCl<sub>3</sub></u>		<u><sup>1</sup>H</u>		<u><sup>1</sup>H</u>		
γ		0.72		0.71		
γ		0.79		0.78		
B γ		0.89		0.86		
β		1.72		1.67		
β		1.72		1.67		
B β		1.86		1.84		
AcMe Cα		1.99		1.92		
AcMe Aα		2.07				
AcMe Bα		2.10				
AcMe B4		2.16				
AcMe C4		2.21		2.15		
OMe		3.71		3.67		
OMe		3.74		3.72		
OMe		3.79		3.76		
Cα		5.45		5.42		
Aα		5.54		5.49		
Bα		5.63		5.61		
C6		6.13		6.03		
C2		6.46		6.62		
B6		6.82		6.70		
A6		6.76		6.70		
A2		6.81		6.99		
B2		6.87		7.13		

Compound Number 290

<sup>13</sup>C



1-(3,5-dimethoxy-4-hydroxy)-propanol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	0.87	t	7.3
β	1.66	m	
OMe	3.79	s	
α	4.44	bt	6.4
2,6	6.63	s	
4 OH	6.99	s	
<u>CDCl<sub>3</sub></u>			
γ	0.91		
β	1.75		
OMe	3.88		
α	4.50		
2,6	6.57		
<u>DMSO</u>			
γ	0.79		
β	1.56		
OMe	3.72		
α	4.30		
2,6	6.54		
4 OH	8.08		

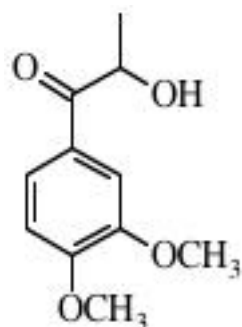
**Notes:**

FPL Collection  
22 mg  
HSQC and HMBC in acetone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.19	27	10.61	47	10.32	25
β	31.87	27	33.24	36	32.16	21
OMe	56.23	57	56.59	93	55.95	48
OMe	56.23	57	56.59	93	55.95	48
α	76.20	24	75.81	29	73.92	20
2	102.60	45	104.32	87	103.33	35
6	102.60	45	104.32	87	103.33	35
4	133.91	11	135.66	11	134.10	14
1	135.87	16	137.56	22	136.44	17
3	146.91	23	148.41	25	147.65	31
5	146.91	23	148.41	25	147.65	31

Compound Number 291

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	22.77	60	22.59	67	21.09	67
OMe	55.97	68	56.14	89	55.54	63
OMe	56.06	60	56.24	81	55.75	62
β	68.78	57	69.53	46	68.31	62
5	110.13	59	111.62	80	110.89	105
2	110.68	52	111.95	77	110.89	105
6	123.32	62	124.22	81	123.31	68
1	126.16	8	127.80	9	127.38	15
3	149.25	8	150.30	9	148.61	12
4	153.96	7	155.01	7	153.11	10
α	200.73	10	201.30	8	200.09	15

Atom	H Shifts	Mult	J
γ	1.35	d	6.85
OMe	3.87	s	
OMe	3.90	s	
β	5.14	q	6.85
5	7.06	d	8.6
2	7.54	d	2.0
6	7.68	dd	8.6, 2.0

Atom	H Shifts	Mult	J
γ	1.43		
OMe	3.92		
OMe	3.93		
β	5.10		
5	6.89		
2	7.49		
6	7.49		

Atom	H Shifts	Mult	J
γ	1.27		
OMe	3.81		
OMe	3.84		
β	5.05		
β OH	5.21		
5	7.06		
2	7.48		
6	7.69		

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	1.35	d	6.85
OMe	3.87	s	
OMe	3.90	s	
β	5.14	q	6.85
5	7.06	d	8.6
2	7.54	d	2.0
6	7.68	dd	8.6, 2.0

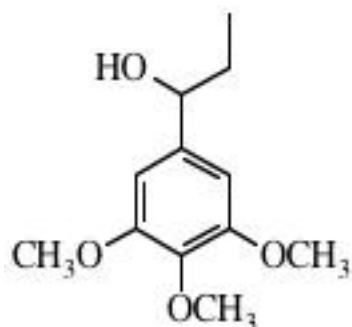
  

Atom	H Shifts	Mult	J
γ	1.43		
OMe	3.92		
OMe	3.93		
β	5.10		
5	6.89		
2	7.49		
6	7.49		

**Notes:**

SRX-115G 26 mg  
 HSQC in acetone and CDCl<sub>3</sub>, HMBC in acetone  
 HSQC shows that C2 is downfield of C5 for acetone and CDCl<sub>3</sub>  
 C2 = C5 in DMSO

Compound Number 292

<sup>13</sup>C

1-(3,4,5-trimethoxyphenyl)-1-propanol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	0.89	t	7.3
β	1.67	m	
4 OMe	3.68	s	
OMe	3.79	s	
α	4.12	d	4.0
α OH	4.48	bt	6.4
2,6	6.65	s	
<u>CDCl<sub>3</sub></u>			
γ	0.93		
β	1.76		
4 OMe	3.82		
OMe	3.86		
α	4.52		
2,6	6.58		
<u>DMSO</u>			
γ	0.81		
β	1.56		
4 OMe	3.60		
OMe	3.73		
α	4.35		
αOH	5.08		
2,6	6.59		

**Notes:**

SRX-115S

39 mg

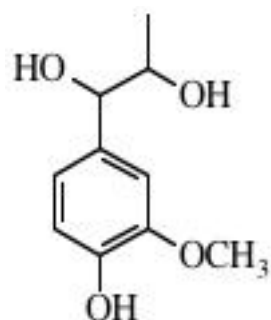
HSQC and HMBC in acetone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.06	46	10.58	79	10.29	90
β	31.84	66	33.20	83	32.08	91
OMe	55.86	97	56.32	142	55.78	183
OMe	55.86	97	56.32	142	55.78	183
4 OMe	60.57	24	60.44	38	59.98	60
α	75.80	34	75.69	55	73.81	92
2	102.68	113	104.06	144	103.00	179
6	102.68	113	104.06	144	103.00	179
4	136.84	3	137.95	3	136.05	9
1	140.60	9	142.75	12	142.09	30
3	152.96	16	154.08	14	152.55	38
5	152.96	16	154.08	14	152.55	38



Compound Number 293

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
major						
γ	18.34	55	18.08	82	18.42	41
OMe	56.83	67	56.20	74	55.56	52
β	72.25	46	72.03	65	70.67	38
α	78.37	49	78.15	66	76.83	40
2	110.18	52	111.20	70	111.04	30
5	115.09	53	115.09	70	114.65	34
6	120.61	54	120.32	74	119.26	36
1	133.49	10	134.95	14	134.56	22
4	146.17	10	146.39	11	145.16	20
3	147.55	7	147.81	8	146.97	16
minor isomer						
γ	19.67	19	19.30	33	19.00	16
OMe	56.83	67	56.20	74	55.56	52
β	73.15	19	72.68	25	70.89	16
α	80.27	17	79.80	26	77.79	14
2	110.12	25	111.27	34	111.12	15
5	115.16	26	115.21	31	114.76	17
6	120.90	22	120.66	29	119.50	14
1	134.08	4	134.90	9	133.98	10
4	146.40	4	146.77	4	145.46	9
3	147.61	4	148.02	4	147.04	9

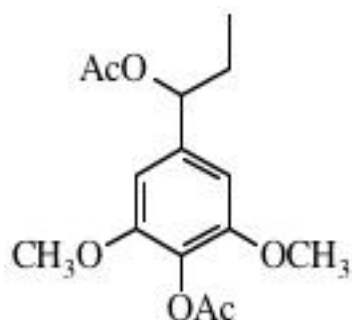
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	1.02 (0.92)	d	6.4
β	3.81 (3.69)	m	
OMe	3.80 (3.80)	s	
α	4.45 (4.20)	d	5.1 (7.3)
5	6.73 (6.73)	d	8.1
6	6.77 (6.77)	dd	8.1, 1.7
2	6.98 (6.95)	d	1.7
<u>CDCl<sub>3</sub></u>			
γ	1.03 (0.96)		
β	3.87 (3.74)		
OMe	3.81 (3.81)		
α	4.49 (4.20)		
<u>DMSO</u>			
γ	0.93 (0.77)		
β	3.56 (3.56)		
OMe	3.69 (3.69)		
α	4.20 (4.09)		
5,6	6.64 (6.64)		
2	6.83 (6.81)		

**Notes:**

FPL Collection 20 mg  
g-HSQC and g-HMBC in d6-acetone  
2 isomers <sup>1</sup>H minor shifts and j's in ( )

Compound Number 294

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.01	40	10.29	66	9.93	59
4 Ac Me	20.41	32	20.26	47	20.14	57
α Ac Me	21.20	26	21.04	37	20.90	54
β	29.30	50	30.13	112	28.96	50
OMe	56.10	88	56.45	135	55.98	116
OMe	56.10	88	56.45	135	55.98	116
α	77.26	49	77.61	71	76.49	52
2	103.29	97	103.86	121	102.85	93
6	103.29	97	103.86	121	102.85	93
4	128.18	3	129.21	3	127.27	11
1	138.92	11	140.45	14	139.33	38
3	152.01	17	153.13	14	151.60	55
5	152.01	17	153.13	14	151.60	55
4 Ac C=O	168.65	6	168.55	10	168.14	27
α Ac C=O	170.25	5	170.39	8	169.89	24

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ	0.88	t	7.3
β	1.83	m	
α Ac Me	2.05	s	
4 Ac Me	2.21	s	
OMe	3.80	s	
α	5.61	dd	7.3
2,6	6.71	s	
<u>CDCl<sub>3</sub></u>			
γ	0.91		
β	1.85		
Ac Me	2.09		
Ac Me	2.33		
OMe	3.82		
α	5.62		
2,6	6.58		
<u>DMSO</u>			
γ	0.85		
β	1.80		
Ac Me	2.07		
Ac Me	2.22		
OMe	3.74		
α	5.56		
2,6	6.68		

**Notes:**

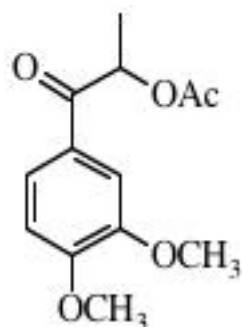
SRX-115SSMAc

19 mg

C4 has very long T1, D1 set to 6 sec.

Compound Number 295

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	17.40	60	17.70	61	17.32	48
AcMe	20.69	42	20.60	38	20.42	38
OMe	55.92	68	56.12	65	55.55	46
OMe	56.03	59	56.25	58	55.80	43
β	70.95	57	71.98	53	71.13	45
5	110.10	58	111.66	75	110.45	37
2	110.66	56	111.69	75	111.05	44
6	122.92	61	123.75	61	123.08	44
1	127.29	14	128.23	10	126.48	11
3	149.23	10	150.39	8	148.83	10
4	153.70	10	154.98	8	153.57	10
Ac C=O	170.35	11	170.47	7	169.78	10
α	195.21	12	195.54	7	194.95	11

<sup>1</sup>H (acetone)

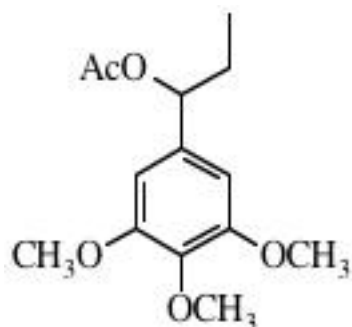
Atom	H Shifts	Mult	J
γ	1.46	d	6.85
AcMe	2.05	s	
3 OMe	3.86	s	
4 OMe	3.90	s	
β	5.97	q	6.85
5	7.06	d	8.6
2	7.50	d	2.0
6	7.67	dd	8.6, 2.0
<u>CDCl<sub>3</sub></u>			
γ	1.53		
AcMe	2.15		
OMe	3.93, 3.96		
β	5.96		
5	6.91		
2	7.52		
6	7.59		
<u>DMSO</u>			
γ	1.40		
AcMe	2.06		
OMe	3.81, 3.85		
β	5.99		
5	7.08		
2	7.43		
6	7.68		

**Notes:**

SRX-115GAc  
12 mg  
g-HSQC and g-HMBC in d<sub>6</sub>-acetone

Compound Number 296

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	9.92	60	10.30	53	9.90	46
α Ac Me	21.13	38	21.05	29	20.89	32
β	29.20	59	30.13	53	28.90	42
3 OMe	55.98	120	56.43	96	55.86	83
5 OMe	55.98	120	56.43	96	55.86	83
4 OMe	60.63	38	60.45	31	59.91	29
α	77.41	63	77.75	49	76.60	44
2	103.58	117	104.71	76	103.49	77
6	103.58	117	104.71	76	103.49	77
1	136.12	18	137.56	11	136.39	16
4	137.45	5	138.71	4	136.85	4
3	153.08	24	154.32	14	152.80	20
5	153.08	24	154.32	14	152.80	20
α Ac C=O	170.26	10	170.37	6	169.83	9

<sup>1</sup>H (acetone)

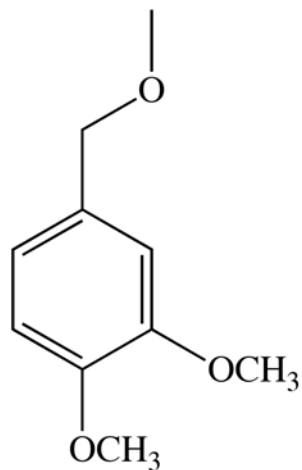
Atom	H Shifts	Mult	J
γ	0.86	t	7.3
β	1.82	m	
α Ac Me	2.03	s	
4 OMe	3.69	s	
3,5 OMe	3.81	s	
α	5.56	bt	6.6
2,6	6.64	s	
<u>CDCl<sub>3</sub></u>			
γ	0.90		
β	1.85		
α Ac Me	2.09		
4 OMe	3.83		
3,5 OMe	3.87		
α	5.59		
2,6	6.55		
<u>DMSO</u>			
γ	0.82		
β	1.77		
α Ac Me	2.05		
4 OMe	3.63		
3,5 OMe	3.76		
α	5.52		
2,6	6.60		

**Notes:**

SRX-115SAc  
29mg  
g-HMBC in d6-acetone

Compound Number 297

<sup>13</sup>C



Veratryl alcohol methyl ether

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.80	61	56.03	58	55.37	126
OMe	55.89	57	56.12	56	55.46	117
α OMe	57.86	27	57.74	28	57.15	60
α	74.61	44	74.86	45	73.55	106
2 or 5	110.84	49	112.49	47	111.45	141
5 or 2	110.99	49	112.60	46	111.50	146
6	120.29	51	120.95	48	120.03	128
1	130.73	7	132.16	8	130.65	19
3 or 4	148.58	4	149.89	5	148.23	12
4 or 3	149.02	4	150.34	5	148.64	13

<sup>1</sup>H (acetone)

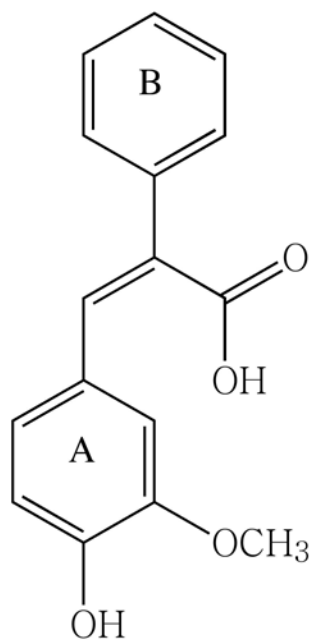
Atom	H Shifts	Mult	J
α OMe	3.27	s	
OMe	3.78	s	
OMe	3.79	s	
α-CH <sub>2</sub>	4.33	s	
6	6.83	dd	8.1, 2.0
5	6.89	d	8.1
2	6.91	d	2.0
<u>CDCl<sub>3</sub></u>			
α-CH <sub>2</sub>	4.37		
5	6.81		
6	6.85		
2	6.87		
<u>DMSO</u>			
α-CH <sub>2</sub>	4.31		
6	6.83		
2	6.89		
5	6.90		

**Notes:**

S. Ralph  
Carbon pairs 2 & 5 and 3 & 4 are to close for definitive assignment

Compound Number 298

<sup>13</sup>C



3-Methoxy-4-hydroxy stilbene carboxylic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.25	29	55.42	31	54.61	36
A2	112.07	36	113.60	30	113.05	29
A5	114.19	37	115.58	34	115.11	29
A6	126.78	41	126.69	34	125.35	30
A1	126.73	14	127.30	7	125.35	20
B4	127.90	39	128.25	34	127.28	30
B3	128.91	75	129.48	64	128.59	63
B5	128.91	75	129.48	64	128.59	63
β	128.91	75	130.55	7	129.64	9
B2	130.03	73	130.81	65	129.66	76
B6	130.03	73	130.81	65	129.66	76
B1	136.18	8	138.15	5	137.15	15
α	142.49	30	141.18	30	139.52	25
A3	145.76	7	147.68	5	146.88	14
A4	147.37	11	148.91	8	148.05	18
γ	172.08	6	169.12	7	168.58	16

<sup>1</sup>H (acetone)

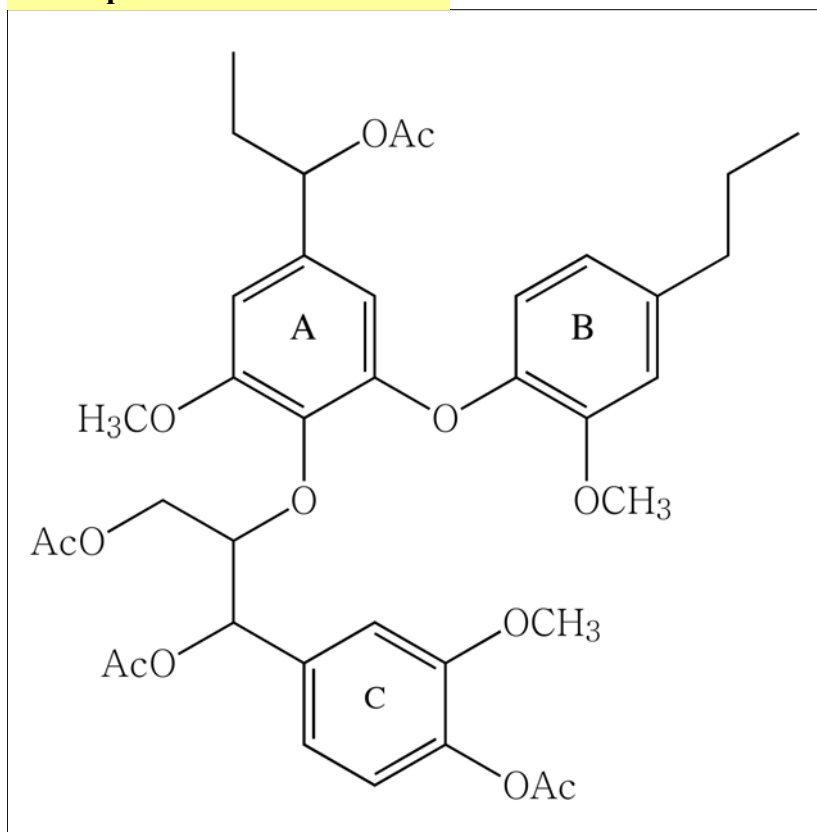
Atom	H Shifts	Mult	J
OMe	3.38	s	
A2	6.50	d	2.0
A5	6.71	d	8.1
A6	6.80	dd	8.1, 2.0
B 2,6	7.27	m	
B4	7.36	m	
B 3,5	7.43	m	
α	7.80	s	
<u>CDCl<sub>3</sub></u>			
A2	6.41		
A5	6.77		
A6	6.83		
B 2,6	7.29		
B4, B 3,5	7.37, 7.41		
α	7.87		
<u>DMSO</u>			
A2	6.41		
A5	6.64		
A6	6.66		
B 2,6	7.19		
B4, B 3,5	7.35, 7.41		
α	7.66		

**Notes:**

FPL - Pearl Collection  
 30 mg, beta under B3,5 shift from APT experiment, HSQC and HMBC all solvents  
 Some 1H shifts taken from HSBC expt.s

Compound Number 299

<sup>13</sup>C



beta-O-4, 5-O-4 trimer

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A $\gamma$	0.79 (0.79)	t	7.3
B $\gamma$	0.94 (0.97)	t	7.3
B $\beta$ --A $\beta$	1.6-1.75 (1.66-1.76)	m	
C $\gamma$ Ac Me	1.78 (1.86)	d	1.0
A $\alpha$ Ac Me	1.93 (2.01)	s	
C $\alpha$ Ac Me	2.08 (2.10)	s	
C4 Ac Me	2.20 (2.28)	s	
B $\alpha$	2.60 (2.59)	m	
C OMe	3.70 (3.69)	d	2.2
B OMe	3.74 (3.72)	s	
A OMe	3.82 (3.76)	s	
C $\gamma$ 1	4.21 (4.26)	dd	4.2, 11.7
C $\gamma$ 2	4.41 (4.47)	dd	5.9, 11.7
C $\beta$	4.98 (4.90)	m	
A $\alpha$	5.44 (5.44)	t	7.3
C $\alpha$	6.13 (6.14)	d	4.4
A6	6.24 (6.27)	bs	
A2	6.69 (6.52)	bs	
B6	6.80 (6.70)	dd	2.0, 8.1
B5	6.90 (6.80)	d	8.1
C6	6.97 (6.92)		
C5	6.98 (6.91)		
B2	6.99 (6.77)		
C2	7.15 (7.02)	bs	

**Notes:**

SR X 125D1-2

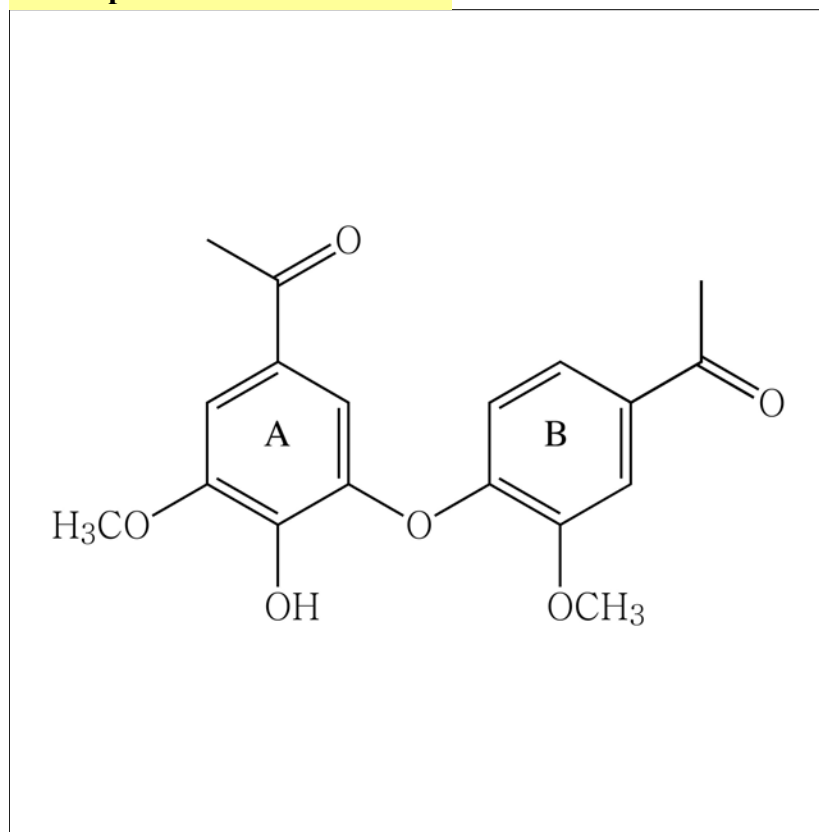
B5 and B6 change order in CDCl<sub>3</sub>

<sup>1</sup>H shifts in CDCl<sub>3</sub> in ( )s after acetone shift

C6, C5 and B2 shifts from HSQC

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A $\gamma$	9.83	64	10.08	43		
B $\gamma$	13.85	53	14.04	38		
C4 Ac Me	20.68	89	20.46	55		
C $\gamma$ Ac Me	20.68	89	20.53	32		
$\alpha$ Ac Me	21.03	55	20.89	44		
$\alpha$ Ac Me	21.19	51	20.95	41		
B $\beta$	24.63	79	25.38	55		
A $\beta$	29.27	76	30.02	98		
B $\alpha$	37.89	87	38.39	62		
OMe	55.63	70	56.11	62		
OMe	55.75	82	56.11	62		
A OMe	56.01	83	56.42	49		
C $\gamma$	62.77	56	63.39	55		
C $\alpha$	74.22	75	75.20	37		
A $\alpha$	77.03	68	77.30	51		
C $\beta$	80.66	55	81.27	41		
A2	104.53	55	105.23	39		
A6	108.03	39	107.60	26		
C2	111.51	44	112.18	46		
B2	112.97	58	114.27	62		
C6	119.46	62	120.06	55		
B6	120.75	57	121.57	57		
B5	120.43	81	121.75	31		
C5	122.30	75	123.25	58		
A4	135.88	39	136.38	6		
C1	136.35	38	136.94	12		
A1	136.35	38	137.60	8		
C4	139.38	28	140.66	4		
B1	139.64	31	140.90	10		
B4	142.32	24	143.02	5		
B3	150.58	27	152.04	17		
C3	150.78	31	152.04	17		
A5	150.98	32	152.12	8		
A3	153.40	32	154.40	10		
C4 Ac C=O	168.98	29	168.91	9		
C $\alpha$ Ac C=O	169.67	32	169.96	8		
A $\alpha$ Ac C=O	170.28	32	170.17	7		
C $\gamma$ Ac C=O	170.93	30	170.66	7		

Compound Number 300

<sup>13</sup>C

5-O-4 diacetovanillone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Aβ	25.92	49	26.33	44	26.32	55
Bβ	26.09	46	26.47	43	26.51	44
B OMe	56.17	68	56.36	49	55.79	49
A OMe	56.50	66	56.76	49	56.23	47
A2	107.30	65	108.56	45	108.09	35
B2	112.30	47	112.68	44	111.65	34
A6	114.80	61	115.45	47	114.62	34
B5	116.82	47	116.80	44	115.44	34
B6	122.48	75	123.22	47	122.51	38
A1	129.24	16	129.73	13	127.91	26
B1	133.33	9	133.65	12	132.01	18
A5	142.21	6	143.16	8	141.97	15
A4	142.41	10	144.09	7	143.37	19
A3	148.16	10	149.67	9	148.83	17
B3	150.08	9	150.73	9	149.09	20
B4	150.43	10	151.69	8	150.44	14
Aα	195.70	10	195.93	11	195.87	18
Bα	196.37	9	196.55	10	196.50	17

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Aβ	2.49 (2.48)	s	
Bβ	2.53 (2.56)	s	
OMe	3.93 (3.95)	s	
OMe	3.95 (3.99)	s	
B5	6.78 (6.85)	d	8.3
A6	7.30 (7.28)	d	2.0
A2	7.47 (7.41)	d	2.0
B6	7.56 (7.49)	dd	8.3, 2.0
B2	7.64 (7.63)	d	2.0
<u>DMSO</u>			
Aβ	2.49		
Bβ	2.55		
OMe	3.90		
OMe	3.92		
B5	6.67		
A6	7.25		
A2	7.42		
B6	7.54		
B2	7.59		
A4-OH	10.00		

**Notes:**

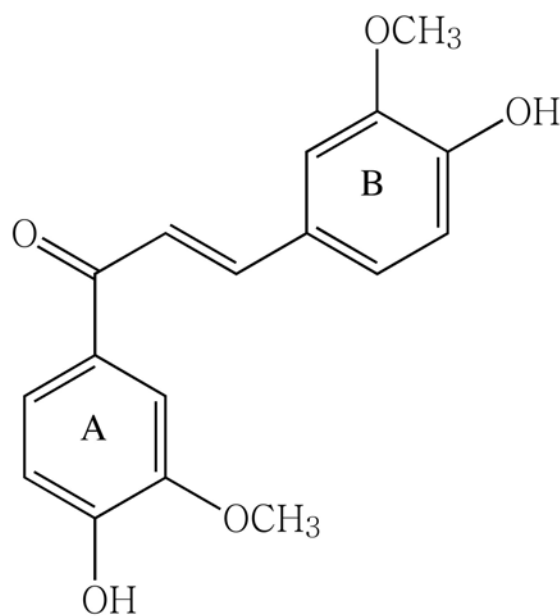
SRX-146C

A4-OH has strong HMBC correlations in DMSO to A3,4,5



Compound Number 301

<sup>13</sup>C



guaiacyl chalcone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.99	108	56.34	45	55.70	45
OMe	56.09	122	56.40	42	55.84	45
B2	110.07	126	111.95	50	111.79	26
A2	110.50	125	112.05	49	111.57	25
A5	113.71	121	115.36	35	114.92	31
B5	114.85	126	116.14	33	115.60	33
β	119.25	122	119.87	47	118.71	33
6	123.13	130	124.15	56	123.55	32
6	123.49	146	124.21	54	123.70	35
B1	127.62	18	128.33	7	126.51	25
A1	131.22	12	131.84	7	129.85	21
γ	144.33	122	144.36	47	143.60	36
A3	146.79	15	148.54	5	147.78	17
B3	146.85	15	148.74	4	147.96	17
B4	148.12	20	150.10	5	149.41	23
A4	150.21	22	152.17	4	151.66	22
α	188.62	13	187.90	7	187.02	19

<sup>1</sup>H (acetone)

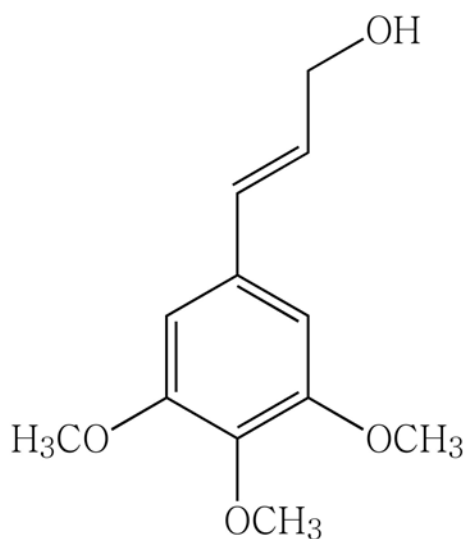
Atom	H Shifts	Mult	J
OMe	3.93 (3.87)	bs	
B5	6.83 (6.83)	d	8.3
A5	6.93 (6.97)	d	8.3
B6	7.29 (7.28)	dd	1.7, 8.3
B2	7.49 (7.49)	d	1.7
A2	7.61 (7.61)	d	1.7
γ	7.63 (7.63)	d	15.4
β	7.76 (7.76)	d	15.4
A6	7.80 (7.80)	dd	1.7, 8.3
<u>CDCl<sub>3</sub></u>			
OMe	3.93	s	
OMe	3.95	s	
5	6.93	d	8.3
5	6.97	d	8.3
B2	7.10	d	1.96
B6	7.20	dd	1.96, 8.3
β	7.37	d	15.4
A2	7.61	d	obscured
A6	7.62	dd	obscured
γ	7.73	d	15.4

**Notes:**

FPL collection  
A2 and B2 change order in DMSO  
<sup>1</sup>H DMSO chemical shifts in ( )'s  
<sup>13</sup>C C6 shift assignments not confirmed, also C5s in CDCl<sub>3</sub>

Compound Number 302

<sup>13</sup>C



3,4,5-trimethoxy cinnamyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
3 OMe	55.99	145	56.33	140	55.78	70
5 OMe	55.99	145	56.33	140	55.78	70
4 OMe	60.85	45	60.53	37	59.99	28
γ	63.47	70	63.17	67	61.43	31
2	103.47	109	104.55	146	103.43	60
6	103.47	109	104.55	146	103.43	60
α	128.04	70	130.11	71	128.55	31
β	130.92	66	130.32	66	130.16	31
1	132.40	16	133.87	11	132.65	17
4	137.78	4	138.76	3	136.83	6
3	153.22	26	154.41	22	152.94	26
5	153.22	26	154.41	22	152.94	26

<sup>1</sup>H (acetone)

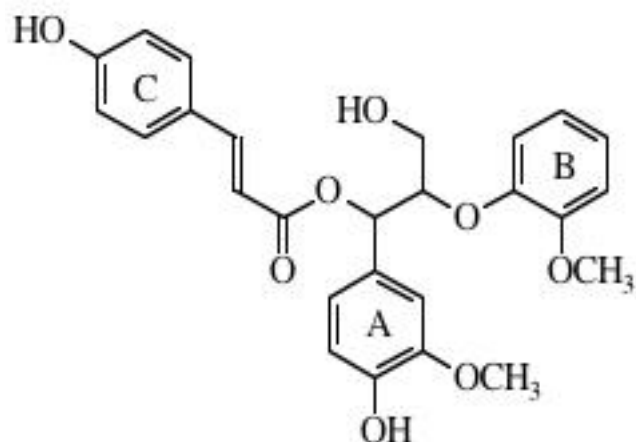
Atom	H Shifts	Mult	J
4 OMe	3.69 (3.81)	s	
3,5 OMe	3.82 (3.83)	s	
OH	3.89	t	5.4
γ	4.21 (4.28)	dt	1.5, 5.4
β	6.32 (6.24)	dt	15.9, 5.2
α	6.53 (6.50)	bt	15.9, 1.5
2,6	6.72 (6.57)	s	
<u>DMSO</u>			
4 OMe	3.64		
3,5 OMe	3.78		
γ	4.10		
β	6.33		
α	6.47		
2,6	6.72		

**Notes:**

S. Ralph

Compound Number 1001

<sup>13</sup>C



*threo*

3-(4-Hydroxyphenyl)acrylic acid 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	3.51	dd	7.2, 5.3
γ2	3.68	dd	7.2, 3.7
β	4.58	m	
α	6.16	d	7.3
C β	6.30	d	16.0
C α	7.51	d	15.6

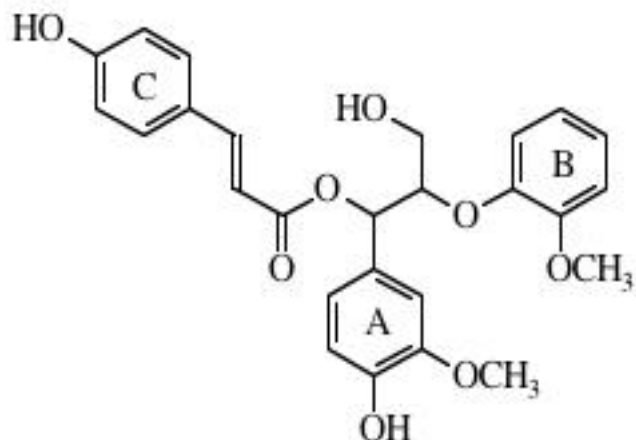
**Notes:**

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.25			
OMe			56.31			
γ			61.76			
α			75.88			
β			85.20			
A2			112.04			
B2			113.58			
A5			115.58			
C β			115.81			
C3			116.64			
C5			116.64			
B5			119.36			
A6			121.23			
B6			121.78			
B1			123.24			
C1			127.04			
A1			130.16			
C2			130.91			
C6			130.91			
C α			145.39			
A4			147.48			
A3			148.18			
B4			149.82			
B3			151.87			
C4			160.48			
C γ			166.51			

Compound Number 1002

<sup>13</sup>C



*erythro*

3-(4-Hydroxyphenyl)acrylic acid 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	3.68	dd	11.7, 4.8
γ2	3.79	dd	11.8, 5.7
β	4.66	m	
α	6.12	d	4.8
C β	6.35	d	16.0
C α	7.56	d	16.0

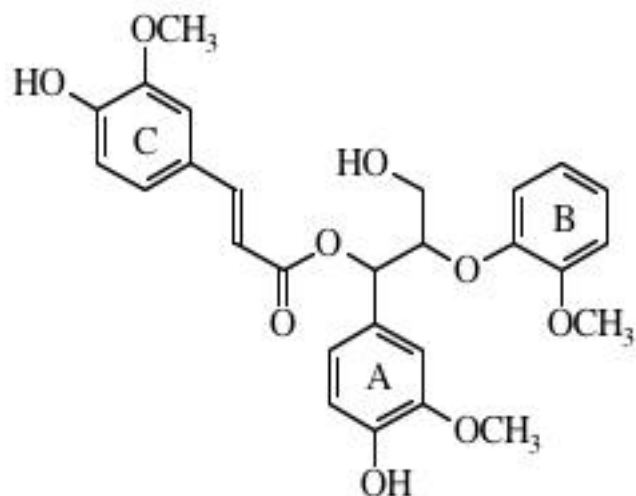
Notes:

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.29			
OMe			56.29			
γ			61.49			
α			75.08			
β			84.09			
A2			112.57			
B2			113.67			
A5			115.21			
C β			115.62			
C3			116.67			
C5			116.67			
B5			119.18			
B6			121.75			
A6			121.79			
B1			123.31			
C1			126.97			
A1			129.64			
C2			130.96			
C6			130.96			
C α			145.65			
A4			147.35			
A3			147.99			
B4			149.22			
B3			151.86			
C4			160.59			
C γ			166.32			

Compound Number 1003

<sup>13</sup>C



*threo*

3-(4-Hydroxy-3-methoxyphenyl)acrylic acid 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	3.52	dd	11.9, 5.3
γ2	3.69	dd	11.9, 3.8
β	4.58	m	
α	6.16	d	2.3
C β	6.34	d	15.9
C α	7.49	d	15.9

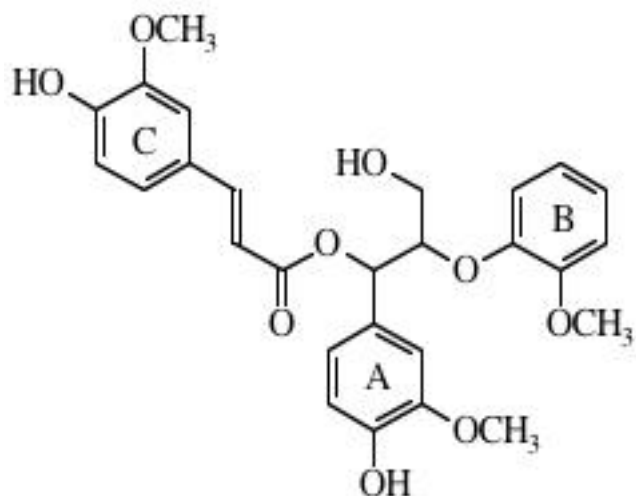
**Notes:**

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.22			
OMe			56.31			
OMe			56.31			
γ			61.74			
α			75.87			
β			85.13			
C2			111.26			
A2			112.04			
B2			113.54			
A5			115.59			
C β			115.99			
C5			116.03			
B5			119.25			
A6			121.20			
B6			121.76			
B1			123.21			
C6			123.91			
C1			127.44			
A1			130.15			
C α			145.77			
A4			147.50			
A3			148.19			
C3			148.70			
B4			149.78			
C4			150.02			
B3			151.82			
C γ			166.55			

Compound Number 1004

<sup>13</sup>C



*erythro*

3-(4-Hydroxy-3-methoxyphenyl)acrylic acid 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ 1	3.60	dd	11.7, 4.8
γ 2	3.79	dd	11.5, 5.8
β	4.67	m	
α	6.13	d	4.8
C β	6.39	d	15.9
C α	7.55	d	15.9

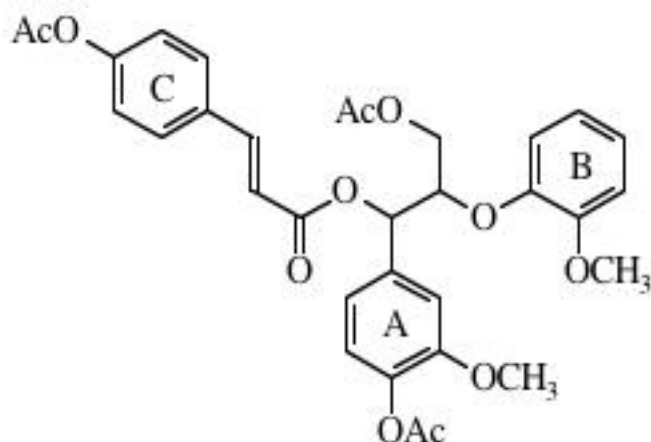
**Notes:**

R. Helm  
CDCl<sub>3</sub> column is D<sub>2</sub>O/Acetone-d<sub>6</sub>

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
	<b>Acet /D<sub>2</sub>O</b>					
OMe	56.30		56.28			
OMe	56.31		56.30			
OMe	56.33		56.32			
γ	61.38		61.48			
α	75.10		75.09			
β	84.00		84.02			
C2	111.32		111.29			
A2	112.64		112.60			
B2	113.68		113.66			
A5	115.17		115.22			
Cβ	115.84		115.83			
C5	116.01		116.04			
B5	119.07		119.10			
B6	121.77		121.96			
A6	121.82		121.80			
B1	123.28		123.30			
C6	124.00		123.99			
C1	127.40		127.40			
A1	129.62		129.63			
C α	146.02		146.02			
A4	147.32		147.36			
A3	147.97		147.98			
C3	148.72		148.71			
B4	149.23		149.19			
C4	150.08		150.09			
B3	151.85		151.84			
C γ	166.35		166.34			

Compound Number 1005

<sup>13</sup>C



*threo*

3-(4-Acetoxyphenyl)acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.08	dd	11.9, 5.6
γ2	4.31	dd	11.9, 4.1
β	4.89	m	
α	6.24	d	6.6
C β	6.52	d	16.0
C α	7.63	d	16.0

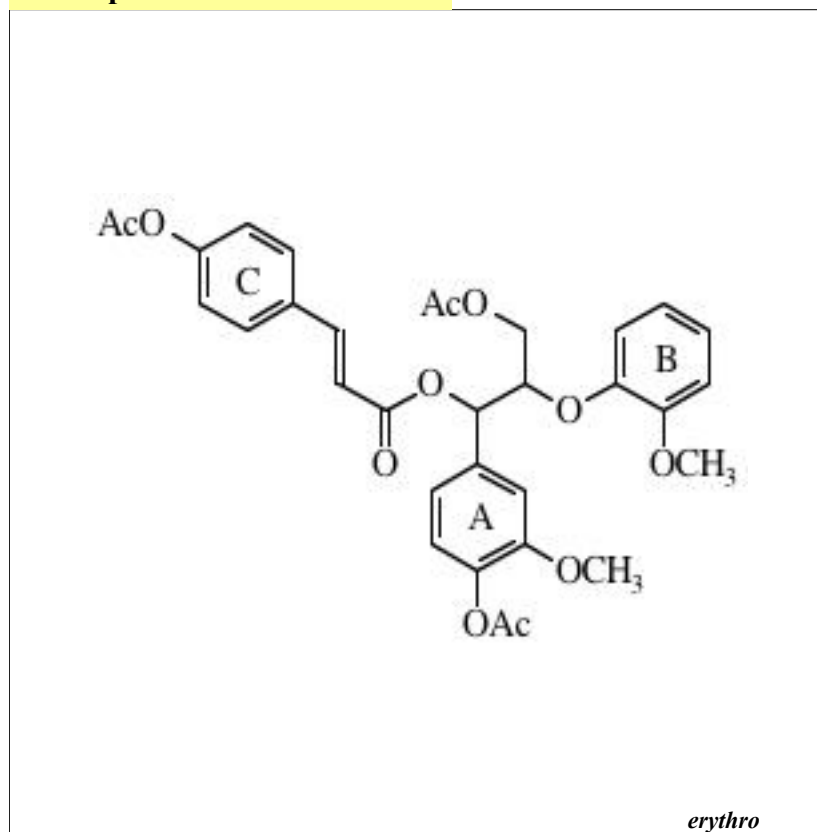
**Notes:**

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
Ac Me			20.60			
Ac Me			20.94			
OMe			56.16			
OMe			56.32			
γ			63.70			
α			75.81			
β			80.87			
A2			112.71			
B2			113.66			
Cβ			118.76			
B5			119.33			
A6			120.31			
B6			121.65			
C3			123.21			
C5			123.21			
A5			123.61			
B1			123.78			
C2			130.22			
C6			130.22			
C1			132.82			
A1			136.74			
A4			140.95			
C α			144.91			
B4			149.12			
B3			151.89			
A3			152.24			
C4			153.52			
C γ			165.90			
Ac C=O			168.86			
Ac C=O			169.42			
Ac C=O			170.69			

Compound Number 1006

<sup>13</sup>C



3-(4-Acetoxyphenyl) acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ 1	4.29	dd	11.9, 4.4
γ2	4.41	dd	11.9, 6.1
β	4.93	m	
α	6.22	d	4.7
C β	6.61	d	16.1
C α	7.71	d	16.1

**Notes:**

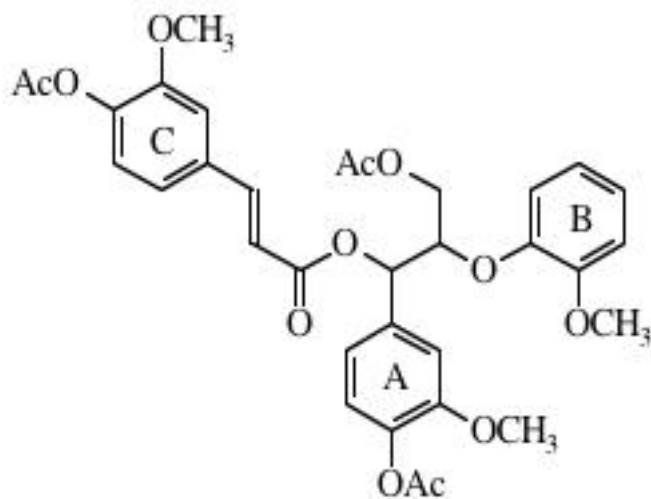
R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.61			
Ac Me			20.94			
OMe			56.22			
OMe			56.30			
γ			63.16			
α			74.96			
β			80.44			
A2			112.79			
B2			113.80			
C β			118.67			
B5			119.89			
A6			120.45			
B6			121.68			
C3			123.24			
C5			123.24			
A5			123.40			
B1			124.08			
C2			130.28			
C6			130.28			
C1			132.82			
A1			136.63			
A4			140.83			
C α			145.12			
B4			148.39			
B3			152.06			
A3			152.14			
C4			153.58			
C γ			165.79			
Ac C=O			168.89			
Ac C=O			169.42			
Ac C=O			170.75			



Compound Number 1007

<sup>13</sup>C



*threo*

3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.09	dd	11.9, 5.6
γ2	4.30	dd	11.9, 4.1
β	4.89	m	
α	6.24	d	6.5
C β	6.56	d	
C α	7.60	d	15.8

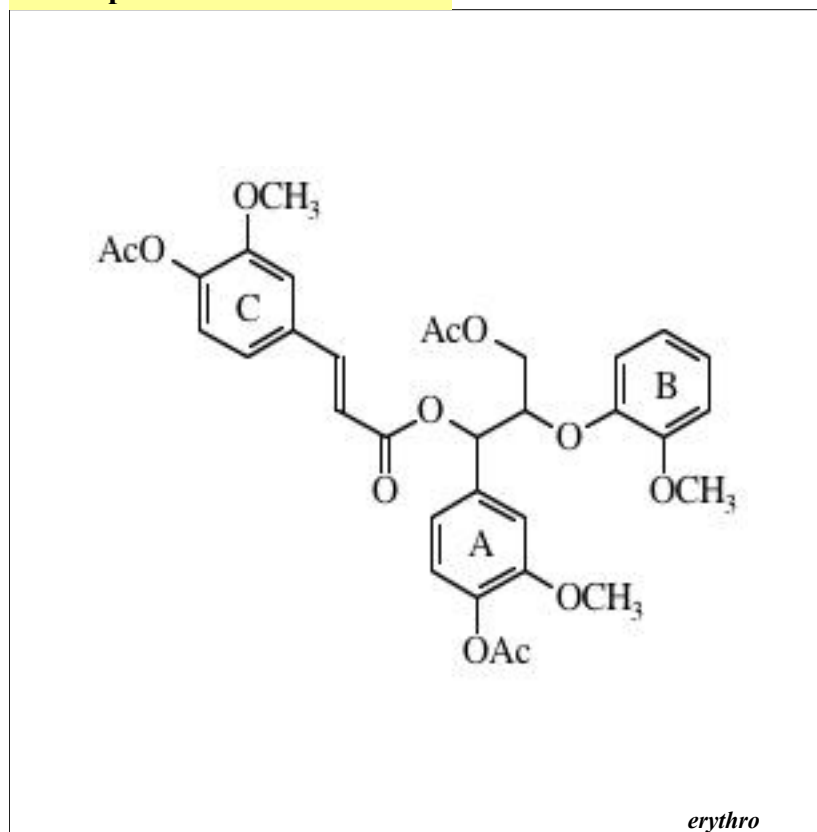
**Notes:**

R. Helm  
16mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
Ac Me			20.44			
Ac Me			20.60			
OMe			56.16			
OMe			56.32			
OMe			56.40			
γ			63.70			
α			75.82			
β			80.88			
C2			112.42			
A2			112.72			
B2			113.65			
C β			118.85			
B5			119.30			
A6			120.30			
B6			121.65			
C6			122.27			
A5			123.61			
B1			123.77			
C5			124.12			
C1			134.15			
A1			136.77			
A4			140.95			
C4			142.76			
C α			145.36			
B4			149.13			
B3			151.88			
A3			152.24			
C3			152.67			
C γ			165.96			
Ac C=O			168.79			
Ac C=O			168.86			
Ac C=O			170.69			

Compound Number 1008

<sup>13</sup>C



3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.28	dd	11.8, 4.4
γ2	4.40	dd	11.8, 6.1
β	4.96	m	
α	6.22	d	4.7
C α	6.65	d	16.0
C β	7.68	d	16.0

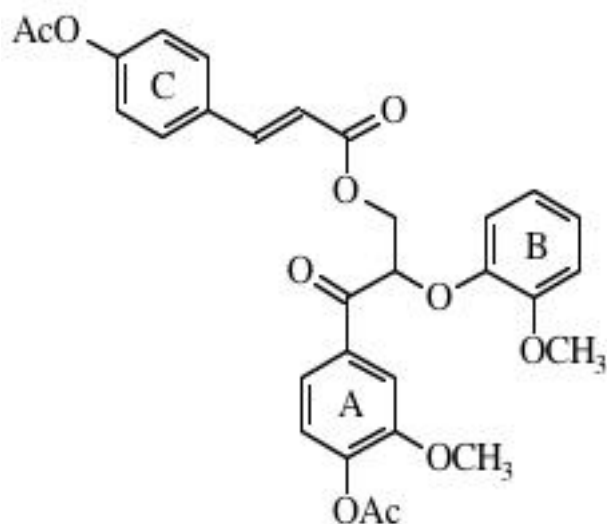
**Notes:**

R. Helm  
19mg  
Acetone run at 300 K

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
Ac Me			20.44			
Ac Me			20.61			
OMe			56.22			
OMe			56.30			
OMe			56.41			
γ			63.16			
α			74.97			
β			80.39			
C2			112.46			
A2			112.79			
B2			113.79			
C β			118.75			
B5			119.85			
A6			120.43			
B6			121.68			
C6			122.35			
A5			123.41			
B1			124.08			
C5			124.14			
C1			134.13			
A1			136.61			
A4			140.83			
C4			142.82			
C α			145.57			
B4			148.37			
B3			152.05			
A3			152.14			
C3			152.69			
C γ			165.89			
Ac C=O			168.79			
Ac C=O			168.90			
Ac C=O			170.76			

Compound Number 1009

<sup>13</sup>C



3-(4-Acetoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)-3-oxopropyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.62	dd	12.0, 6.5
γ2	4.81	dd	12.0, 3.8
β	5.91	dd	6.5, 3.8
C β	6.48	d	16.0
C α	7.60	d	16.0

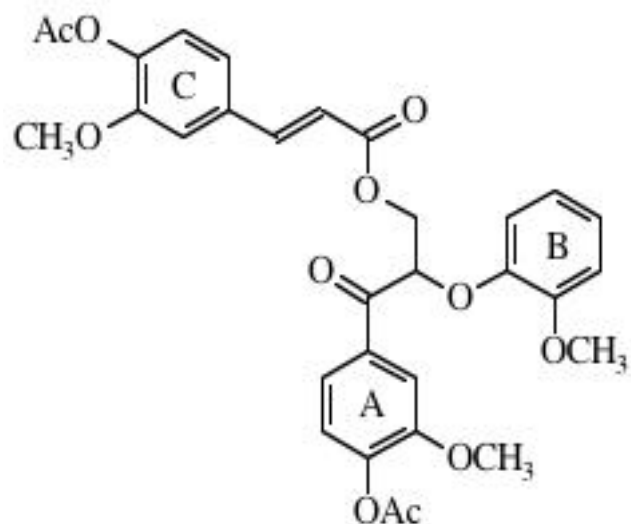
**Notes:**

R. Helm  
25.5mg  
acetone-d6 at 300 K

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.94			
OMe			56.10			
OMe			56.42			
γ			64.97			
β			80.56			
A2			113.46			
B2			113.84			
C β			118.32			
B5			118.69			
B6			121.64			
A6			122.88			
C3			123.24			
C5			123.24			
A5			124.02			
B1			124.07			
C2			130.27			
C6			130.27			
C1			132.68			
A1			134.86			
C α			145.09			
A4			145.34			
B4			147.84			
B3			151.42			
A3			152.49			
C4			153.58			
C γ			166.76			
Ac C=O			168.58			
Ac C=O			169.42			
α			195.13			

Compound Number 1010

<sup>13</sup>C



3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)-3-oxopropyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.61	dd	12.0, 6.5
γ2	4.81	dd	12.0, 3.8
β	5.91	dd	6.5, 3.8
Cβ	6.52	d	16.0
C α	7.58	d	16.0

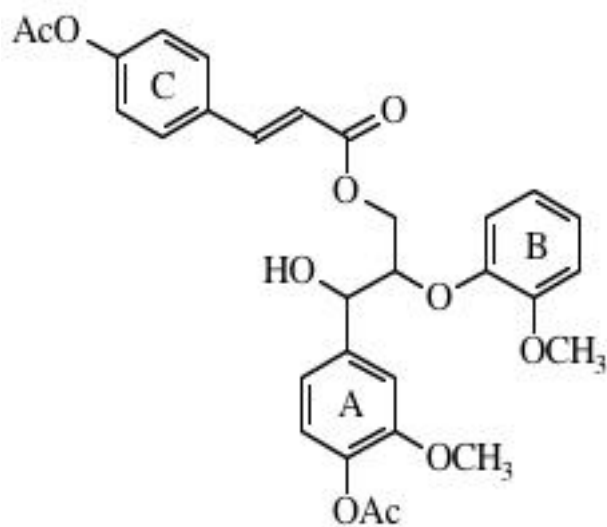
**Notes:**

R. Helm  
25mg  
300k, acetone-d6

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
Ac Me			20.44			
OMe			56.10			
OMe			56.40			
OMe			56.43			
γ			64.93			
β			80.54			
C2			112.41			
A2			113.48			
B2			113.83			
C β			118.44			
B5			118.62			
B6			121.64			
C6			122.35			
A6			122.87			
A5			124.03			
B1			124.06			
C5			124.15			
C1			134.01			
A1			134.85			
C4			142.83			
A4			145.35			
C α			145.50			
B4			147.82			
B3			151.40			
A3			152.50			
C3			152.69			
C γ			166.81			
Ac C=O			168.58			
Ac C=O			168.80			
α			195.11			

Compound Number 1011

<sup>13</sup>C



*threo*

3-(4-Acetoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	5.08	d	4.3
α OH	4.75		
β	4.64	m	
γ1	4.17	dd	11.9, 6.3
γ2	4.44	dd	11.9, 3.7
C β	6.46	d	16.1
C α	7.54	d	16.0

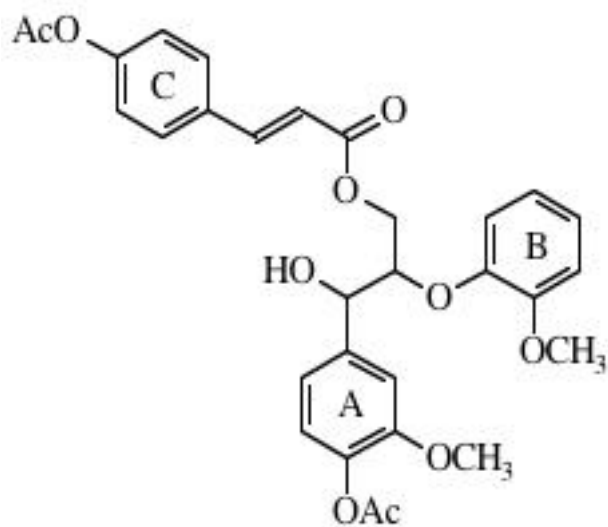
**Notes:**

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			64.28			
α			73.58			
β			83.80			
C β			118.73			
C α			144.57			
C γ			166.68			

Compound Number 1012

<sup>13</sup>C



*erythro*

3-(4-Acetoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	5.09	d	4.4
α OH	4.80		
β	4.70	m	
γ1	4.45	dd	11.8, 3.7
γ2	4.52	dd	11.8, 6.3
C β	6.41	d	16.1
C α	7.50	d	16.1

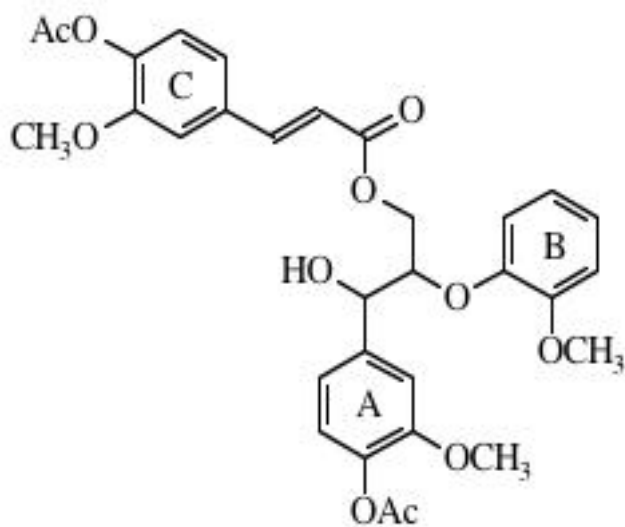
**Notes:**

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			63.95			
α			73.16			
β			83.22			
C β			118.83			
C α			144.36			
C γ			166.79			

Compound Number 1013

<sup>13</sup>C



*threo*

3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	5.08	d	4.2
α OH	4.75		
β	4.64	m	
γ1	4.17	dd	11.9, 6.2
γ2	4.44	dd	11.9, 3.7
Cβ	6.49	d	16.0
C α	7.51	d	16.0

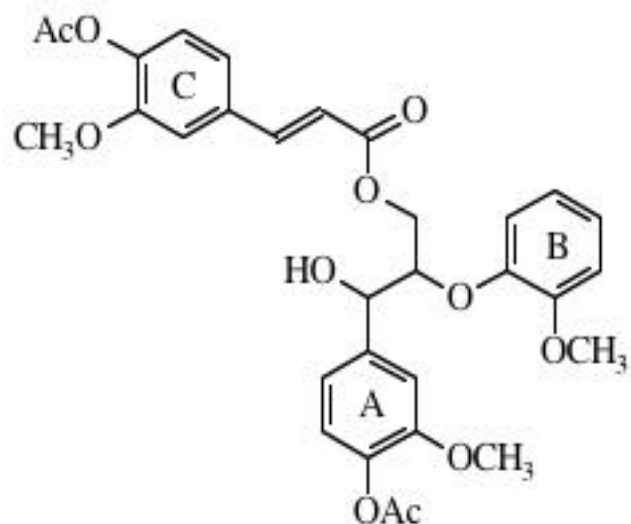
**Notes:**

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			64.27			
α			73.56			
β			83.73			
C β			118.81			
C α			144.94			
C γ			166.72			

Compound Number 1014

<sup>13</sup>C



*erythro*

3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	5.08	d	4.4
α OH	4.79		
β	4.70	m	
γ1	4.45	dd	11.8, 3.7
γ2	4.58	dd	11.8, 6.2
C β	6.44	d	16.0
C α	7.47	d	16.0

**Notes:**

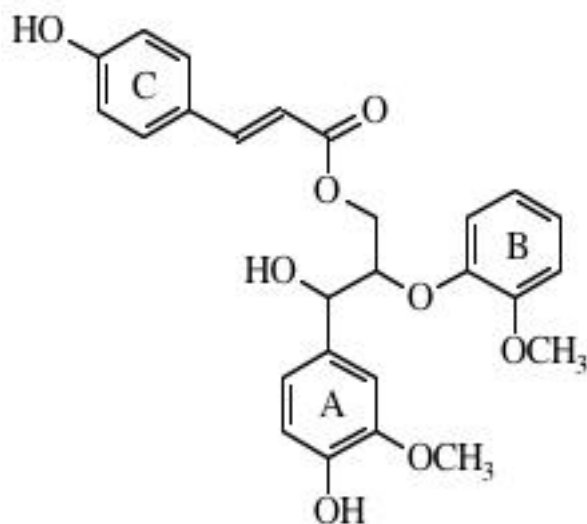
R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			63.93			
α			73.14			
β			83.18			
C β			118.91			
C α			144.79			
C γ			166.83			



Compound Number 1015

<sup>13</sup>C



*threo*

3-(4-Hydroxyphenyl) acrylic acid 3-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.10	dd	12.0, 6.2
γ2	4.36	dd	12.0, 3.5
β	4.56	m	
α OH	4.59	d	3.9
α	4.97	dd	6.2, 3.9
C β	6.29	d	16.0
C α	7.47	d	16.0

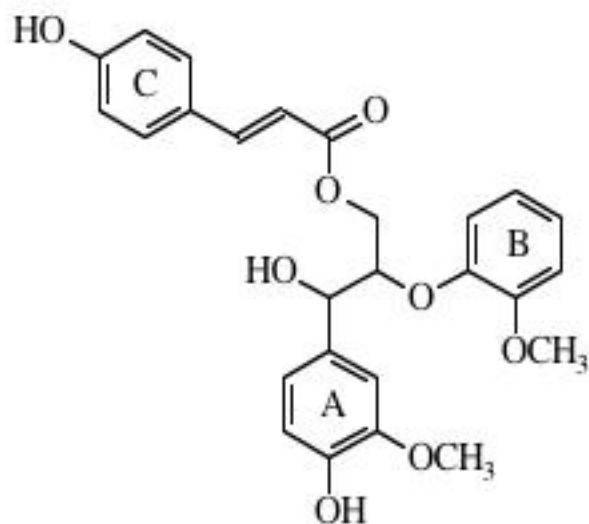
**Notes:**

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.19			
OMe			56.25			
γ			64.18			
α			73.95			
β			84.52			
A2			111.46			
B2			113.59			
C β			115.22			
A5			115.34			
C3			116.66			
C5			116.66			
B5			119.42			
A6			120.56			
B6			121.81			
B1			123.55			
C1			126.89			
C2			130.94			
C6			130.94			
A1			133.16			
C α			145.57			
A4			147.02			
A3			148.09			
B4			149.36			
B3			151.79			
C4			160.63			
C γ			167.15			

Compound Number 1016

<sup>13</sup>C



*erythro*

3-(4-Hydroxyphenyl) acrylic acid 3-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.39	dd	11.8, 3.6
γ2	4.46	dd	11.8, 6.6
β	4.66	m	
α	4.91	d	4.9
C β	6.24	d	16.0
C α	7.42	d	16.0

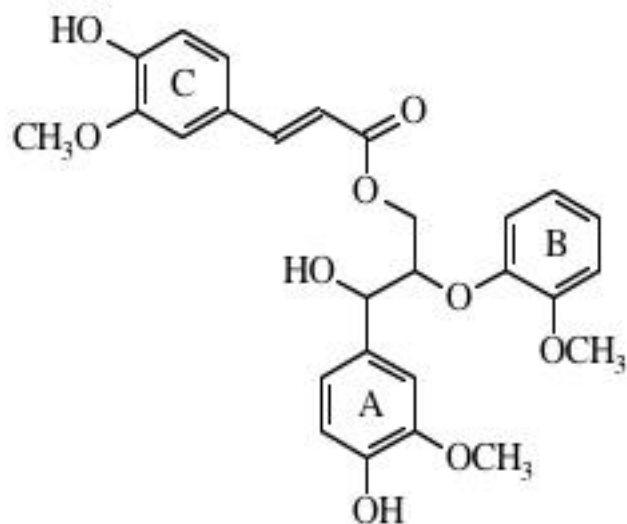
Notes:

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.20			
OMe			56.22			
γ			63.98			
α			73.28			
β			83.54			
A2			111.20			
B2			113.64			
C β			115.24			
A5			115.34			
C3			116.64			
C5			116.64			
B5			119.67			
A6			120.32			
B6			121.71			
B1			123.51			
C1			126.91			
C2			130.88			
C6			130.88			
A1			133.59			
C α			145.39			
A4			146.72			
A3			148.02			
B4			148.86			
B3			152.02			
C4			160.52			
C γ			167.28			

Compound Number 1017

<sup>13</sup>C



*threo*

3-(4-Hydroxy-3-methoxyphenyl) acrylic acid 3-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	4.96	d	6.3
β	4.56	m	
γ2	4.36	dd	12.0, 3.5
γ1	4.10	dd	12.0, 6.2
C β	6.33	d	16.0
C α	7.45	d	16.0

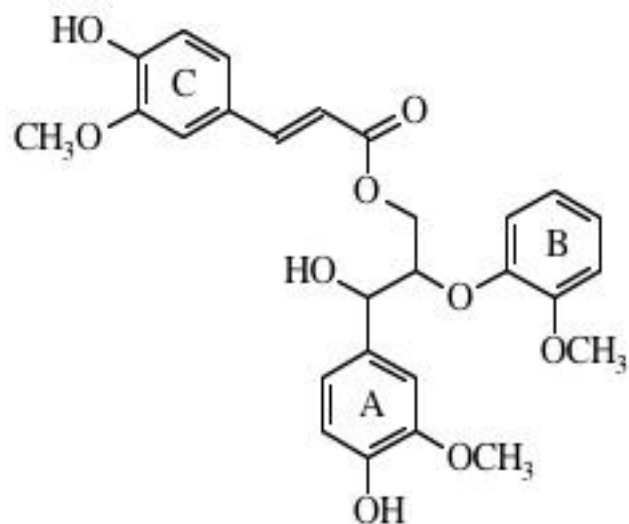
Notes:

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.20			
OMe			56.26			
OMe			56.32			
γ			64.16			
α			73.94			
β			84.48			
C2			111.37			
A2			111.46			
B2			113.60			
A5			115.33			
C β			115.47			
C5			116.05			
B5			119.39			
A6			120.56			
B6			121.81			
B1			123.54			
C6			123.90			
C1			127.35			
A1			133.16			
C α			145.91			
A4			147.01			
A3			148.08			
C3			148.71			
B4			149.36			
C4			150.09			
B3			151.80			
C γ			167.14			

Compound Number 1018

<sup>13</sup>C



*erythro*

3-(4-Hydroxy-3-methoxyphenyl) acrylic acid 3-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.40	dd	3.7,
γ2	4.46	dd	6.7,
β	4.66	m	
α	4.97	d	4.9
C α	6.28	d	15.9
C β	7.40	d	15.9

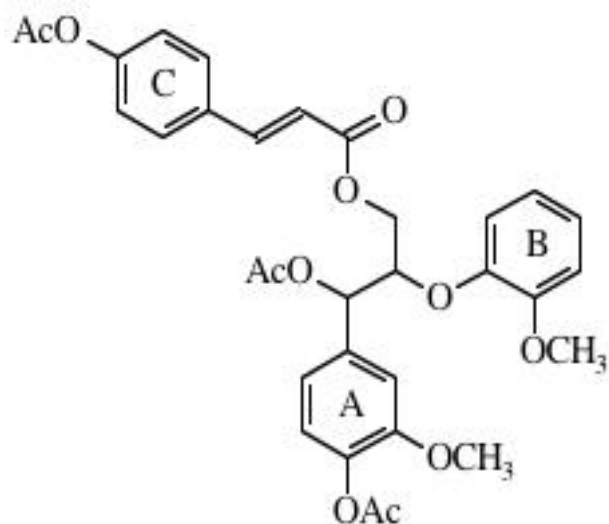
**Notes:**

R. Helm  
27mg  
300K, acetone-d6

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.23			
OMe			56.23			
OMe			56.31			
γ			63.94			
α			73.26			
β			83.57			
A2			111.21			
C2			111.29			
B2			113.66			
A5			115.25			
C β			115.59			
C5			116.03			
B5			119.63			
A6			120.31			
B6			121.73			
B1			123.49			
C6			123.86			
C1			127.37			
A1			133.63			
C α			145.74			
A4			146.74			
A3			148.05			
C3			148.70			
B4			148.86			
C4			150.04			
B3			152.04			
C γ			167.28			

Compound Number 1019

<sup>13</sup>C



*threo*

3-(4-acetoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.17	dd	5.6,
γ2	4.40	dd	4.0,
β	4.88	m	
α	6.18	d	6.5
C β	6.51	d	16.0
C α	7.57	d	16.1

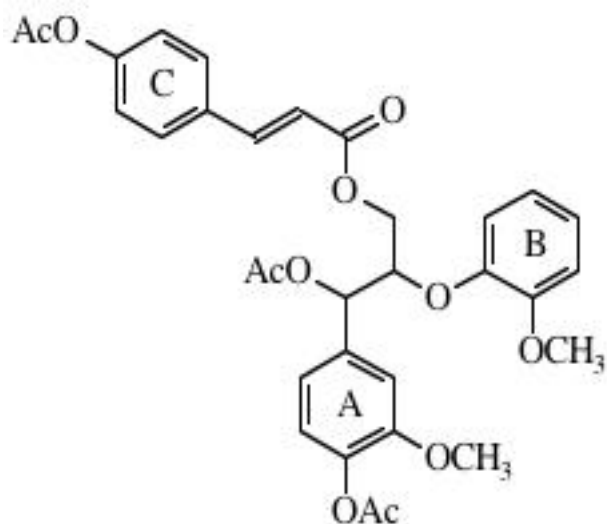
**Notes:**

R. Helm  
18mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.94			
Ac Me			20.94			
OMe			56.20			
OMe			56.28			
γ			63.94			
α			75.54			
β			80.89			
A2			112.70			
B2			113.73			
C β			118.57			
B5			119.36			
A6			120.32			
B6			121.69			
C3			123.21			
C5			123.21			
A5			123.59			
B1			123.81			
C2			130.25			
C6			130.25			
C1			132.81			
A1			136.71			
A4			140.91			
C α			144.75			
B4			149.12			
B3			151.90			
A3			152.22			
C4			153.52			
C γ			166.61			
Ac C=O			168.87			
Ac C=O			169.43			
Ac C=O			170.02			

Compound Number 1020

<sup>13</sup>C



*erythro*

3-(4-acetoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.40	dd	11.9, 4.2
γ2	4.48	dd	11.9, 5.9
β	4.92	m	
α	6.13	d	5.1
C β	6.45	d	16.0
C α	7.56	d	16.1

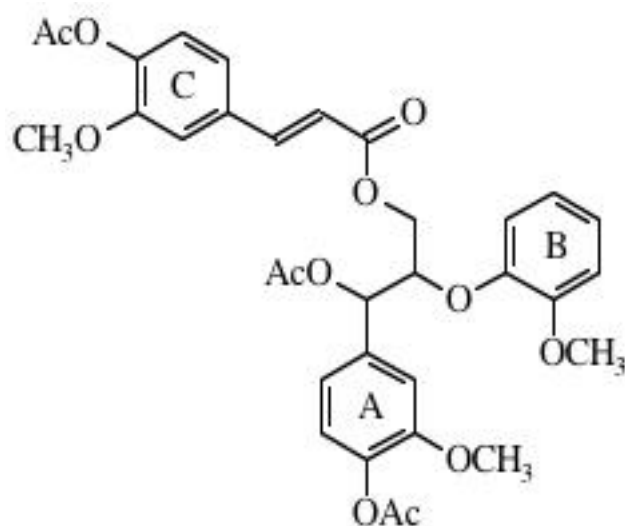
Notes:

R. Helm

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.46			
Ac Me			20.89			
Ac Me			20.94			
OMe			56.19			
OMe			56.26			
γ			63.33			
α			74.71			
β			80.52			
A2			112.74			
B2			113.76			
C β			118.54			
B5			119.99			
A6			120.44			
B6			121.64			
C3			123.20			
C5			123.20			
A5			123.37			
B1			124.10			
C2			130.21			
C6			130.21			
C1			132.78			
A1			136.73			
A4			140.77			
C α			144.71			
B4			148.30			
B3			152.09			
A3			152.11			
C4			153.49			
C γ			166.60			
Ac C=O			168.89			
Ac C=O			169.41			
Ac C=O			169.92			

Compound Number 1021

<sup>13</sup>C



*threo*

3-(4-acetoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.16	dd	12.0, 5.6
γ2	4.40	dd	12.0, 3.9
β	4.88	m	
α	6.18	d	6.6
C β	6.55	d	16.0
C α	7.54	d	16.0

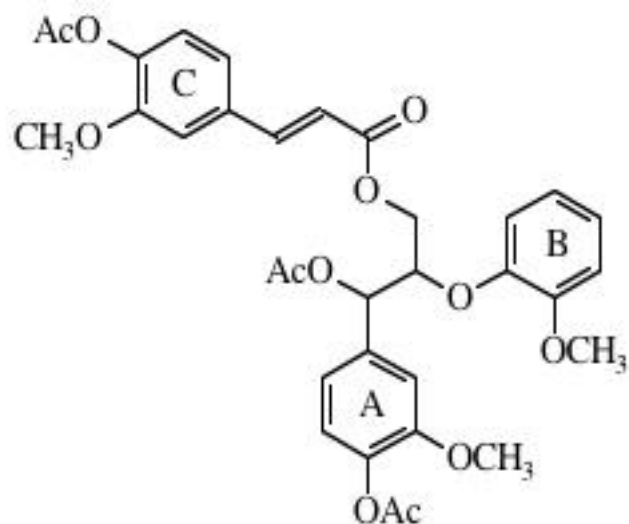
**Notes:**

R. Helm  
18.5mg  
300K

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.45			
Ac Me			20.95			
OMe			56.20			
OMe			56.29			
OMe			56.42			
γ			63.96			
α			75.57			
β			80.88			
C2			112.45			
A2			112.69			
B2			113.73			
C β			118.64			
B5			119.33			
A6			120.32			
B6			121.69			
C6			122.30			
A5			123.60			
B1			123.80			
C5			124.12			
C1			134.13			
A1			136.69			
A4			140.92			
C4			142.76			
C α			145.20			
B4			149.10			
B3			151.89			
A3			152.23			
C3			152.68			
C γ			166.68			
Ac C=O			168.82			
Ac C=O			168.89			
Ac C=O			170.05			

Compound Number 1022

<sup>13</sup>C



*erythro*

3-(4-acetoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.40	dd	11.9, 4.2
γ2	4.49	dd	11.9, 5.9
β	4.92	m	
α	6.13	d	5.1
C β	6.48	d	16.0
C α	7.53	d	16.0

**Notes:**

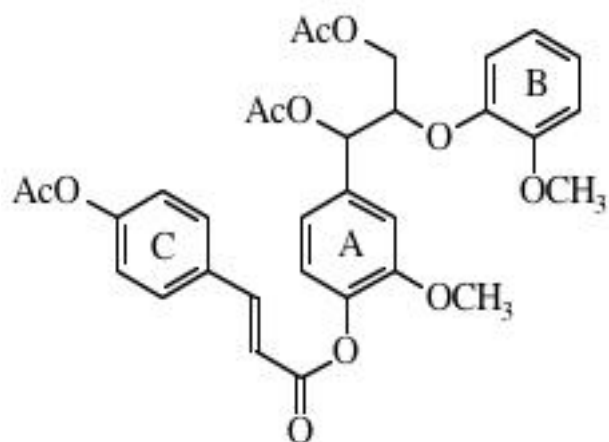
R. Helm  
18.5mg  
300K

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.45			
Ac Me			20.89			
OMe			56.19			
OMe			56.28			
OMe			56.40			
γ			63.33			
α			74.70			
β			80.50			
C2			112.44			
A2			112.74			
B2			113.77			
C β			118.63			
B5			119.97			
A6			120.44			
B6			121.65			
C6			122.25			
A5			123.38			
B1			124.41			
C5			124.41			
C1			134.11			
A1			136.73			
A4			140.79			
C4			142.74			
C α			145.16			
B4			148.30			
B3			152.10			
A3			152.12			
C3			152.67			
C γ			166.67			
Ac C=O			168.80			
Ac C=O			168.90			
Ac C=O			169.94			



Compound Number 1023

<sup>13</sup>C



*threo*

3-(4-acetoxyphenyl) acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy) propyl] phenyl ester □

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
C α	7.84	d	16.1
C β	6.74	d	16.1
α	6.14	d	6.5
β	4.81	m	
γ1	4.28	dd	11.9, 4.2
γ2	4.04	dd	11.9, 5.6

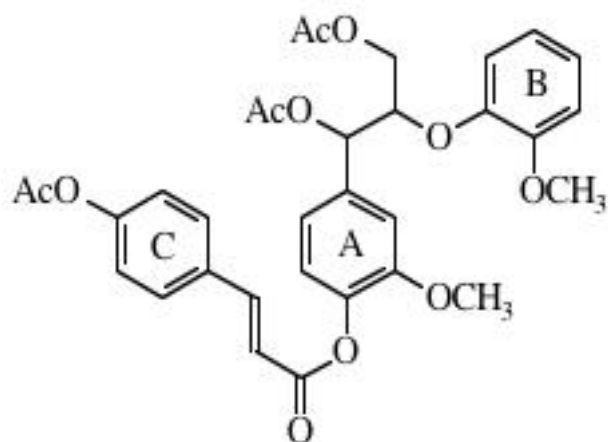
**Notes:**

R. Helm  
20.6mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.59			
Ac Me			20.92			
Ac Me			20.96			
OMe			56.30			
OMe			56.20			
γ			63.60			
α			75.40			
β			80.70			
A2			112.70			
B2			113.74			
C β			117.92			
B5			119.23			
A6			120.34			
B6			121.68			
C3			123.31			
C5			123.31			
A5			123.64			
B1			123.72			
C2			130.44			
C6			130.44			
C1			132.72			
A1			136.78			
A4			140.83			
C α			146.05			
B4			149.08			
B3			151.84			
A3			152.30			
C4			153.74			
C γ			164.91			
Ac C=O			169.42			
Ac C=O			170.01			
Ac C=O			170.68			

Compound Number 1024

<sup>13</sup>C



*erythro*

3-(4-acetoxyphenyl) acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy) propyl] phenyl ester □

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
C α	7.84	d	15.7
C β	6.74	d	16.1
α	6.10	d	5.1
β	4.85	m	
γ1	4.39	dd	11.9, 5.9
γ2	4.24	dd	11.9, 4.2

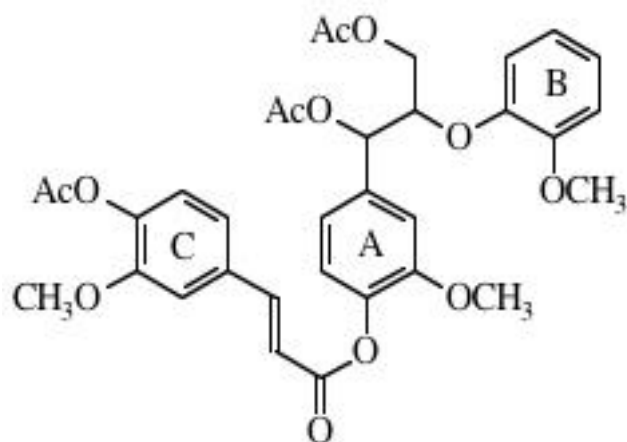
**Notes:**

R. Helm  
25mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.61			
Ac Me			20.87			
Ac Me			20.96			
OMe			56.20			
OMe			56.28			
γ			63.00			
α			74.60			
β			80.32			
A2			112.77			
B2			113.79			
C β			117.95			
B5			119.82			
A6			120.45			
B6			121.64			
C3			123.31			
C5			123.31			
A5			123.45			
B1			124.06			
C2			130.44			
C6			130.44			
C1			132.73			
A1			136.78			
A4			140.71			
C α			146.02			
B4			148.27			
B3			152.06			
A3			152.19			
C4			153.74			
C γ			164.95			
Ac C=O			169.42			
Ac C=O			169.92			
Ac C=O			170.76			

Compound Number 1025

<sup>13</sup>C



*threo*

3-(4-acetoxy-3-methoxyphenyl) acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy) propyl] phenyl ester □

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
C α	7.81	d	15.9
C β	6.77	d	16.0
α	6.14	d	6.5
β	4.81	m	
γ1	4.28	dd	11.9, 4.2
γ2	4.04	dd	11.9, 5.6

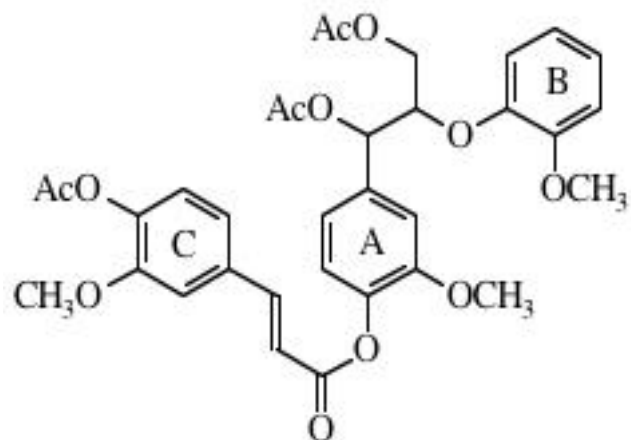
**Notes:**

R. Helm  
20.6mg  
std conditions

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.46			
Ac Me			20.59			
Ac Me			20.93			
OMe			56.20			
OMe			56.30			
OMe			56.44			
γ			63.61			
α			75.40			
β			80.70			
C2			112.61			
A2			112.70			
B2			113.75			
C β			118.03			
B5			119.23			
A6			120.34			
B6			121.68			
C6			122.52			
A5			123.64			
B1			123.72			
C5			124.20			
C1			134.04			
A1			136.77			
A4			140.83			
C4			142.98			
C α			146.46			
B4			149.08			
B3			151.84			
A3			152.30			
C3			152.76			
C γ			164.97			
Ac C=O			168.79			
Ac C=O			170.01			
Ac C=O			170.69			

Compound Number 1026

<sup>13</sup>C



*erythro*

3-(4-acetoxy-3-methoxyphenyl) acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy) propyl] phenyl ester □

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
C α	7.81	d	15.8
C β	6.78	d	16.0
α	6.10	d	5.1
β	4.85	m	
γ1	4.39	dd	11.9, 5.6
γ2	4.24	dd	11.9, 4.2

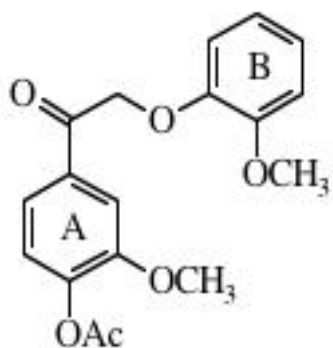
**Notes:**

R. Helm  
20.9mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.46			
Ac Me			20.60			
Ac Me			20.86			
OMe			56.20			
OMe			56.27			
OMe			56.44			
γ			63.00			
α			74.60			
β			80.32			
C2			112.60			
A2			112.77			
B2			113.79			
C β			118.06			
B5			119.82			
A6			120.45			
B6			121.64			
C6			122.52			
A5			123.44			
B1			124.06			
C5			124.20			
C1			134.04			
A1			136.77			
A4			140.70			
C4			142.97			
C α			146.44			
B4			148.27			
B3			152.06			
A3			152.19			
C3			152.76			
C γ			165.00			
Ac C=O			168.80			
Ac C=O			169.92			
Ac C=O			170.76			

Compound Number 1027

<sup>13</sup>C



Acetic acid 2-methoxy-4-[2-(2-methoxyphenoxy) acetyl] phenyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	5.43		

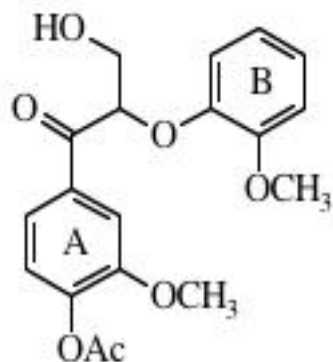
**Notes:**

R. Helm  
crystalline

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
OMe			56.21			
OMe			56.44			
β			72.50			
A2			112.66			
B2			113.63			
B5			115.72			
B6			121.54			
A6			122.13			
B1			122.79			
A5			123.99			
A1			134.59			
A4			145.22			
B4			148.97			
B3			150.88			
A3			152.58			
Ac C=O			168.63			
α			194.31			

Compound Number 1028

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
OMe			56.12			
OMe			56.35			
γ			63.90			
β			84.22			
A2			113.43			
B2			113.73			
B5			117.45			
B6			121.60			
A6			122.81			
B1			123.34			
A5			123.80			
A1			135.27			
A4			145.05			
B4			148.29			
B3			151.13			
A3			152.36			
Ac C=O			168.60			
α			196.80			

Acetic acid 4-[3-hydroxy-2-(2-methoxyphenoxy) propionyl]-2-methoxy phenyl ester

<sup>1</sup>H (acetone)

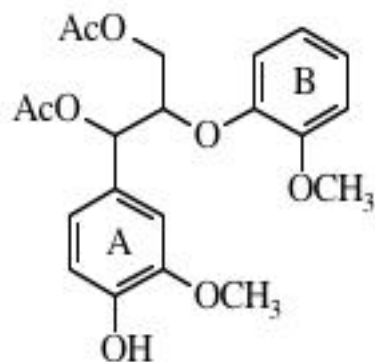
Atom	H Shifts	Mult	J
β	5.55		
γ's	4.09		

**Notes:**

R. Helm  
20mg  
300K acetone-d6

Compound Number 1029

<sup>13</sup>C



*threo*

Acetic acid 3-acetoxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	6.04	d	7.13
β	4.77	m	
γ1	4.21	dd	11.9, 3.6
γ2	3.95	dd	11.9, 5.6

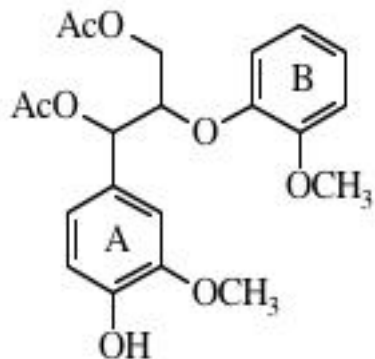
**Notes:**

R. Helm  
19.6mg  
acetone-d6

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.58			
Ac Me			20.97			
OMe			56.21			
OMe			56.30			
γ			63.86			
α			75.87			
β			80.99			
A2			111.89			
B2			113.77			
A5			115.64			
B5			119.13			
A6			121.19			
B6			121.67			
B1			123.57			
A1			129.17			
A4			147.71			
A3			148.26			
B4			149.31			
B3			151.83			
Ac C=O			169.95			
Ac C=O			170.66			

Compound Number 1030

<sup>13</sup>C



*erythro*

Acetic acid 3-acetoxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	5.99	d	4.99
β	4.81	m	
γ1	4.34	dd	11.9, 6.2
γ2	3.98	dd	11.9, 4.0

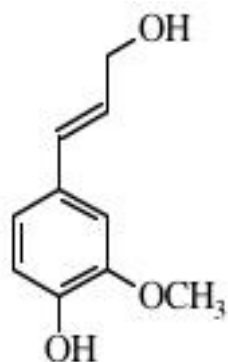
**Notes:**

R. Helm  
15mg  
std conditions

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.60			
Ac Me			20.90			
OMe			56.20			
OMe			56.29			
γ			63.30			
α			74.89			
β			80.40			
A2			112.01			
B2			113.78			
A5			115.41			
B5			119.56			
A6			121.28			
B6			121.61			
B1			123.83			
A1			129.07			
A4			147.53			
A3			148.15			
B4			148.49			
B3			152.00			
Ac C=O			169.90			
Ac C=O			170.75			



Compound Number 2001

<sup>13</sup>C*trans*

coniferyl alcohol  
4-hydroxy-3-methoxy cinnamyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.78	100	56.09	92	55.56	100
γ	63.66	67	63.37	100	61.73	64
2	108.40	59	109.91	71	109.72	67
5	114.48	69	115.73	99	115.47	68
6	120.18	81	120.55	100	119.43	70
β	126.05	92	127.96	90	127.49	65
1	129.18	48	130.16	40	128.52	52
α	131.23	80	130.41	97	129.00	69
4	145.51	53	147.07	45	146.17	54
3	146.64	31	148.36	34	147.72	55

<sup>1</sup>H (acetone)

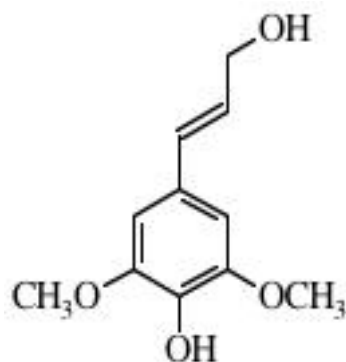
Atom	H Shifts	Mult	J
γ OH	3.78	t	5.65
OMe	3.85	s	
γ	4.18	td	1.5, 5.6
β	6.22	dt	15.9, 5.5
α	6.49	dt	15.9, 1.5
	□	□	
5	6.76	d	8.1
6	6.84	dd	8.1, 1.9
2	7.04	d	1.9
Ar OH	7.63	s	

**Notes:**

S. Quideau  
Assignments confirmed in all three solvents  
JAFC 1992-40(7), 1108-1110

Compound Number 2002

<sup>13</sup>C



sinapyl alcohol

4-hydroxy-3,5-dimethoxy cinnamyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.27	100	56.48	39	55.92	100
OMe	56.27	100	56.48	39	55.92	100
γ	63.76	52	63.33	21	61.62	42
2	103.35	94	104.65	32	103.79	76
6	103.35	94	104.65	32	103.79	76
β	126.58	49	128.27	19	127.89	41
1	128.22	22	128.99	10	127.40	28
α	131.50	50	130.62	100	129.17	42
4	134.80	20	136.52	8	135.17	14
3	147.13	41	148.71	16	148.01	50
5	147.13	41	148.71	16	148.01	50

<sup>1</sup>H (acetone)

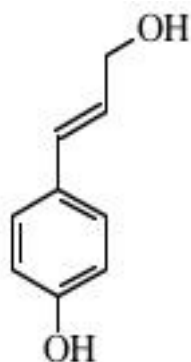
Atom	H Shifts	Mult	J
γ OH	3.88	t	5.65
OMe	3.82	s	
γ	4.20	td	5.6, 1.5
β	6.24	dt	15.8, 5.5
α	6.48	dt	15.8, 1.5
2,6	6.71	s	
4 OH	7.30	s	

**Notes:**

S. Quideau  
 Note α and β change places in DMSO. Assignments confirmed in CDCl<sub>3</sub> and Acetone. JAF 1992-40(7), 1108-1110

Compound Number 2003

<sup>13</sup>C



p-coumaryl alcohol  
4-hydroxy-cinnamyl alcohol

<sup>1</sup>H (acetone)

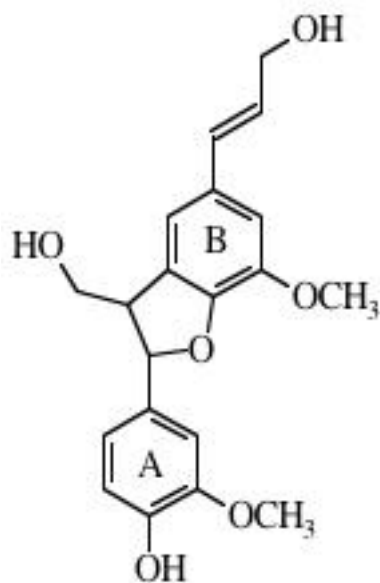
Atom	H Shifts	Mult	J
γ OH	3.85	t	5.65
g's	4.19	td	5.6, 1.6
β	6.19	dt	15.9, 5.6
α	6.50	dt	15.9, 1.6
3,5	6.78	m	
2,6	7.25	m	
4 OH	8.40	s	

**Notes:**

S. Quideau  
JAFC-1992-40(7), 1108-1110

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	63.79	46	63.41	41	61.72	49
3	115.50	100	116.15	84	115.37	85
5	115.50	100	116.15	84	115.37	85
β	125.74	46	127.71	42	127.15	50
2	127.73	98	128.33	100	127.38	100
6	127.73	98	128.33	100	127.38	100
1	128.90	24	129.68	18	127.92	27
α	131.08	48	130.13	44	128.70	50
4	156.12	31	157.76	18	156.80	27

Compound Number 2004

<sup>13</sup>C

4-[3-Hydroxymethyl-5-(3-hydroxypropenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-2-methoxyphenol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	3.53	br q	
γ + γ OH	3.78-3.88	m	
A3 OMe	3.81	s	
B3 OMe	3.85	s	
B γ OH	4.16	t	5.0
B γ	4.19	td	5.2, 1.5
α	5.56	d	6.5
B β	6.23	dt	15.8, 5.5
B α	6.52	dt	15.8, 1.5
A5	6.80	d	8.1
A6	6.87	ddd	8.1, 2.0, 0.5
B2	6.94	br s	
B6	6.97	br s	
A2	7.03	d	2.0
A4 OH	7.73	br s	

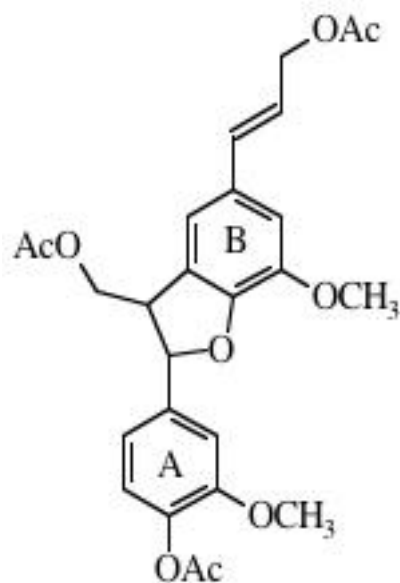
**Notes:**

S. Quideau-Ag<sub>2</sub>O oxidation of coniferyl alcohol.  
Assignments confirmed in acetone.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	53.53	70	54.73	73	53.02	41
A OMe	55.99	97	56.26	94	55.68	46
B OMe	56.01	100	56.38	100	55.73	100
B γ	63.83	89	63.39	79	61.70	77
γ	64.00	72	64.60	68	62.98	32
α	88.24	72	88.51	100	87.26	45
A2	108.75	73	110.48	99	110.37	59
B2	110.54	73	111.72	85	110.37	59
A5	114.33	78	115.67	60	115.00	38
B6	114.78	72	116.08	97	115.37	52
A6	119.43	75	119.57	99	118.58	55
B β	126.45	70	128.33	85	128.02	46
B5	128.09	50	130.40	59	129.52	48
B α	131.33	80	130.54	100	129.04	73
B1	130.87	47	131.91	54	130.56	78
A1	132.87	49	134.36	55	132.39	69
B3	144.47	42	145.14	50	143.72	70
A4	145.74	52	147.27	26	146.42	87
A3	146.68	44	148.36	32	147.13	56
B4	148.38	28	148.84	32	147.60	78

Compound Number 2005

<sup>13</sup>C



Acetic acid 4-[3-acetoxymethyl-5-(3-acetoxypropenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-2-methoxyphenyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	2.0	s	
B γ Ac Me	2.01	s	
A4 Ac Me	2.22	s	
β	3.78	m	
A3 OMe	3.79	s	
B3 OMe	3.88	s	
γ1	4.34	dd	11.1, 7.6
γ2	4.46	dd	11.1, 5.4
B γ	4.66	dd	6.5, 1.3
α	5.61	d	6.7
Bβ	6.24	dt	15.8, 6.5
B α	6.63	dt	15.8, 1.3
A6	7.0	br dd	8.1, 1.8
B6	7.03	br s	
B2	7.049	br s	
A5	7.054	d	8.1
A2	7.18	d	1.8

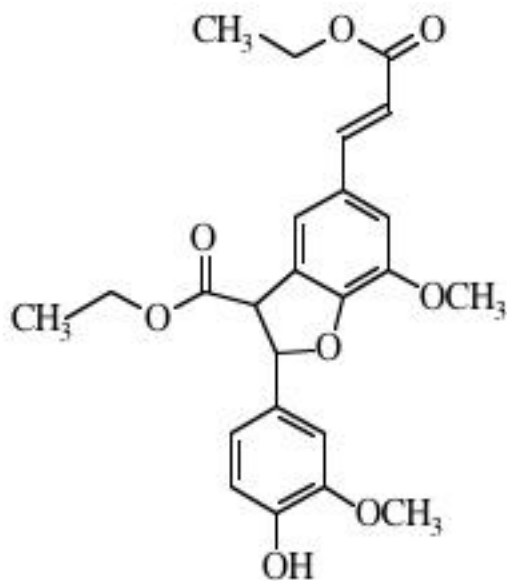
Notes:

S.Quideau-Ag2O oxidation of coniferyl alcohol + acetylation. Assignments confirmed in CDCl<sub>3</sub> and acetone  
A1 and A4 switch places in CDCl<sub>3</sub>

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.51	91	20.43	94	20.41	68
γ Ac Me	20.68	81	20.67	92	20.61	78
B γ Ac Me	20.90	84	20.78	77	20.79	84
β	50.36	71	51.33	85	49.53	46
A OMe	55.79	100	56.24	97	55.84	100
B OMe	55.92	95	56.41	92	55.84	100
B γ	65.06	83	65.47	100	64.57	60
γ	65.22	61	65.96	75	64.90	37
α	87.91	72	88.34	89	87.01	47
A2	109.84	77	111.07	88	110.59	50
B2	110.56	60	112.20	79	111.08	35
B6	115.23	69	116.32	76	115.36	40
A6	118.08	78	118.67	90	118.00	50
B β	121.16	72	122.30	86	121.53	45
A5	122.79	79	123.76	94	123.01	50
B5	127.21	63	128.82	61	127.84	50
B1	130.59	60	131.65	58	130.28	47
B α	134.13	76	134.64	87	133.52	47
A4	139.56	46	140.70	38	139.14	40
A1	139.30	58	140.99	54	139.59	46
B3	144.30	56	145.39	53	143.96	47
B4	148.03	39	149.21	37	147.55	35
A3	151.16	57	152.38	44	150.92	53
A4 Ac C=O	168.82	52	168.98	44	168.60	42
γ C=O	170.63	53	170.97	43	170.41	51
B γ C=O	170.76	43	170.80	32	170.27	44

Compound Number 2006

<sup>13</sup>C



□ 5-(2-Ethoxycarbonylvinyl)-2-(4-hydroxy-3-methoxyphenyl)-7-methoxy-2,3-dihydrobenzofuran-3-carboxylic acid ethyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
CH3	1.27	t	7.1
CH3	1.27	t	7.1
A3 OMe	3.82	s	
B3 OMe	3.91	s	
CH2	4.18	q	7.1
CH2	4.25	m	
β	4.43	d	8.0
α	6.03	d	8.0
B β	6.41	d	15.9
A5	6.84	d	8.1
A6	6.91	dd	8.1, 1.9
A2	7.08	d	1.9
B6	7.27	br s	
B2	7.31	br s	
B α	7.62	d	15.9
A4 OH	7.87	s	

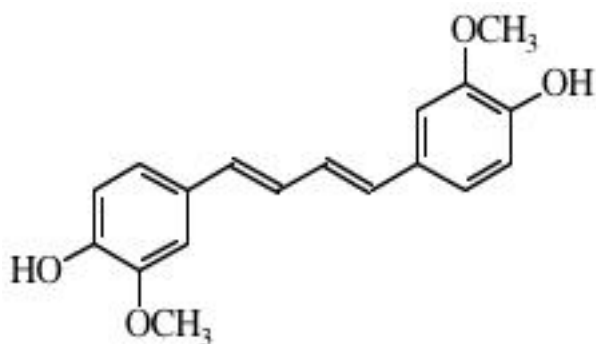
**Notes:**

S. Quideau-Ag<sub>2</sub>O oxidation of ethyl ferulate.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A CH3	14.24	95	14.48	94	14.12	100
B CH3	14.31	96	14.63	92	14.32	91
β	55.54	77	56.06	88	54.33	42
A OMe	55.98	100	56.31	98	55.78	96
B OMe	56.08	94	56.49	100	56.04	78
A CH2	61.83	87	62.20	89	61.49	80
B CH2	60.37	85	60.56	89	59.99	67
α	87.46	80	88.34	89	87.36	45
A2	108.74	90	110.74	79	110.86	59
B2	111.93	71	113.30	83	112.55	37
A5	114.49	95	115.82	64	115.48	57
B β	115.93	78	116.69	87	115.84	45
B6	117.86	75	118.91	90	118.31	41
A6	119.44	93	120.18	91	119.41	58
B5	125.85	65	127.41	57	126.35	53
B1	128.61	70	129.46	59	128.23	53
A1	131.44	67	132.10	42	129.97	57
B α	144.50	77	145.22	85	144.66	43
B3	144.69	63	145.82	50	147.83	66
A3	146.69	63	148.56	35	144.44	60
A4	146.03	65	147.97	34	149.50	47
B4	149.90	42	150.99	34	147.19	59
B γ	167.18	58	167.28	53	166.65	57
γ	170.20	64	171.10	53	170.42	65

Compound Number 2007

<sup>13</sup>C



*trans*

1,4-bis-(4-hydroxy-3-methoxyphenyl)-1,3-butadiene

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.87	s	
α	6.56	m	
A5	6.78	d	8.1
β, A6	6.85-6.92	m	
A2	7.12	d	1.9
Ar OH	7.71	s	

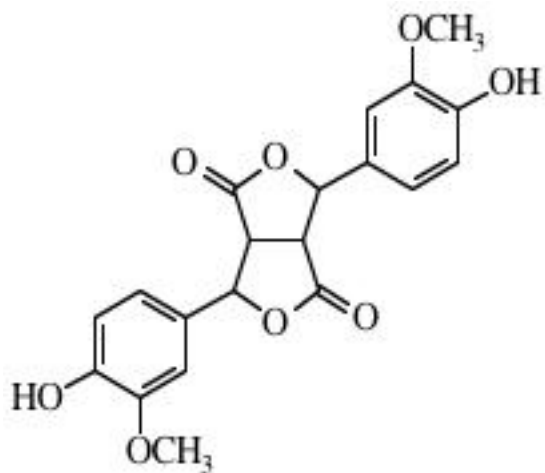
**Notes:**

S. Quideau  
 From LiBH<sub>4</sub> red. of dilactone  
 As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.89	100	56.21	100	55.55	100
2	107.95	90	109.76	84	109.38	61
5	114.55	90	115.96	77	115.55	57
6	120.29	93	120.95	96	119.81	67
β	127.35	87	128.07	85	126.90	49
1	130.25	48	130.81	41	128.96	35
α	131.72	88	132.49	80	131.37	59
4	145.45	57	147.41	44	146.43	45
3	146.69	53	148.60	42	147.80	52

Compound Number 2008

<sup>13</sup>C



dilactone from ferulic acid

3,6-Bis-(4-hydroxy-3-methoxyphenyl) tetrahydrofuro [3,4-c]  
furan-1,4-dione

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.85	s	
β	4.09	t	1.0
α	5.77	br s	
5	6.86	d	8.2
6	6.92	dd	8.2, 1.8
2	7.05	d	1.8
4 OH	7.90	s	

**Notes:**

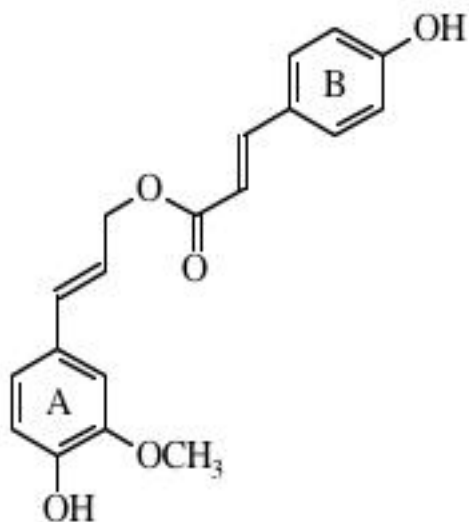
S. Quideau  
As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	48.39	83	49.11	95	48.11	83
OMe	56.13	95	56.39	95	55.81	74
α	81.90	86	83.22	94	82.06	75
2	107.52	100	110.40	88	110.64	98
5	114.98	92	116.00	81	115.46	85
6	117.41	92	119.57	100	119.22	100
1	129.81	52	130.82	49	129.00	73
4	146.35	53	148.17	42	147.36	70
3	147.06	47	148.72	36	147.88	85
γ	174.94	48	175.99	48	175.40	75



Compound Number 2009

<sup>13</sup>C



coniferyl p-coumarate

3-(4-Hydroxyphenyl) acrylic acid 3-(4-hydroxy-3-methoxyphenyl) llyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.86	s	
γ	4.78	dd	6.5, 1.3
β	6.25	dt	15.8, 6.5
B β	6.37	d	15.9
α	6.65	dt	15.8, 1.3
A5	6.79	d	8.1
B3,5	6.88	m	
A6	6.91	dd	8.1, 2.0
A2	7.11	d	2.0
B2,6	7.54	m	
B α	7.63	d	15.9
ArOH	7.76	s	
ArOH	9.03	s	

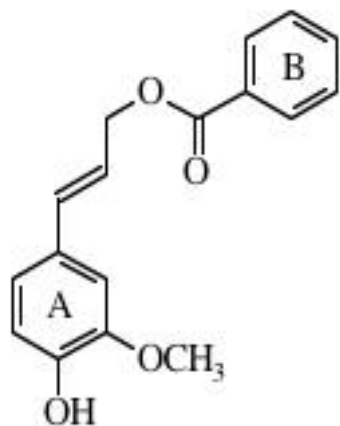
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.87	55	56.20	47	55.61	77
γ	65.35	43	65.49	55	64.62	34
A2	108.44	51	110.20	47	109.91	52
B β	114.45	53	115.45	43	114.13	44
A5	114.98	47	115.83	40	115.46	51
B3	115.93	100	116.68	67	115.81	96
B5	115.93	100	116.68	67	115.81	96
A6	120.62	54	121.19	46	120.12	53
β	120.89	52	121.72	44	120.61	49
B1	126.81	32	126.90	24	125.12	38
A1	128.83	30	129.39	22	127.59	43
B2	130.00	96	130.91	100	130.37	100
B6	130.00	96	130.91	100	130.37	100
α	134.43	50	134.90	45	133.9	49
Bα	145.07	41	145.49	43	144.90	43
A4	145.84	32	147.80	22	146.87	39
A3	146.63	31	148.53	17	147.79	47
B4	158.26	32	160.65	17	159.89	37
B γ	167.57	28	167.27	23	166.46	40

Compound Number 2010

<sup>13</sup>C



coniferyl benzoate

3-Phenyl-acrylic acid 3-(4-hydroxy-3-methoxyphenyl)allyl ester

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.86	43	56.21	59	55.61	58
γ	65.74	45	66.35	60	65.55	45
A2	108.39	41	110.25	57	109.96	46
A5	114.44	40	115.84	43	115.45	44
A6	120.64	43	121.29	64	120.23	80
β	120.81	44	121.32	64	120.23	80
B3	128.32	95	129.37	100	128.82	96
B5	128.32	95	129.37	100	128.82	96
A1	128.76	21	129.31	100	127.52	30
B2	129.61	100	130.17	94	129.20	100
B6	129.61	100	130.17	94	129.20	100
B1	130.24	13	131.30	17	129.78	24
B4	132.93	45	133.86	59	133.39	50
α	134.50	44	135.34	60	134.29	50
A3	146.63	20	148.54	18	147.79	36
A4	145.91	23	147.89	18	146.93	31
B α C=O	166.46	16	166.58	16	165.62	25

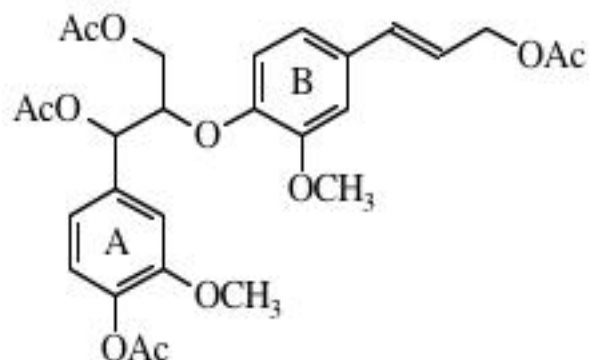
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.86	s	
γ	4.94	dd	6.5, 1.3
β	6.34	dt	15.8, 6.5
α	6.72	dt	15.8, 1.3
A5	6.80	d	8.1
A6	6.93	dd	8.1, 2.0
A2	7.14	d	2.0
B3,5	7.50	m	
B4	7.62	m	
B2,6	8.03 - 8.06	m	
ArOH	7.76	s	

**Notes:**

S. Quideau  
isolated from gum s.am



*erythro*

Guaiacyl glycerol- $\beta$ -coniferyl ether peracetate  
Acetic acid 4-{1,3-diacetoxy-2-[4-(3-acetoxypentenyl)-2-methoxyphenoxy] propyl}-2-methoxyphenyl ester

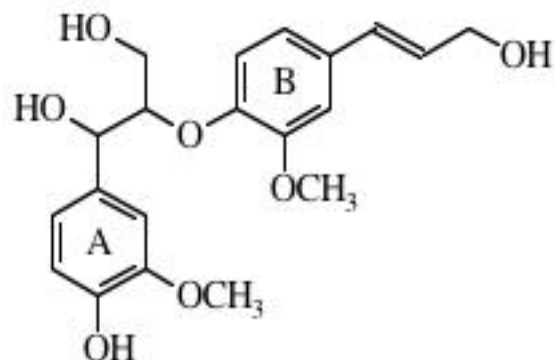
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
$\gamma$ Ac Me	1.93	s	
B $\gamma$ Ac Me	2.02	s	
$\alpha$ Ac Me	2.07	s	
A4 Ac Me	2.21	s	
A3 OMe	3.82	s	
B3 OMe	3.85	s	
$\gamma$ 1	4.22	dd	11.9, 4.1
$\gamma$ 2	4.36	dd	11.9, 5.9
B $\gamma$	4.66	dd	6.4, 1.4
$\beta$	4.85	m	
$\alpha$	6.06	d	5.1
B $\beta$	6.26	dt	15.9, 6.4
B $\alpha$	6.62	dt	15.9, 1.4
B6	6.93	dd	8.3, 2.0
B5	6.97	d	8.3
A5	7.02	d	8.1
A6	7.05	dd	8.1, 1.8
B2	7.13	d	2.0
A2	7.25	d	1.8

**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.64		20.45	87	20.39	
$\alpha$ Ac Me	20.74		20.59	92	20.47	
$\gamma$ Ac Me	20.99		20.77	86	20.69	
B $\gamma$ Ac Me	20.99		20.85	90	20.75	
A3 OMe	55.80		56.25	100	55.72	
B3 OMe	55.91		56.27	100	55.78	
$\gamma$	62.53		62.98	71	61.92	
B $\gamma$	65.07		65.34	93	64.43	
$\alpha$	73.70		74.49	83	73.07	
$\beta$	80.17		80.27	88	78.29	
B2	110.24		111.38	86	110.40	
A2	111.94		112.73	76	111.69	
B5	119.11		119.36	82	117.51	
A6	119.65		120.39	80	119.37	
B6	119.80		120.48	80	119.56	
B $\beta$	122.23		123.37	97	122.48	
A5	122.60		123.35	97	122.58	
B1	131.86		132.63	49	130.93	
B $\alpha$	133.85		134.12	82	132.96	
A1	135.28		136.59	63	135.34	
A4	139.78		140.79	38	139.11	
B4	147.23		148.27	44	146.63	
B3	150.98		151.98	46	150.32	
A3	151.02		152.11	46	150.60	
A4 Ac C=O	168.80		168.90	38	168.51	
$\alpha$ Ac C=O	169.49		169.88	45	169.33	
$\gamma$ Ac C=O	170.76		170.74	77	170.12	
B $\gamma$ Ac C=O	170.83		170.74	77	170.21	

*threo*Guaiacylglycerol- $\beta$ -coniferyl ether

## 1-(4-Hydroxy-3-methoxyphenyl)-2-[4-(3-hydroxypropenyl)-2-methoxyphenoxy]propane-1,3-diol

<sup>1</sup>H (acetone)

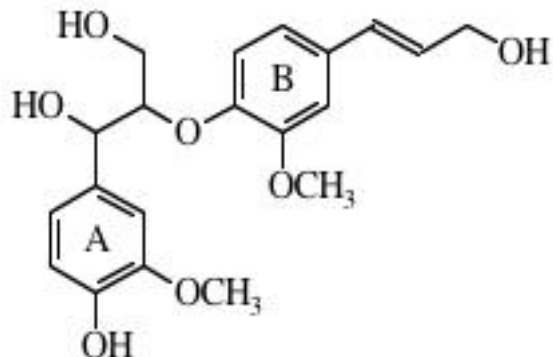
Atom	H Shifts	Mult	J
$\gamma$ 1	3.48	dd	11.9, 5.7
$\gamma$ 2	3.67	dd	11.9, 3.7
A,B $\gamma$ OH	3.80-3.90		
A3 OMe	3.80	s	
B3 OMe	3.88	s	
B $\gamma$	4.20	br dd	5.3, 1.6
$\beta$	4.20	m	
$\alpha$ OH	4.45	d	3.9
$\alpha$	4.87	br d	5.5
B $\beta$	6.28	dt	15.9, 5.4
B $\alpha$	6.52	dt	15.9, 1.6
A5	6.76	d	8.1
A,B 6	6.88-6.91	m	
A2	7.08	d	1.9
B2	7.09	d	1.9
B5	7.11	d	8.4
A4 OH	7.50	br s	

**Notes:**

S. Quideau

$\alpha$  (e/t) and  $\gamma$  shifts (e/t) interchange from sample to sample, probably due to H-exchange of OH's in d<sub>6</sub>-acetone. CDCl<sub>3</sub> and DMSO shifts not substantiated.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe	55.97	83	56.19	100	55.44	75
B3 OMe	56.03	100	56.31	90	55.83	69
$\gamma$	61.21	22	61.88	60	60.16	50
B $\gamma$	63.56	57	63.25	100	61.65	100
$\alpha$	74.07	21	73.83	50	71.01	35
$\beta$	89.47	54	88.37	80	84.36	36
B2	108.94	44	110.85	50	109.84	42
A2	110.00	68	111.42	40	111.05	38
A5	114.37	32	115.21	30	114.71	39
B5	120.15	63	119.57	90	115.53	42
B6	120.29	55	120.31	60	119.05	29
A6	120.83	53	120.54	80	119.10	51
B $\beta$	128.24	67	129.63	70	128.58	83
B $\alpha$	130.53	67	129.85	90	128.60	83
B1	131.55	19	132.96	40	130.18	46
A1	133.15	28	133.82	40	132.97	43
A4	144.75	26	146.83	30	145.46	64
A3	145.71	16	148.03	30	147.03	48
B4	147.47	33	149.15	40	147.88	42
B3	151.33	35	151.69	40	149.70	25

*erythro*Guaiacylglycerol- $\beta$ -coniferyl ether

## 1-(4-Hydroxy-3-methoxyphenyl)-2-[4-(3-hydroxypropenyl)-2-methoxyphenoxy]propane-1,3-diol

<sup>1</sup>H (acetone)

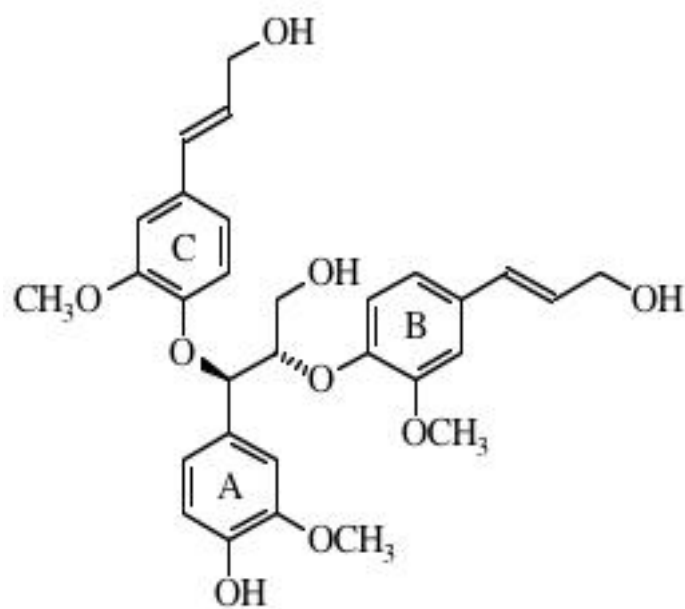
Atom	H Shifts	Mult	J
$\gamma$ 1	3.69	dd	11.8, 4.0
$\gamma$ 2	3.81	dd	11.8, 6.2
A,B $\gamma$ OH	3.80-3.90		
A3 OMe	3.80	s	
B3 OMe	3.84	s	
B $\gamma$	4.19	br dd	5.4, 1.6
$\beta$	4.29	m	
$\alpha$ OH	4.57	d	4.6
$\alpha$	4.89	br d	5.2
B $\beta$	6.26	dt	15.9, 5.4
B $\alpha$	6.50	dt	15.9, 1.6
A5	6.75	d	8.1
A,B6	6.86-6.89	m	
B5	6.91	d	1.9
B2	7.05	d	1.9
A2	7.10	d	8.4
A4 OH	7.47	br s	

**Notes:**

S. Quideau

$\alpha$  (e/t) and  $\gamma$  shifts (e/t) interchange from sample to sample, probably due to H-exchange of OH's in d6-acetone. CDCl<sub>3</sub> and DMSO shifts not substantiated.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe	55.97	84	56.21	100	55.64	100
B3 OMe	56.03	100	56.29	100	55.64	100
$\gamma$	60.87	16	61.82	60	60.16	92
B $\gamma$	63.56	58	63.25	99	61.65	92
$\alpha$	72.96	11	73.81	70	71.67	24
$\beta$	87.34	43	86.63	49	83.75	23
B2	108.82	44	110.99	87	109.93	29
A2	110.05	68	111.44	92	111.47	24
A5	114.37	32	115.13	43	114.60	26
B5	119.14	42	119.27	58	115.60	38
B6	120.09	45	120.23	62	119.05	27
A6	120.79	54	120.46	86	119.54	27
B $\beta$	128.19	63	129.54	55	128.52	34
B $\alpha$	130.56	61	129.87	92	128.60	78
B1	131.86	10	132.84	35	130.08	34
A1	133.11	34	134.24	35	133.23	28
A4	143.98	20	146.65	21	145.46	60
A3	145.27	14	147.96	27	147.00	40
B4	146.75	25	148.55	29	147.60	29
B3	151.62	22	151.88	31	149.75	44

*erythro*

Guaiacylglycerol- $\alpha,\beta$ -bis-coniferyl ether  
4-{3-Hydroxy-1,2-bis-[4-(3-hydroxypropenyl)-2-methoxy  
phenoxy]propyl}-2-methoxyphenol

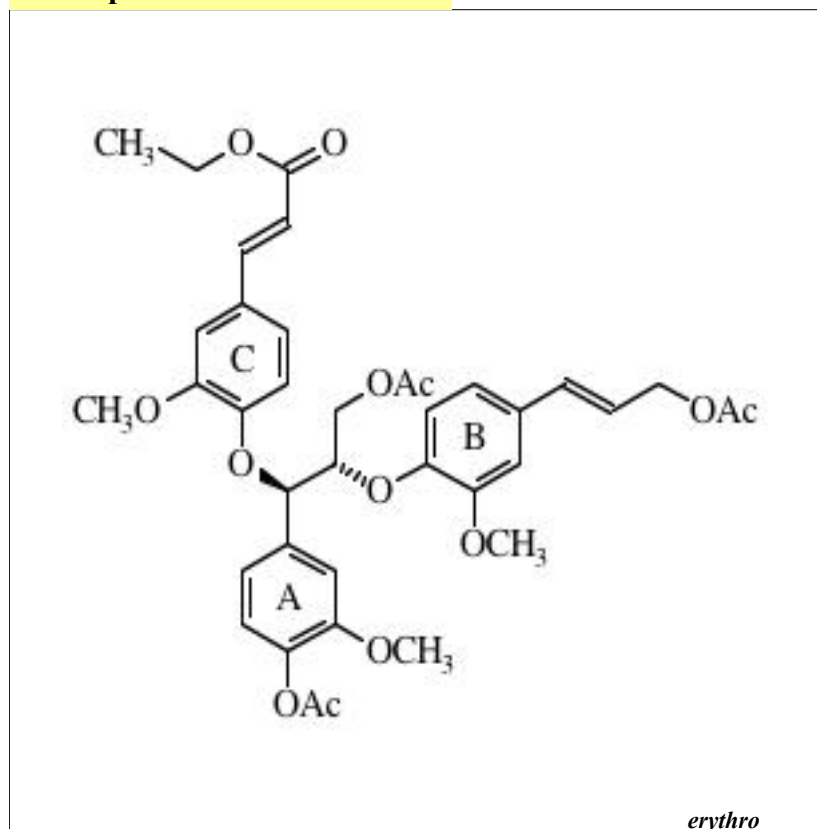
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A $\alpha$	5.46	d	5.5
A $\beta$	4.56	m	
A $\gamma$ 1	3.81□	dd	11.7, 7.1
A $\gamma$ 2	3.93	dd	11.7, 4.1

**Notes:**

S. Quideau Shifts for  $\alpha$  and  $\beta$ 's and A,B,C 1's change places in CDCl<sub>3</sub> and DMSO  
S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver  
(I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers,  
Holzforschung, 1994, 48(2), 124-132.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe	55.76	82	56.18	83	55.41	88
B3 OMe	55.85	92	56.20	83	55.61	100
C3 OMe	55.93	100	56.32	76	55.80	100
$\gamma$	62.17	40	61.75	46	59.74	31
B $\gamma$	63.56	61	63.25	100	61.52	71
C $\gamma$	63.63	64	63.25	100	61.58	72
$\alpha$	81.68	52	81.15	49	79.01	39
$\beta$	85.42	56	85.31	57	82.53	40
C2	109.38	61	110.74	50	109.93	62
B2	109.54	56	110.93	51	109.93	62
A2	109.77	62	112.11	53	111.91	41
A5	114.26	54	115.23	46	114.74	31
C5	115.94	57	117.02	54	115.71	48
B5	119.13	58	119.04	59	116.15	41
C6	119.49	64	119.90	67	118.87	58
B6	119.74	61	120.15	66	119.00	53
A6	120.33	55	121.49	57	120.34	35
C $\beta$	127.10	68	129.22	56	128.32	72
B $\beta$	127.60	70	129.45	61	128.47	58
B $\alpha$	130.59	62	129.85	100	130.49	79
C $\alpha$	130.79	62	129.85	100	130.49	79
A1	130.43	49	130.39	41	128.24	40
C1	130.85	66	132.05	38	128.71	58
B1	132.09	45	132.74	41	128.82	58
A4	145.49	50	147.18	32	146.07	45
C4	146.64	47	147.77	33	146.27	58
A3	146.85	44	148.10	31	147.11	45
B4	147.08	45	148.61	36	147.36	58
C3	149.80	47	151.17	41	149.73	61
B3	150.81	46	151.71	40	149.80	61



3-(4-{3-Acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(3-acetoxypropenyl)-2-methoxyphenoxy]propoxy}-3-methoxyphenyl) acrylic acid ethyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	4.45	dd	11.8, 3.8
γ2	4.53	dd	11.9, 6.0
Bγ	4.66	dd	6.4, 1.3
β <sup>-</sup>	4.88	m	
α	5.71	d	5.3
Bβ	6.25	dt	15.8, 6.4
Cβ	6.39	d	15.9
Bα	6.61	dt	15.8, 1.3
Cα	7.53	d	15.9

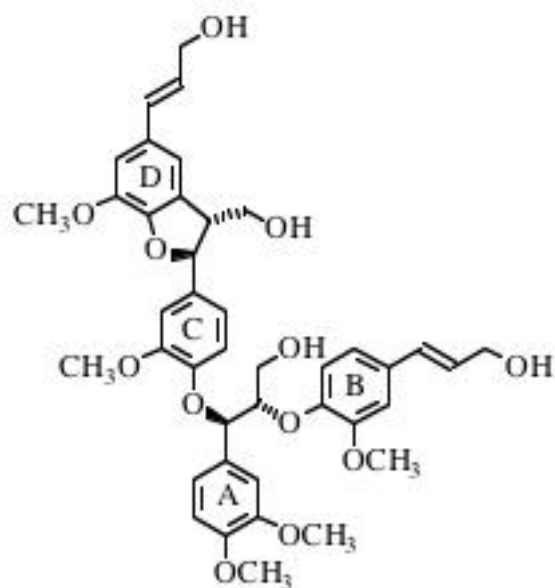
**Notes:**

S. Quideau Shifts substantiated in d<sub>6</sub>-acetone but not CDCl<sub>3</sub> or DMSO. γ and Bγ Ac C=O shifts may be interchanged S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, *Holzforschung*, 1994, 48(2), 124-132.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Me	14.33	90	14.57	85	14.19	73
A4 Ac Me	20.65	94	20.43	100	20.33	77
γ Ac Me	20.74	84	20.60	62	20.43	81
B γAc Me	21.00	88	20.77	100	20.71	100
A OMe	55.73	61	56.16	92	55.67	97
B OMe	55.96	82	56.20	62	55.80	54
C OMe	55.98	100	56.44	62	55.95	61
CH <sub>2</sub>	60.39	75	60.56	62	59.79	53
γ	63.22	44	63.41	38	62.33	24
B γ	65.09	87	65.37	54	64.41	59
α	79.99	42	80.47	38	78.45	27
β	81.98	50	81.70	46	79.57	33
B2	110.14	72	111.19	38	110.22	37
C2	110.73	65	111.92	38	111.40	41
A2	111.17	48	112.80	46	111.89	38
C5	115.87	54	116.69	38	115.28	34
C β	116.51	47	117.15	46	116.25	39
B5	119.10	58	119.28	69	117.18	40
A6	119.34	42	120.33	54	119.35	28
B6	119.82	62	120.47	62	119.50	45
C6	122.08	75	122.57	62	122.33	39
B β	122.15	75	123.17	69	122.24	43
A5	122.66	68	123.36	46	122.49	25
C1	128.62	52	129.41	46	127.56	39
B1	131.71	50	132.37	46	130.59	43
B α	133.90	79	134.18	69	133.00	53
A1	136.48	56	137.19	31	135.93	31
A4	139.64	57	140.63	46	138.94	51
C α	144.28	58	144.96	46	144.23	42
B4	147.35	39	148.51	23	146.96	50
C4	149.33	52	150.06	31	148.42	47
C3	150.23	53	151.36	46	149.75	44
B3	150.96	55	151.86	23	150.12	53
A3	151.20	43	152.12	38	150.49	38
C γ C=O	167.13	52	167.23	69	166.40	53
A4 Ac C=O	168.78	48	168.90	54	168.36	44
γAc C=O	170.77	27	170.81	31	170.09	48
B γ Ac C=O	170.86	55	170.82	69	170.14	54



Compound Number 2017

<sup>13</sup>C*erythro*Veratrylglycerol- $\alpha$ -dehydrodiconifyl- $\beta$ -con.ether<sup>1</sup>H Acetone/D<sub>2</sub>O

Atom	H Shifts	Mult	J
A $\alpha$	5.48	d	5.8
A $\beta$	4.62	m	
A $\gamma$ 1	3.80□	dd	11.9, 6.5
A $\gamma$ 2	3.91	dd	11.9, 4.9
C $\alpha$	5.51	d	5.8
C $\beta$	3.43	m	
C $\gamma$ 1	3.69□	s	
C $\gamma$ 2	3.80	s	

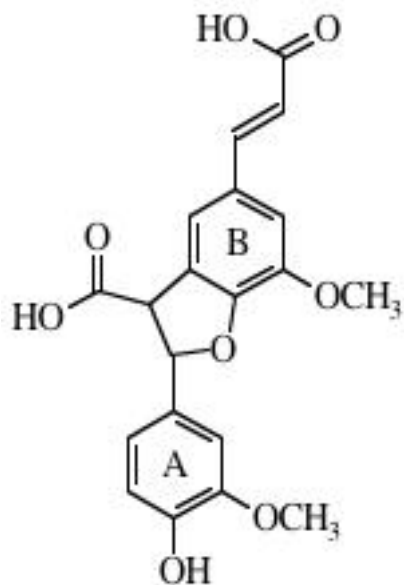
**Notes:**

S. Quideau Run only in Acetone:D<sub>2</sub>O (9:1) S. Quideau, and J. Ralph, Holzforschung, 1994, 48(2), 124-132. Note: Two erythro isomers!! Resolvable pairs are: 80.10, 80.05 54.28, 54.21 136.08, 136.05 110.98, 110.89 147.31, 147.30 116.41, 116.42 118.42, 118.40

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
C $\beta$			Note* 54.28	30		
A3 OMe			55.83	100		
A4 OMe			55.80	72		
B OMe			56.09	100		
D OMe			56.20	100		
C OMe			56.33	86		
$\gamma$			61.20	46		
B $\gamma$			62.77	94		
D $\gamma$			62.85	50		
C $\gamma$			64.18	52		
$\alpha$			80.10	29		
$\beta$			83.86	46		
C $\alpha$			87.80	55		
B2			110.71	66		
C2			110.98	29		
D2			111.35	46		
A5			111.67	44		
A2			112.04	47		
D6			115.96	59		
C5			116.41	24		
B5			117.55	49		
C6			118.42	49		
B6			119.99	64		
A6			120.96	36		
D $\beta$			127.73	65		
B $\beta$			128.64	64		
B $\alpha$			130.02	85		
D5			129.64	33		
D $\alpha$			130.57	39		
A1			130.94	39		
D1			131.83	53		
B1			132.11	46		
C1			136.08	24		
D3			144.75	61		
C4			147.31	25		
B4			147.98	48		
D4			148.27	24		
A3			149.45	53		
A4			149.48	53		
C3			150.58	50		
B3			150.83	50		

Compound Number 2018

<sup>13</sup>C



beta-5-dehydrodiferulic acid

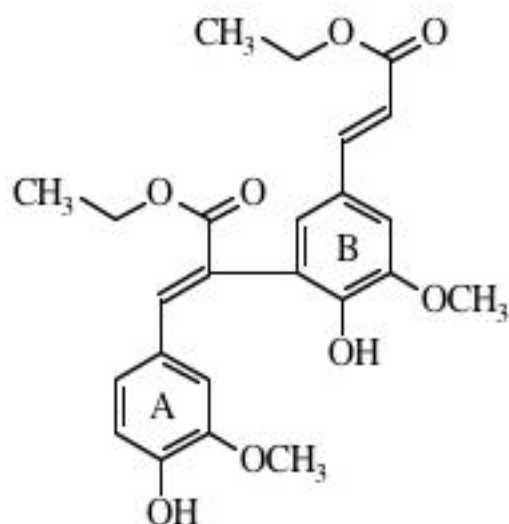
Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe	56.03	55	56.31	82	55.61	80
B3 OMe	56.15	47	56.49	70	55.85	80
β	53.76	46	56.22	100	55.10	20
α	87.53	24	88.56	49	87.72	29
A2	108.77	93	110.72	57	110.61	70
B2	112.26	18	113.34	41	112.10	38
A5	114.53	20	115.78	57	115.30	61
B β	114.91	79	116.75	42	116.43	100
B6	118.63	26	118.95	42	117.93	49
A6	119.49	100	120.08	60	119.50	73
B5	125.93	24	128.05	35	127.82	43
B1	128.29	26	129.38	34	130.69	24
A1	131.44	29	132.49	31	137.46	15
B α	146.74	46	145.59	41	144.09	49
B3	144.71	80	145.73	34	144.19	49
A4	146.06	30	147.81	30	146.79	31
A3	146.74	46	148.53	31	147.60	60
B4	150.32	28	150.96	24	149.16	49
B γ	171.34	28	168.18	42	167.79	49
γ	173.67	31	172.55	38	171.66	42

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α	6.05	d	7.8
β	4.39	d	7.8
A2	7.08	d	2.0
A5	6.83	d	8.1
A6	6.91	dd	8.1, 2.0
A3 OMe	3.83	s	
B α	7.62	d	15.9
B β	6.39	d	15.9
B2	7.29	br s	
B6	7.33	br s	
B3 OMe	3.91	s	

**Notes:**

S. Quideau  
 B α changes in CDCl<sub>3</sub>  
 JCS Perkin 1, 3485-98 (1994)  
 Cmpd 13



□ 3-(4-Hydroxy-3-methoxyphenyl)-2-[2-hydroxy-3-methoxy-5-(2-propoxycarbonylvinyl)phenyl] acrylic acid ethyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
CH3	1.21	t	7.1
CH3	1.24	t	7.1
A3 OMe	3.44	s	
B3 OMe	3.96	s	
CH2	4.16	q	7.1
CH2	4.17	q	7.1
B β	6.38	d	15.9
A2	6.696	d	2.1
A5	6.702	d	8.2
A6	6.83	dd	8.2, 2.1
B6	7.00	d	2.0
B2	7.38	d	2.0
B α	7.56	d	15.9
A α	7.76	s	

**Notes:**

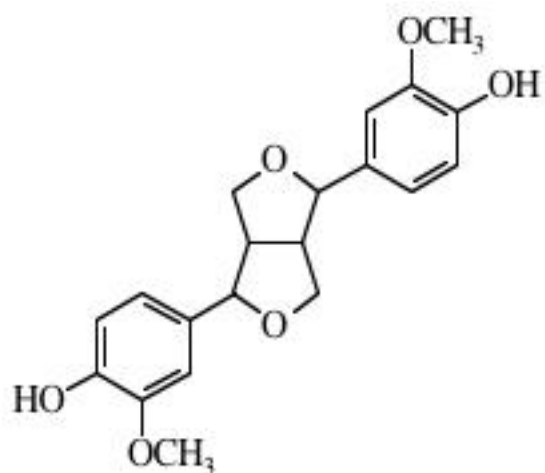
S. Quideau

B5,B6 and A6 switch in acetone and DMSO

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.28	100	14.61	100	14.14	100
CH3	14.28	100	14.62	100	14.16	94
A3 OMe	55.24	74	55.51	81	54.66	78
B3 OMe	56.12	72	56.58	88	56.05	74
CH2	60.35	71	60.47	79	59.62	64
CH2	61.09	69	61.05	74	60.15	61
B2	108.68	58	110.25	76	110.05	38
A2	111.57	61	113.28	81	112.92	48
A5	114.29	65	115.63	81	115.02	45
B β	116.00	63	116.31	76	115.17	50
β	123.29	41	124.92	38	123.97	44
B5	124.76	43	126.56	45	125.09	45
B6	124.82	62	125.71	76	124.61	42
A6	125.82	61	126.37	81	125.16	48
B1	126.81	48	127.31	50	125.56	51
A1	126.94	50	127.58	50	125.66	49
α	141.45	53	141.37	71	140.11	39
B α	144.30	60	145.25	74	144.49	42
A3	145.86	45	147.87	45	147.02	58
B4	146.05	44	148.03	43	147.11	46
A4	147.11	51	148.99	52	148.16	52
B3	147.31	44	149.10	45	148.23	59
B γ	167.11	43	167.29	40	166.44	52
γ	167.46	34	167.77	33	166.83	43

Compound Number 2020

<sup>13</sup>C



Pinosesinol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	54.15	98	55.23	86	53.59	72
OMe	55.94	98	56.24	93	55.62	100
γ	71.66	98	72.20	88	70.91	70
α	85.86	98	86.62	83	85.17	72
2	108.60	95	110.60	80	110.43	72
5	114.27	93	115.52	69	115.15	73
6	118.95	100	119.59	100	118.64	75
1	132.91	51	134.17	46	132.26	61
4	145.24	59	146.86	47	145.91	66
3	146.70	48	148.32	32	147.53	66

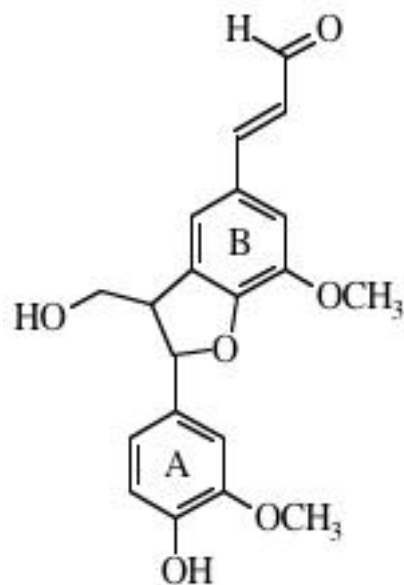
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	3.08	m	
γ1	3.80	dd	9.1, 3.8
OMe	3.83	s	
γ2	4.19	dd	9.0, 7.0
α	4.66	d	4.25
A5	6.78	d	8.1
A6	6.83	dd	8.1, 1.8
A2	6.98	d	1.8
Ar OH	7.48	s	

**Notes:**

S. Quideau  
As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 2021

<sup>13</sup>C*erythro*

3-[2-(4-Hydroxy-3-methoxyphenyl)-3-hydroxymethyl-7-methoxy-2,3-dihydrobenzofuran-5-yl] prop-2-enal

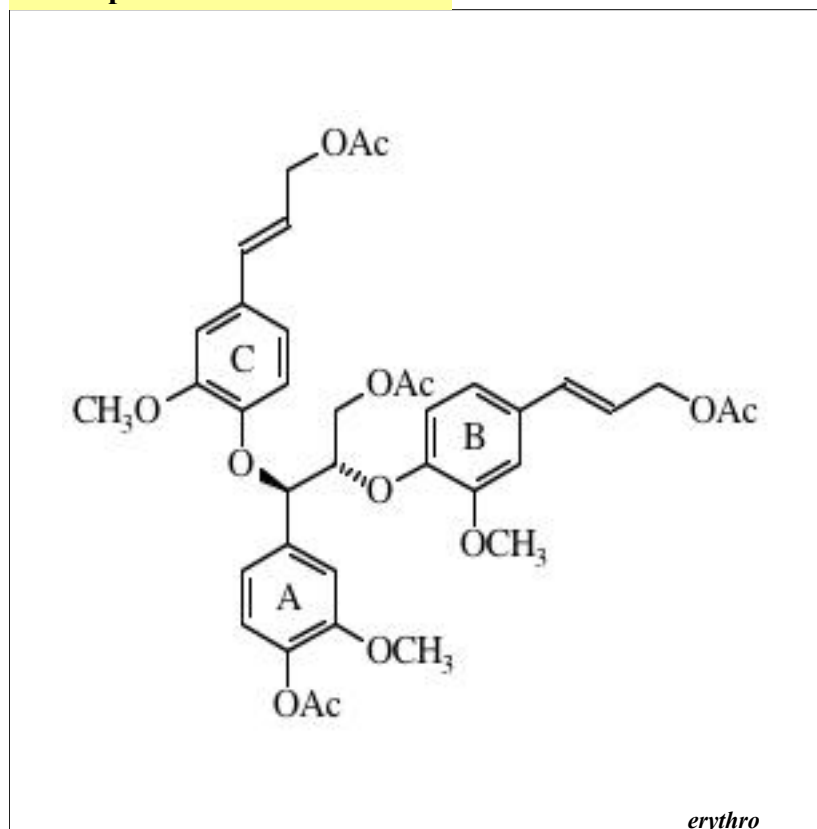
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	3.61	br q	
A3 OMe	3.82	s	
B3 OMe	3.91	s	
γ	3.87-3.91	m	
α	5.65	d	6.6
B β	6.65	dd	15.8, 7.7
A5	6.81	d	8.1
A6	6.88	dd	8.1, 2.0
A2	7.04	d	2.0
B2	7.29	bro	
B6	7.32	bro	
B α	7.59	d	15.8
B γ	9.63	d	7.7

**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			54.25	59		
A3 OMe			56.29	100		
B3 OMe			56.46	81		
γ			64.32	54		
α			89.39	82		
A2			110.59	94		
B2			113.56	67		
A5			115.76	61		
B6			119.64	85		
A6			119.73	83		
B β			127.14	76		
B5			129.00	59		
B1			131.24	41		
A1			133.75	40		
B3			145.65	41		
A4			147.55	31		
A3			148.46	23		
B4			152.41	22		
B α			154.10	77		
B γ			193.77	87		

Guaiacylglycerol- $\alpha,\beta$ -bis coniferyl ether acetate<sup>1</sup>H (acetone)

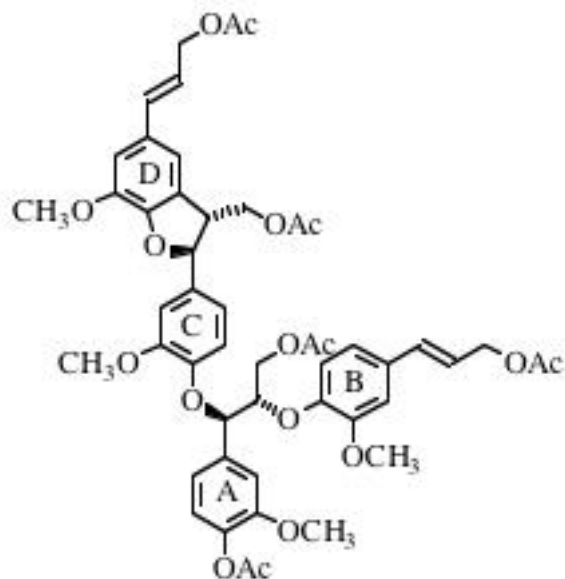
Atom	H Shifts	Mult	J
A $\alpha$	5.62		
A $\beta$	4.87		
A $\gamma$ 1	4.45		
A $\gamma$ 2	4.53		

**Notes:**

S. Quideau

 $\alpha$  and  $\beta$  of B and C can interchange in CDCl<sub>3</sub>S. Quideau, and J. Ralph, *Holzforchung*, 1994, 48(2), 124-132.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.63	45	20.44	57	20.33	87
$\gamma$ Ac Me	20.73	40	20.62	57	20.42	87
C $\gamma$ Ac Me	20.98	100	20.76	58	20.70	92
B $\gamma$ Ac Me	20.98	77	20.78	55		
					20.70	92
A3 OMe	55.73	37	56.23	100	55.59	89
B3 OMe	55.91	44	56.23	100	55.64	89
C3 OMe	55.94	44	56.39	100	55.78	94
$\gamma$	63.37	20	63.56	28	62.39	31
C $\gamma$	65.08	35	65.37	55	64.39	100
B $\gamma$	65.12	41	65.37	55	64.39	100
$\alpha$	80.17	25	80.85	31	78.68	38
$\beta$	81.92	24	81.74	36	79.56	31
C2	109.94	29	111.16	36	110.15	52
B2	110.11	29	111.32	41	110.21	52
A2	111.29	25	112.74	35	111.87	38
C5	116.41	28	117.41	35	115.81	52
B5	118.92	28	119.23	44	117.06	48
C6	119.49	26	120.45	51	119.43	70
B6	119.77	37	120.50	51	119.48	70
A6	119.79	37	120.51	51	119.50	70
C $\beta$	121.69	31	122.99	44	122.12	58
B $\beta$	122.03	31	123.18	47	122.19	59
A5	122.50	26	123.26	39	122.38	31
C1	130.61	24	131.73	38	130.12	45
B1	131.55	24	132.34	41	130.51	50
C $\alpha$	133.92	32	134.22	91	133.00	76
B $\alpha$	134.02	35	134.22	91	133.00	76
A1	136.80	24	137.52	40	136.19	57
A4	139.53	21	140.65	26	138.88	49
C4	147.45	26	148.20	39	146.38	48
B4	147.47	26	148.66	29	146.99	54
C3	150.18	25	151.43	40	149.75	49
B3	150.90	23	151.91	40	150.09	58
A3	151.09	22	152.12	32	150.45	52
A4 Ac C=O	168.76	23	168.85	35	168.34	50
A $\gamma$ Ac C=O	170.76	29	170.72	32	170.07	73
D $\gamma$ Ac C=O	170.83	29	170.74	32	170.10	73
C $\gamma$ Ac C=O	170.83	29	170.77	40	170.12	73



erythro

Guaiacylglycerol- $\alpha$ -dehydrodiconiferyl-bis-ether peracetate  
diastereomeric mixture

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A $\alpha$	5.62	d	5.4
A $\beta$	4.88	m	
A $\gamma$ 1	4.46	dt	11.9, 3.8
A $\gamma$ 2	4.53	dt	11.9, 5.8
C $\alpha$	5.49	d	6.9
C $\beta$	3.72	s	
C $\gamma$ 1	4.28	dd	11.1, 7.5
C $\gamma$ 2	4.40	dd	11.1, 5.4

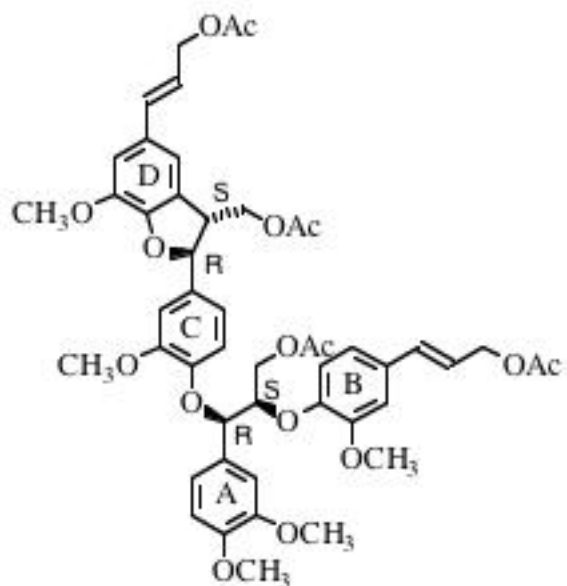
**Notes:**

S. Quideau

S. Quideau

S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, *Holzforschung*, 1994, 48(2), 124-132.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.52	88	20.43	97	20.32	
A $\gamma$ Ac Me	20.61	88	20.61	89	20.42	
C $\gamma$ Ac Me	20.74	100	20.65	89	20.48	
B $\gamma$ Ac Me	20.98	89	20.78	95	20.70	
D $\gamma$ Ac Me	20.98	89	20.78	95	20.70	
OMe			56.39	78		
OMe			56.31	77		
OMe			56.17	100		
OMe			56.15	100		
C $\beta$	50.25	35	51.04	49	49.16	
$\gamma$	63.36	35	63.52	50	62.38	
B $\gamma$	65.06	84	65.36	85	64.40	
D $\gamma$	65.16	84	65.48	35	64.49	
C $\gamma$	65.28	43	65.84	55	68.42	
$\alpha$	80.13	34	80.73	42	78.62	
$\beta$	81.87	47	81.63	48	79.49	
C $\alpha$	88.38	30	88.61	38	87.25	
B2	110.09	75	111.17	30	110.20	
C2	110.17	75	111.36	57	110.74	
D2	110.61	55	112.02	30	110.93	
A2	111.33	32	112.69	45	111.89	
D6	115.31	39	116.24	32	115.24	
C5	116.39	41	117.29	31	115.76	
C6	118.64	29	119.11	31	118.35	
B5	118.89	62	119.11	31	117.00	
A6	119.51	38	120.45	81	119.43	
B6	119.77	70	120.46	81	119.49	
D $\beta$	121.13	60	122.13	66	121.31	
B $\beta$	122.01	67	123.10	74	122.18	
A5	122.47	52	123.24	57	122.38	
D5	127.53	32	128.99	42	127.93	
D1	130.49	41	131.41	48	129.99	
B1	131.52	45	132.23	49	130.48	
B $\alpha$	133.90	69	134.20	74	133.00	
D $\alpha$	134.31	65	134.69	74	133.50	
C1	134.49	65	135.94	27	134.13	
A1	136.76	39	137.49	28	136.18	
A4	139.52	43	140.56	47	138.88	
D3	144.36	42	145.32	44	143.83	
C4	147.36	45	147.96	37	146.31	
B4	147.45	45	148.56	46	146.95	
D4	148.22	27	149.22	46	147.51	
C3	150.35	27	151.33	30	149.63	
B3	150.87	47	151.82	55	150.07	
A3	151.06	36	152.05	46	150.44	
A4 Ac C=O	168.72		168.84		168.33	
B $\gamma$ Ac C=O	170.74		170.74		170.12	
D $\gamma$ Ac C=O	170.74		170.74		170.12	
A $\gamma$ Ac C=O	170.80		170.76		170.12	
C $\gamma$ Ac C=O	170.83		170.90		170.23	

*threo*Veratrylglycerol- $\alpha$ -dehydrodiconiferyl- $\beta$ -coniferyl-bis-ether peracetate, diastereomeric mixture<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A $\alpha$	5.54	d	5.2
A $\beta$	4.87	s	
A $\gamma$ 1	4.44	td	11.8, 3.7
A $\gamma$ 2	4.52	td	11.8, 6.2
C $\alpha$	5.48	d	6.9
C $\beta$	3.70	s	
C $\gamma$ 1	4.28	dt	11.1, 7.5
C $\gamma$ 2	4.39	dt	11.1, 5.5

**Notes:**

S. Quideau

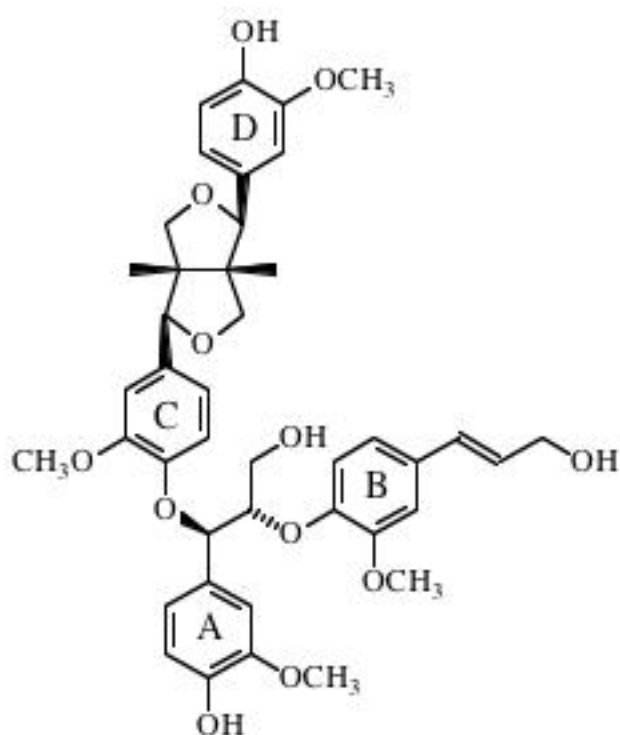
A3 and A4, C and D OMe's, and B and D  $\gamma$ 's can be interchanged in all solvents Shifts are confirmed for AcetoneS. Quideau, and J. Ralph, *Holzforchung*, 1994, 48(2), 124-132.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A $\gamma$ Ac Me	20.75	72	20.64	98	20.45	97
C $\gamma$ Ac Me	20.75	72	20.64	98	20.45	97
B $\gamma$ Ac Me	20.98	100	20.79	98	20.70	97
D $\gamma$ Ac Me	20.98	100	20.79	98	20.70	97
A4 OMe	55.75	89	55.97	94	55.33	99
A3 OMe	55.82	94	56.06	100	55.59	99
B3 OMe	55.86	94	56.22	100	55.70	99
C3 OMe	56.06	64	56.38	85	55.79	99
D3 OMe	55.97					
C $\beta$	50.18	28	51.08	39	49.16	54
$\gamma$	63.67	28	63.86	52	62.64	40
B $\gamma$	65.09	79	65.38	98	64.41	100
D $\gamma$	65.17	87	65.49	98	64.50	100
C $\gamma$	65.28	50	65.90	59	64.71	49
$\alpha$	80.14	33	80.89	46	78.77	29
$\beta$	81.80	31	81.73	53	79.57	38
C $\alpha$	88.43	28	88.65	44	87.28	52
B2	110.02	56	111.28	81	110.17	63
C2	110.33	29	111.45	39	110.63	29
D2	110.17	43	112.16	69	110.93	58
A5	110.56	56	112.22	69	111.25	45
A2	110.79	42	112.31	69	111.12	32
D6	115.29	38	116.31	52	115.24	46
C5	116.53	23	117.46	29	115.95	26
B5	118.47	51	118.91	48	116.79	46
C6	118.59	51	119.11	40	118.27	28
B6	119.73	57	120.48	73	119.49	66
A6	119.95	57	120.98	28	119.81	25
D $\beta$	121.16	48	122.19	76	121.32	61
B $\beta$	121.91	47	123.04	65	122.09	58
D5	127.57	30	129.06	38	127.93	53
A1	130.18	24	130.90	28	129.46	30
D1	130.49	32	131.46	49	129.99	58
B1	131.24	36	132.08	40	130.30	51
B $\alpha$	133.94	58	134.26	75	133.03	76
C 1	134.12	38	135.74	28	133.92	39
D $\alpha$	134.32	64	134.71	81	133.51	67
D3	144.37	43	145.37	49	143.83	63
C4	147.38	28	148.11	32	146.38	34
B4	147.71	33	148.83	40	147.12	51
D4	148.21	35	149.29	40	147.51	51
A3	148.83	32	150.20	44	148.37	51
A4	148.93	31	150.23	44	148.48	48
C3	150.39	25	151.42	31	149.69	33
B3	150.78	37	151.81	47	150.02	58
D $\gamma$ Ac C=O	170.70		170.76		170.05	
B $\gamma$ Ac C=O	170.77		170.76		170.10	
A $\gamma$ Ac C=O	170.82		170.79		170.13	
C $\gamma$ Ac C=O	170.85		170.90		170.23	



Compound Number 2025

<sup>13</sup>C



*erythro*

Guaiacylglycerol- $\alpha$ -pinoresinol- $\beta$ -coniferyl-bis-ether  
diastereomeric mixture

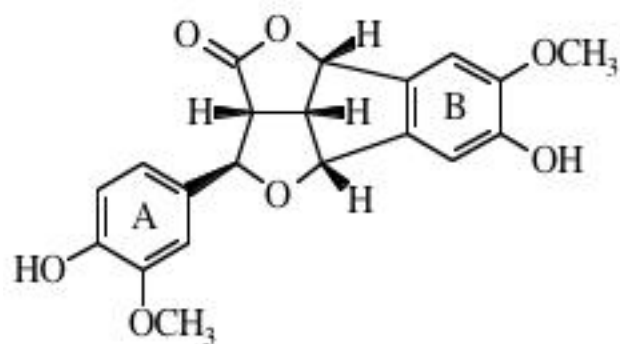
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A $\alpha$	5.45	d	5.6
A $\beta$	4.55	m	
A $\gamma$ 1	3.82	dd	11.5, 6.5
A $\gamma$ 2	3.92	dd	11.5, 5.2
C $\alpha$	4.63		
C $\beta$	3.04		
C $\gamma$ 1	3.77		
C $\gamma$ 2	4.17		

**Notes:**

S. Quideau Only run in acetone  
S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, Holzforschung, 1994, 48(2), 124-132.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
D $\beta$			55.15	100		
C $\beta$			55.15	100		
D3 OMe			56.22	75		
A3 OMe			56.25	75		
B3 OMe			56.25	74		
C3 OMe			56.44	52		
$\gamma$			61.82	28		
B $\gamma$			63.27	44		
D $\gamma$			72.23	71		
C $\gamma$			72.23	71		
$\alpha$			81.21	28		
$\beta$			85.38	36		
C $\alpha$			86.37	51		
D $\alpha$			86.58	36		
D2			110.59	52		
B2			111.05	43		
C2			111.43	22		
A2			112.21	19		
A5			115.28	32		
D5			115.50	45		
C5			116.83	24		
C6			118.96	20		
B5			119.06	43		
D6			119.61	61		
B6			120.17	42		
A6			121.53	23		
B $\beta$			129.50	37		
B $\alpha$			129.88	42		
A1			130.53	27		
B1			132.78	33		
D1			134.10	32		
C1			136.29	22		
D4			146.85	26		
A4			147.24	12		
C4			147.61	23		
A3			148.15	16		
D3			148.30	22		
C3			151.12	17		
B3			151.75	21		



11-hydroxy-(4-hydroxy-3-methoxyphenyl)-10-methoxy-3a,4,6,6a-tetrahydro 3H-3,4-benzenofuro [3,4-c]furan-1-one

<sup>1</sup>H (acetone)

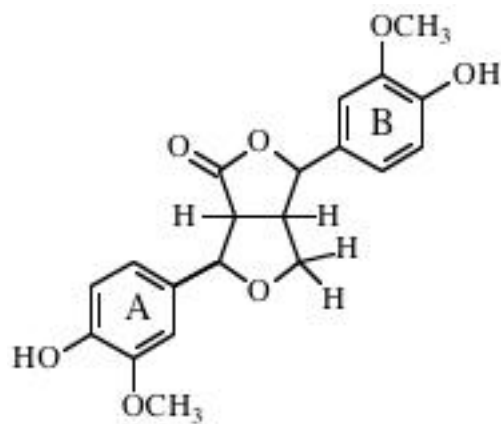
Atom	H Shifts	Mult	J
β	3.36	dd	10.7, 6.4
B β	4.24	dddd	10.6, 7.5, 6.9, 0.6
α	4.72	dquin	6.3, 0.6
B α	5.73	br d	
B γ	5.60	dq	

**Notes:**

S. Quideau  
 Ref: S. Quideau and John Ralph. J. Chem Soc. Perkin Trans. 1 1993 - issue 6 - 653-659.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	50.40	100	51.13	86	49.78	54
β	53.87	88	54.58	81	53.16	50
B3 OMe	56.14	90	56.38	94	55.67	99
A3 OMe	55.95	93	56.25	92	55.58	100
α	82.38	87	84.18	90	83.14	62
B α	83.33	88	84.22	100	83.27	58
B γ	85.74	91	86.62	87	85.15	61
B2	106.87	84	108.57	78	108.24	50
A2	108.61	91	110.78	90	110.60	65
B5	110.88	83	112.10	66	111.46	54
A5	114.39	87	115.56	72	115.12	66
A6	118.82	90	119.80	90	118.98	65
A1	131.09	40	132.41	41	130.35	58
B1	132.06	37	133.24	34	131.52	63
B6	133.95	37	135.28	43	133.78	51
A4	145.52	40	147.28	35	146.38	65
A3	146.60	42	148.30	33	147.50	60
B4	148.42	40	150.03	42	149.01	63
B3	148.69	44	150.43	29	149.63	57
γ	176.43	43	177.32	46	176.86	65

Compound Number 2027

<sup>13</sup>C

4-cis-8-trans-bis (4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo  
[3-3-0] octan-2-one

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	3.63	t	8.8
B β	3.35	ddd	9.0, 6.6, 4.6
α	5.05	br d	8.6
B α	5.23	br d	6.6
B γ cis	3.88	dd	9.5, 4.8
B γ trans	4.28	br d	9.5

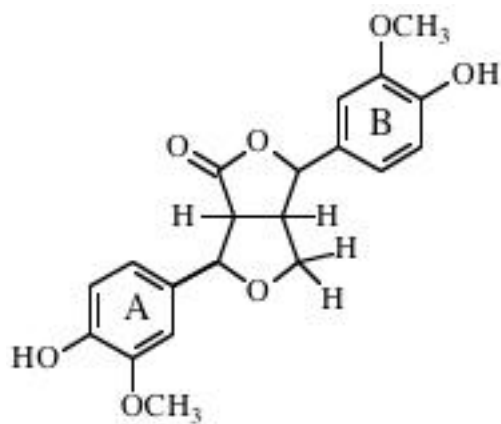
**Notes:**

S. Quideau  
S. Quideau and John Ralph. J. Chem. Soc. Perkin Trans. 1 1993 issue 6 653-659.  
Cmpd 14

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	51.31	89	52.02	97	50.42	58
β	51.67	91	52.43	93	51.54	73
A3 OMe	55.97	92	56.28	94	55.81	100
B3 OMe	56.11	100	56.35	93	55.91	61
B γ	71.63	91	72.08	87	71.06	58
α	84.00	93	84.43	95	83.07	54
B α	85.65	90	86.32	89	85.45	61
B2	107.89	96	110.68	96	110.88	60
A2	108.78	92	111.21	89	110.96	67
A5	114.43	99	115.39	76	115.28	55
B5	114.59	97	115.80	86	115.54	68
B6	118.83	100	120.06	100	119.27	68
A6	119.65	98	120.32	93	119.48	97
A1	127.88	46	129.78	49	128.41	54
B1	131.26	48	132.60	53	130.80	61
A4	145.81	60	147.15	35	146.24	57
B4	146.15	58	147.82	38	147.03	65
A3	146.60	46	147.99	35	147.35	71
B3	146.99	43	148.62	42	147.96	84
γ	174.51	30	174.93	38	174.99	62

Compound Number 2028

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	45.43	90	46.14	77		
β	54.80	99	55.35	78		
A3 OMe	56.00	82	56.26	100		
B3 OMe	56.13	93	56.34	82		
B γ	68.66	86	69.98	78		
B γ	80.37	89	81.09	78		
γ	83.70	88	84.56	81		
B2	107.47	85	109.50	73		
A2	108.17	91	110.24	74		
A5	114.41	100	115.65	37		
B5	114.65	82	115.87	42		
B6	117.76	88	118.57	74		
A6	118.11	97	119.17	85		
B1	127.90	53	129.22	36		
A1	132.46	44	133.48	41		
A4	145.33	63	147.10	17		
B4	145.56	45	147.24	19		
A3	146.67	44	148.39	14		
B3	146.80	49	148.54	15		
γ	177.07	54	177.77	38		

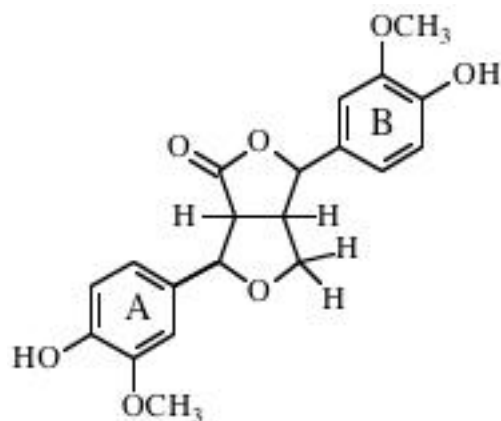
4-trans-8-cis-bis(4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo [3-3-0] octan-2-one

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	3.65	dd	8.7, 2.6
B β	3.71	m	
γ	5.16	br d	2.6
B α	5.82	br d	5.9
B γ cis	3.80	m	
B γ trans	3.47	dd	9.2, 6.7

**Notes:**

S. Quideau  
S. Quideau and J. Ralph. J. Chem Soc . Perkin Trans. 1 1993 (6) 653-659



3,6-bis(4-hydroxy-3-methoxyphenyl)-tetrahydro-furo[3,4-c]furan-1-one  
**4-cis-8-cis-bis (4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo  
 [3-3-0] octan-2-one**

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	3.65	ddd	9.2, 3.7, 0.5
B β	3.39	dddd	9.2, 7.0, 4.6, 3.6, 0.6
α	5.20	dquin	3.7, 0.6
B α	5.39	br d	3.6
B γ cis	4.30	ddd	9.4, 7.0, 0.5
B γ trans	4.02	ddt	9.4, 4.6, 0.5

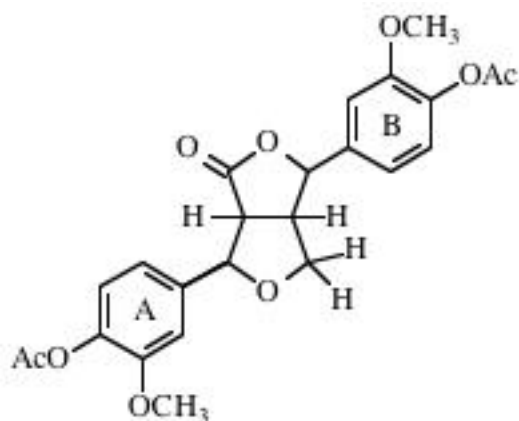
**Notes:**

S. Quideau  
 S. Quideau and J. Ralph. J. Chem. Soc. Perkin Trans. 1 1993 (6) 653-659.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	49.99	84	50.38	93	48.62	69
β	53.31	89	53.71	86	52.32	72
A3 OMe	56.02	88	50.26	99	55.61	100
B3 OMe	56.08	92	50.34	93	55.71	98
B γ	72.70	90	73.44	96	72.15	66
α	83.38	75	84.43	90	82.91	77
B α	84.59	91	85.78	92	84.83	73
A2	107.77	100	110.35	96	110.30	78
B2	108.11	87	110.45	97	110.54	77
A5	114.42	88	115.64	73	115.16	68
B5	114.71	85	115.87	71	115.34	66
A6	118.02	95	119.30	100	118.50	85
B6	118.40	99	119.66	95	118.88	78
B1	131.11	41	132.47	47	130.58	61
A1	132.31	41	133.17	47	131.08	57
A4	145.34	44	147.12	22	146.19	37
B4	146.07	46	147.80	26	146.85	47
A3	146.73	40	148.35	28	147.55	61
B3	146.94	47	148.63	30	147.73	59
γ	176.92	54	177.72	39	177.14	67

Compound Number 2030

<sup>13</sup>C



4-cis-8-cis-bis (4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo [3-3-0] octan-2-one diacetate

<sup>1</sup>H (acetone)

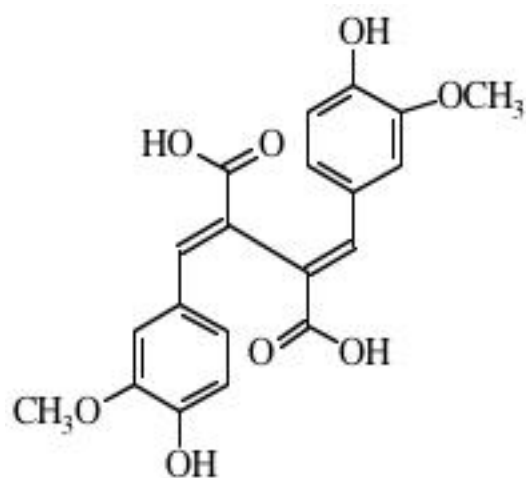
Atom	H Shifts	Mult	J
β	3.72	ddd	9.25, 3.8, 0.5
B β	3.45	dddd	9.15, 7.1, 4.8, 3.0, 0.6
B γ trans	4.12	ddt	9.5, 4.8, 0.5
B γ cis	4.39	ddd	9.5, 7.1, 0.5
B α	5.52	br d	3.6
α	5.29	dquin	3.8, 0.6

**Notes:**

S. Quideau  
 Ralph, Helm, Quideau. J. Chem. Soc. Perkin Trans. 1 1992 2971-2980

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	98	20.45	100	20.39	
Ac Me	20.63	98	20.45	100	20.39	
B β	49.89	84	50.33	76	48.62	
β	53.14	95	53.59	76	52.19	
A3 OMe	55.99	92	56.24	76	55.82	
B3 OMe	56.06	100	56.35	75	55.95	
B γ	72.80	90	73.72	81	72.51	
α	82.99	80	84.01	82	82.49	
B α	83.89	88	84.93	78	83.93	
A2	109.13	86	110.86	82	110.37	
B2	109.35	86	111.05	77	110.69	
A6	117.14	90	118.40	81	117.87	
B6	117.22	86	118.53	83	118.00	
A5	122.98	95	123.65	79	122.80	
B5	123.38	97	123.96	82	123.07	
B1	138.04	53	139.95	39	138.71	
A4	139.26	41	140.40	27	138.80	
A1	139.32	40	140.68	43	139.21	
B4	139.96	36	140.96	23	139.30	
A3	151.35	48	152.38	30	150.88	
B3	151.66	54	152.62	28	151.05	
Ac C=O	169.04	48	168.98	28	168.57	
Ac C=O	168.90	50	168.94	28	168.53	
γ	176.66	54	177.49	36	176.98	

Compound Number 2031

<sup>13</sup>C4,4'-dihydroxy-3,3'-dimethoxy- $\beta,\beta'$ -bicycinnamic acid<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.74	s	
5	6.78	d	8.2
6	7.11	dd	8.2, 2.0
2	7.31	d	2.0
$\alpha$	7.83	s	

**Notes:**

S. Quideau

JCS Perkin 1, 3485-98 (1994)

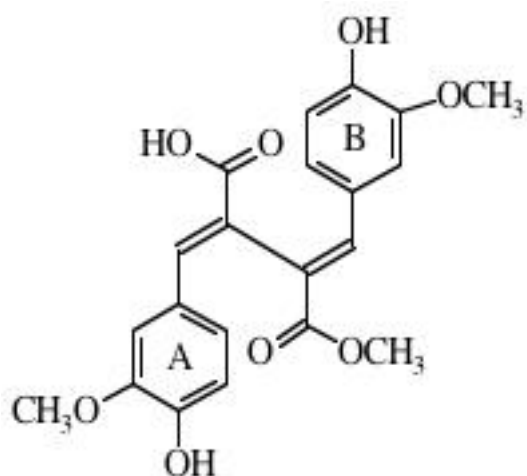
Cmpd 18

As this compound has a plane of symmetry only one set of shifts are reported.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.05	100	55.28	100
2			113.51	91	113.23	60
5			115.93	57	115.47	59
6			125.60	95	124.11	67
$\beta$			126.15	24	125.12	15
1			127.94	57	126.13	62
$\alpha$			142.26	59	140.40	18
3			148.19	31	147.29	77
4			149.25	24	148.37	61
$\gamma$			168.46	28	168.06	40

Compound Number 2032

<sup>13</sup>C



$\gamma'$ -methoxy-4,4'-dihydroxy-3,3'-dimethoxy- $\beta,\beta'$ -bicycinnamic acid

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B $\gamma$ OMe	3.66	s	
A3 OMe	3.72	s	
B3 OMe	3.73	s	
A,B 5	6.78	d	8.2
B6	7.11	dd	8.3, 2.0
A6	7.09	dd	8.3, 2.0
A2	7.25	d	2.0
B2	7.30	d	2.0
B $\alpha$	7.81	s	
$\alpha$	7.84	s	

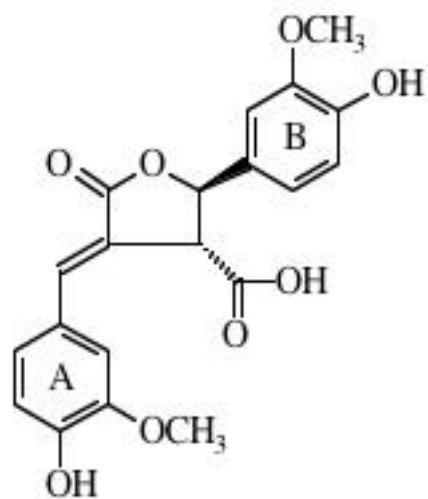
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B $\gamma$ OMe			52.28	54		
B3 OMe			56.04	100		
A3 OMe			56.04	100		
A2			113.40	56		
B2			113.54	59		
A5			115.95	58		
B5			115.97	59		
A6			125.60	56		
$\beta$			125.67	56		
B $\beta$			125.67	56		
B6			125.73	66		
A1			127.78	36		
B1			127.81	36		
B $\alpha$			142.36	51		
$\alpha$			142.47	44		
B3			148.19	33		
A3			148.20	33		
A4			149.32	27		
B4			149.37	21		
B $\gamma$			168.22	27		
$\gamma$			168.53	19		



Compound Number 2033

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β			54.03	56	52.64	49
A3 OMe			56.27	100	55.54	90
B3 OMe			56.27	100	55.67	100
B α			81.24	66	80.17	48
B2			110.17	72	110.31	63
A2			113.95	67	113.67	53
B5			116.04	58	115.61	58
A5			116.20	57	115.70	58
B6			119.17	66	118.21	65
β			120.45	37	119.08	68
A1			126.54	68	124.72	57
A6			126.58	68	125.56	50
B1			132.37	42	130.42	62
α			140.46	59	139.48	42
B4			147.97	30	147.07	59
A3			148.54	29	147.72	67
B3			148.63	30	147.76	67
A4			150.20	34	149.54	51
γ			171.66	23	171.02	55
B γ			172.12	34	171.72	76

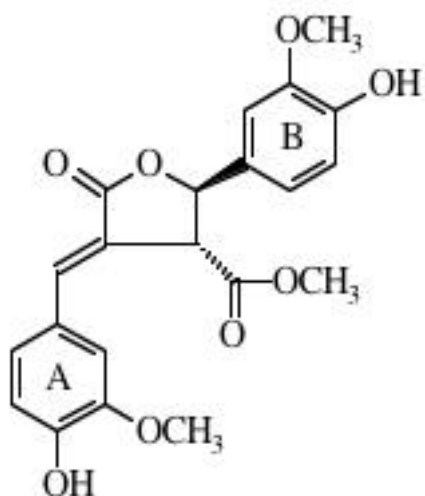
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B3 OMe	3.81	s	
A3 OMe	3.87	s	
B β	4.30	t	2.5
B α	5.75	d	2.8
B 5,6	6.82	m	
A5	6.89	d	8.2
B2	6.98	br s	
A6	7.21	dd	8.2, 2.0
A2	7.37	d	2.0
α	7.61	d	2.1

**Notes:**

S. Quideau  
 JCS Perkin 1, 3485-98 (1994)  
 Cmpd 12b (R=H)

Compound Number 2034

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ OMe	52.98	51	53.16	82	51.98	56
B β	53.49	50	53.78	89	52.75	74
B3 OMe	55.97	100	56.23	100	55.46	88
A3 OMe	55.97	100	56.26	100	55.62	100
B α	80.22	52	80.97	87	79.74	54
B2	107.65	56	110.12	89	110.26	63
A2	112.04	50	113.78	88	113.48	52
B5	114.78	62	116.04	89	115.53	47
A5	114.92	51	116.24	89	115.68	42
B6	118.22	54	119.23	93	118.26	67
β	118.38	38	120.03	52	118.34	41
A1	125.66	38	126.38	63	124.48	45
A6	125.59	51	126.42	93	125.44	50
B1	131.08	35	132.08	52	130.02	47
α	141.06	45	140.75	81	139.93	48
B4	146.12	37	147.99	56	147.11	33
A3	146.77	32	148.52	48	147.69	49
B3	146.89	33	148.61	48	147.71	50
A4	148.39	41	150.24	58	149.62	41
γ	170.77	38	171.45	33	170.53	68
B γ	171.23	26	171.56	52	170.70	48

<sup>1</sup>H (acetone)

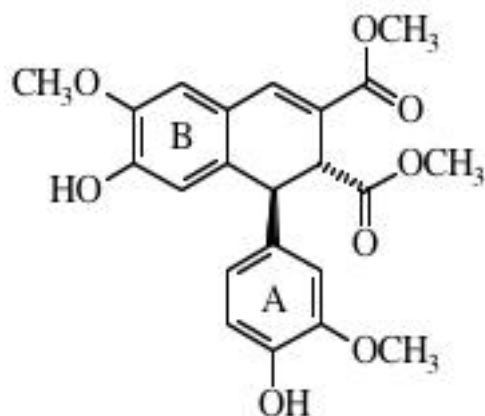
Atom	H Shifts	Mult	J
B γ OMe	3.73	s	
B3 OMe	3.81	s	
A3 OMe	3.88	s	
B β	4.39	t	2.6
B α	5.72	d	3.0
B 5,6	6.79 - 6.85	m	
A5	6.9	d	8.2
B2	6.97	br d	1.5
A6	7.17	dd	8.2, 2.0
A2	7.28	d	2.0
α	7.62	d	2.1

**Notes:**

S. Quideau

Compound Number 2035

<sup>13</sup>C



Dimethyl 7-hydroxy-6-methoxy-1-(4-hydroxy-3-methoxyphenyl)-trans-1,2-dihydronaphthalene-2,3-dicarboxylate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A γ OMe	3.56	s	
B γ OMe	3.68	s	
A3 OMe	3.75	s	
B3 OMe	3.88	s	
β	3.94	d	3.0
α	4.53	d	3.0
A6	6.39	dd	8.2, 2.0
A5	6.65	d	8.2
B5	6.66	s	
A2	6.76	d	2.0
B2	7.10	s	
B α	7.65	s	

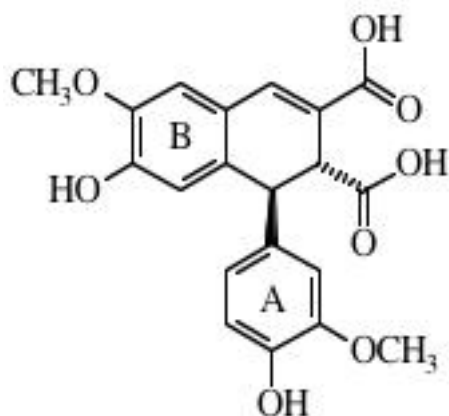
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	45.60	82	46.33	92	44.69	53
β	47.20	81	48.09	92	46.74	48
B γ OMe	51.87	96	51.87	94	51.67	77
A γ OMe	52.40	93	52.34	88	52.11	84
A3 OMe	55.83	100	56.21	99	55.62	100
B3 OMe	56.03	96	56.38	96	55.74	92
A2	110.12	91	112.03	100	111.65	66
B2	111.21	82	113.27	91	113.25	53
A5	114.17	90	115.59	98	115.24	64
B5	115.58	86	116.85	93	116.06	47
A6	120.35	89	120.83	98	119.48	61
B β	122.37	57	122.96	53	120.89	55
B1	123.85	58	124.37	58	122.47	48
B6	131.19	60	132.09	54	130.74	50
A1	134.28	61	135.31	59	133.56	54
B α	137.74	77	138.45	87	137.92	50
A4	144.42	69	146.29	58	145.31	66
B3	145.78	59	147.63	53	146.72	55
A3	146.40	60	148.20	53	147.39	64
B4	147.69	72	149.68	65	148.88	66
B γ	167.10	47	167.49	44	166.52	59
γ	172.93	60	173.17	58	172.31	69

Compound Number 2036

<sup>13</sup>C



$\beta$ - $\beta$ -coupled dehydrodiferulic acid

7-hydroxy-6-methoxy-1-(4-hydroxy-3-methoxyphenyl)-trans-1,2-dihydronaphthalene-2,3-dicarboxylic acid

<sup>1</sup>H (acetone)

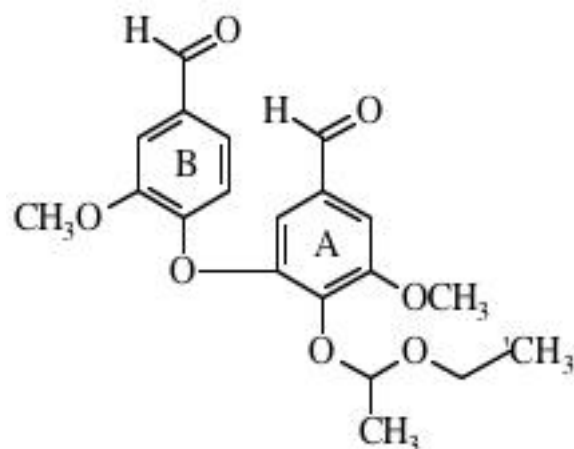
Atom	H Shifts	Mult	J
A3 OMe B3 OMe	3.74 3.86	s s	
$\beta$	3.88	d	1.8
$\alpha$	4.61	br d	1.8
A6	6.42	dd	8.2, 2.0
A5	6.64	d	8.2
B5	6.71	s	
A2	6.79	d	2.0
B2	7.04	s	
B $\alpha$	7.60	s	

**Notes:**

S. Quideau  
JCS Perkin 1, 3485-98 (1994)  
Cmpd 19  
Not very soluble in CDCl<sub>3</sub>

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
$\alpha$			46.00	72	44.25	35
$\beta$			48.08	43	47.80	13
A3 OMe B3 OMe			56.19 56.39	100 99	55.59 55.76	100 87
A2			111.98	88	111.57	63
B2			113.06	75	112.63	37
A5			115.48	73	115.13	60
B5			116.92	65	116.23	45
A6			120.67	90	119.30	61
B $\beta$			124.34	19	123.07	43
B1			124.64	53	124.67	5
B6			132.35	48	130.85	42
A1			136.12	39	134.50	5
B $\alpha$			137.58	44	135.09	18
A4			146.06	33	145.04	47
B3			147.48	46	146.46	42
A3			148.10	44	147.28	51
B4			149.29	38	147.99	29
B $\gamma$			169.32	14	169.23	9
$\gamma$			173.62	31	173.27	51

Compound Number 2037

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
'CH3			15.45	91		
CH3			21.28	90		
B OMe			56.43	100		
A OMe			56.66	95		
CH2			63.26	83		
CH			104.47	91		
A2			108.94	81		
B2			112.46	83		
A6			114.45	80		
B5			119.32	89		
B6			125.46	84		
B1			133.26	46		
A1			134.22	44		
A4			143.42	26		
A3			150.68	31		
B3			151.42	33		
B4			151.95	33		
A5			155.59	36		
α			191.23	94		
B α			191.48	96		

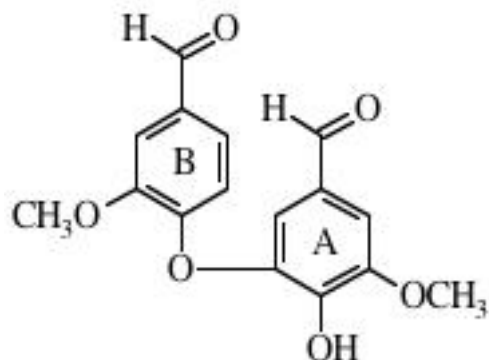
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
'CH3	1.08	t	7.05
CH3	1.38	d	5.1
CH2	3.56 -3.89	m	
OMe	3.95	s	
OMe	3.99	s	
CH	5.53	q	5.1
B5	7.04	d	8.1
A6	7.11	d	1.8
A2	7.42	d	1.8
B6	7.53	dd	8.1
B2	7.62	d	1.9
α	9.85	s	
B α	9.95	s	

**Notes:**

S. Quideau

Compound Number 2038

<sup>13</sup>C

4-0-5-coupled dehydrodivanillin

3-{3-[4-(2-carboxyvinyl)-2-methoxy-phenoxy]-4-hydroxy-5-methoxy-phenyl} acrylic acid

<sup>1</sup>H (acetone)

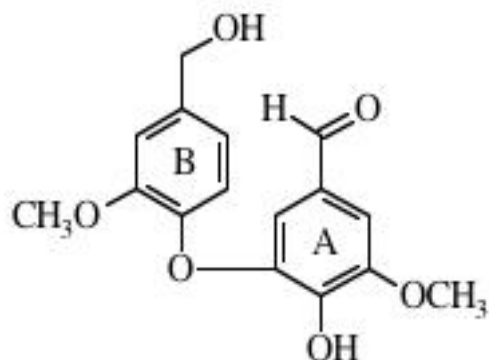
Atom	H Shifts	Mult	J
B OMe	3.95	s	
A OMe	3.98	s	
B5	6.94	d	8.2
A6	7.22	d	1.8
A2	7.40	d	1.8
B6	7.48	dd	8.2, 2.0
B2	7.58	d	2.0
α	9.80	s	
B α	9.92	s	

**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe	56.07	100	56.41	100	55.85	100
A3 OMe	56.56	100	56.80	97	56.24	100
A2	106.80	68	108.48	66	108.09	51
B2	110.85	85	112.26	85	111.60	63
A6	116.92	67	116.99	61	116.27	86
B5	117.31	90	117.63	93	116.31	85
B6	125.55	90	125.55	88	124.80	68
A1	128.69	57	129.54	47	127.64	70
B1	132.76	54	133.56	47	131.84	69
A5	142.55	37	143.79	30	142.52	72
A4	143.30	44	145.22	36	144.52	56
A3	148.60	46	150.37	39	149.47	67
B3	150.61	45	151.49	36	149.82	78
B4	151.08	39	152.48	32	151.24	64
α	190.05	96	190.75	9	190.84	39
B α	190.84	100	191.43	97	191.57	27

Compound Number 2039

<sup>13</sup>C

4-0-5 coupled dehydrovanillin / vanillyl alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe	55.94	58	56.19	94	55.61	100
A3 OMe	56.47	97	56.73	99	56.15	97
B α	64.91	88	64.34	35	62.59	90
A2	106.40	62	107.98	55	107.74	52
B2	111.55	97	112.52	98	111.09	34
A6	114.09	60	112.62	54	111.54	75
B6	119.49	100	119.78	100	118.81	81
B5	120.46	99	121.17	94	119.98	60
A1	128.30	59	129.00	48	127.04	46
B1	138.45	60	140.84	41	139.77	57
A4	142.58	48	143.92	31	142.63	42
B4	143.95	44	144.30	32	143.03	30
A5	145.16	42	146.98	31	145.90	43
A3	148.45	43	149.86	31	148.93	42
B3	150.87	48	152.00	34	150.45	71
α	190.44	83	190.91	92	190.97	67

<sup>1</sup>H (acetone)

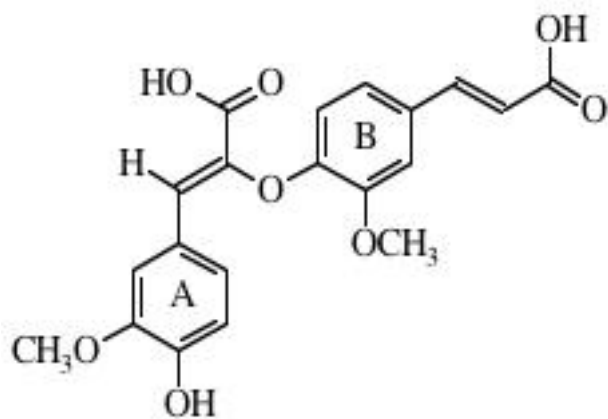
Atom	H Shifts	Mult	J
B3 OMe	3.79	s	
A3 OMe	3.95	s	
B α	4.63	s	
A6	6.91	d	1.8
B 5,6	6.94 - 6.97	m	
B2	7.16	br d	
A2	7.27	d	1.8
α	9.71	s	

**Notes:**

S. Quideau

Compound Number 2040

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe			55.92	100	55.09	100
B3 OMe			56.47	91	55.86	85
B2			112.39	80	111.55	38
A2			113.77	83	112.98	41
B5			114.39	79	113.30	45
A5			115.96	70	115.53	36
B β			117.50	77	117.52	57
B6			122.92	82	122.02	42
A1			125.31	54	123.44	44
A6			126.06	80	124.62	39
α			128.49	63	127.09	34
B1			130.10	56	128.74	52
β			138.28	27	137.01	44
B α			145.25	77	143.71	46
A3			148.30	46	147.24	50
B4			148.90	40	147.42	47
A4			149.46	37	148.59	89
B3			150.23	52	148.59	88
γ			164.51	13	164.11	56
B γ			167.91	22	167.70	72

<sup>1</sup>H (acetone)

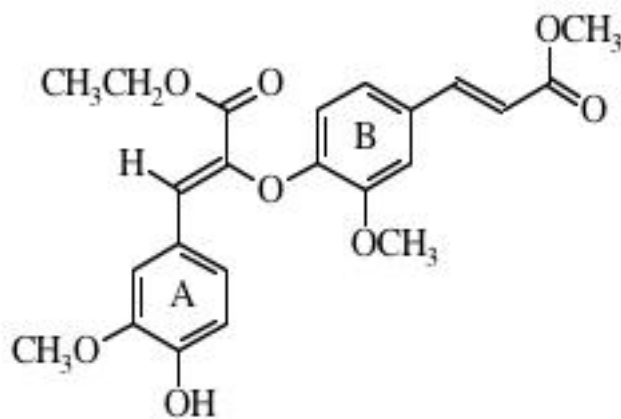
Atom	H Shifts	Mult	J
A3 OMe	3.73	s	
B3 OMe	4.00	s	
B β	6.43	d	15.9
A5	6.82	d	8.2
B5	6.83	d	8.3
B6	7.13	dd	8.3, 2.0
A6	7.23	dd	8.2, 2.0
α	7.42	s	
B2	7.44	d	2.0
A2	7.52	d	2.0
B α	7.59	d	15.9

**Notes:**

S. Quideau  
 JCS Perkin 1, 3485-98 (1994)  
 Cmpd 15



Compound Number 2041

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.14	95	14.47	100	14.05	100
B γ OMe	51.65	83	51.58	78	51.32	62
A3 OMe	55.59	100	55.92	93	55.11	75
B3 OMe	56.21	97	56.49	90	55.93	59
CH2	61.42	92	61.72	74	60.96	61
B2	111.24	83	112.45	70	111.79	41
A2	112.03	97	113.78	70	113.17	34
B5	114.14	89	114.53	71	113.46	35
A5	114.47	87	115.99	70	115.57	26
B β	116.32	82	117.10	71	116.29	42
B6	122.12	80	122.92	78	122.27	46
A1	124.74	55	125.19	9	123.18	32
A6	125.54	84	126.03	71	124.79	35
α	127.80	71	128.05	10	127.43	49
B1	129.31	60	130.09	45	128.78	39
β	137.73	51	138.39	42	136.44	41
B α	144.42	90	145.02	72	144.23	42
A3	146.43	53	148.29	40	147.27	33
B4	147.44	67	148.89	35	147.43	26
A4	147.80	47	149.48	40	148.67	46
B3	149.16	59	150.24	43	148.67	46
γ	163.41	43	163.75	32	162.67	33
B γ	167.50	62	167.63	47	166.80	48

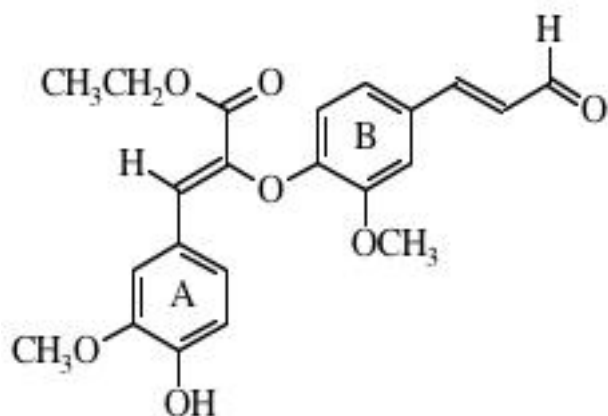
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
CH3	1.21	t	7.1
B γ OMe	3.71	s	
A3 OMe	3.73	s	
B3 OMe	3.99	s	
CH2	4.17	q	7.1
B β	6.45	d	16.0
B5	6.79	d	8.3
A5	6.81	d	8.3,
B6	7.12	dd	8.3, 2.0
A6	7.22	dd	8.3, 2.0
α	7.37	s	
B2	7.44	d	2.0
A2	7.49	d	2.0
B α	7.59	d	16.0
Ar OH	8.12	br s	

**Notes:**

S. Quideau  
Toward β-O-4 dehydro diferulic acid  
(steryl ether, Z isomer)

Compound Number 2042

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.06	98	14.48	12	14.05	100
B3 OMe	56.15	100	56.55	13	55.97	10
A3 OMe	55.47	94	55.94	16	55.11	73
CH2	61.37	91	61.76	92	60.99	74
B2	111.31	78	112.58	93	111.82	49
A2	112.06	80	113.81	91	113.35	53
B5	114.11	78	114.66	93	113.44	53
A5	114.57	79	116.03	82	115.59	40
B6	122.87	82	123.76	99	123.13	9
A1	124.41	62	125.16	54	123.13	83
A6	125.42	77	126.08	53	124.85	52
B β	127.19	85	128.29	100	128.89	65
α	127.90	75	128.16	100	127.35	55
B1	128.83	62	130.13	54	127.53	39
β	137.35	57	138.31	43	136.34	45
A3	146.51	57	148.31	43	147.45	41
A4	147.59	61	149.53	51	147.90	48
B4	148.54	52	149.58	46	148.78	59
B3	149.21	61	150.38	50	148.86	60
B α	152.33	80	153.18	96	152.98	57
γ	163.19	48	163.70	38	162.62	49
B γ	193.42	91	193.89	99	194.19	72

<sup>1</sup>H (acetone)

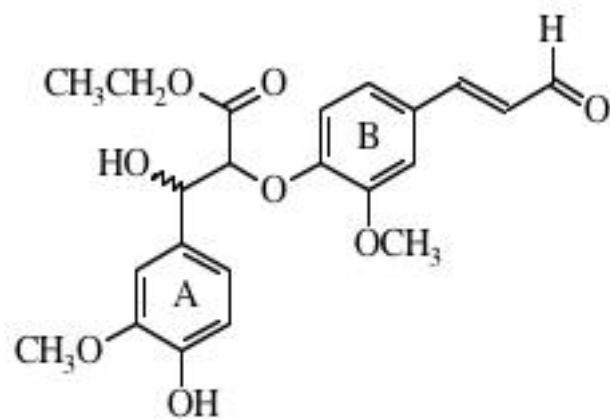
Atom	H Shifts	Mult	J
CH3	1.21	t	7.1
A3 OMe	3.73	s	
B3 OMe	4.00	s	
CH2	4.21	q	7.1
B β	6.70	dd	15.9, 7.7
A5	6.81	d	8.3
B5	6.83	d	8.3
B6	7.18	dd	8.3, 2.0
A6	7.23	ddd	8.3, 2.0, 0.4
α	7.38	s	
A2	7.49	d	2.0
B2	7.50	d	2.0
B α	7.58	d	15.9
B γ	9.65	d	7.7
Ar OH	8.14	s	

**Notes:**

S. Quideau  
Toward β-O-4 dehydro diferulic acid(steryl ether, Z isomer)

Compound Number 2043

<sup>13</sup>C



*erythro*

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	13.86	97				
OMe	55.72	100				
OMe	55.78	98				
CH2	61.33	84				
α	73.70	69				
β	82.29	71				
A2	109.63	73				
B2	111.09	72				
A5	113.93	71				
B5	115.99	71				
A6	119.80	73				
B6	122.72	82				
B β	127.15	81				
B1	128.79	80				
A1	130.89	64				
A3	145.48	70				
A4	146.36	58				
B3	149.72	54				
B4	150.11	59				
B α	152.38	74				
γ	168.80	64				
B γ	193.53	90				

<sup>1</sup>H (acetone)

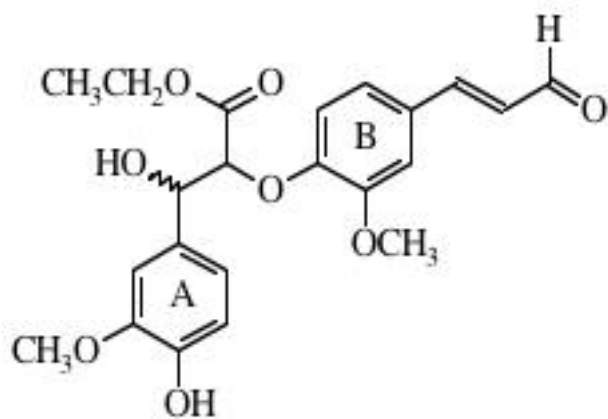
Atom	H Shifts	Mult	J
CH3	1.16	t	7.2
OMe	3.85	s	
OMe	3.86	s	
CH2	4.15	q	7.1
β	4.81	d	5.4
α	5.16	d	5.4
B β	6.58	dd	15.8, 7.7
B α	7.37	d	15.8
B γ	9.61	d	7.7
Ar OH	6.07		

**Notes:**

S. Quideau Compds 2043 and 2044 were run as a mixture and the different isomers were assigned. Relative intensities reflect the spectrum of the mixture.e isomer for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2044

<sup>13</sup>C



*threo*

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	13.73	100				
OMe	55.67	33				
OMe	55.82	34				
CH3	61.28	28				
α	74.49	14				
β	83.43	15				
A2	109.51	16				
B2	110.98	16				
A5	114.02	17				
B5	115.56	15				
A6	119.91	16				
B6	122.72	82				
B β	127.19	29				
B1	128.79	80				
A1	129.94	13				
A3	145.73	15				
A4	146.55	13				
B3	149.74	18				
B4	149.92	13				
B α	152.32	17				
γ	168.73	27				
B γ	193.53	90				

<sup>1</sup>H (acetone)

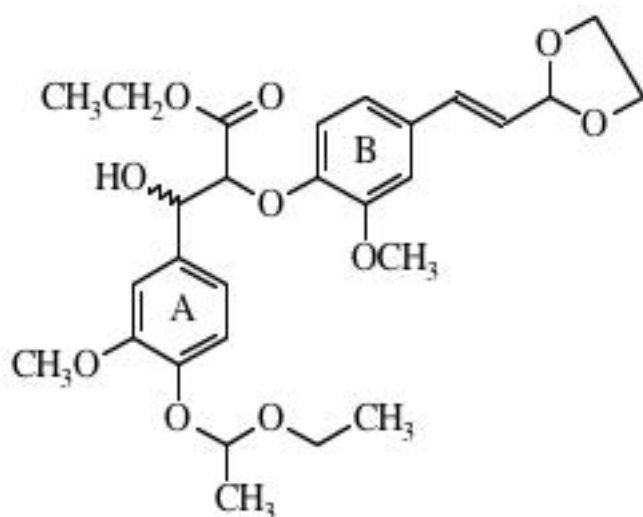
Atom	H Shifts	Mult	J
CH3	1.08	t	7.2
OMe	3.85	s	
OMe	3.87	s	
CH2	4.04-4.11	m	
β	4.67	d	6.2
α	5.10	d	6.2
B β	6.59	dd	15.8, 7.7
B α	7.38	d	15.8
B γ	9.62	d	7.7
Ar OH	6.10		

**Notes:**

S.Quideau Compounds 2043 and 2044 were run as a mixture and the different isomers were assigned. Relative intensities reflect the spectrum of the mixture. threo isomer for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2045

<sup>13</sup>C



*erythro*

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
CH3	1.47	d	5.1
β <i>t</i>	4.56	d	6.6
β <i>e</i>	4.72	d	5.4
α <i>t</i>	5.06	br d	6.3
α <i>e</i>	5.13	br s	
A 4 CH	5.32	q	5.2
B γ	5.36	d	6.0
B β	6.03	dd	15.9, 6.0
B α	6.66	d	16.0

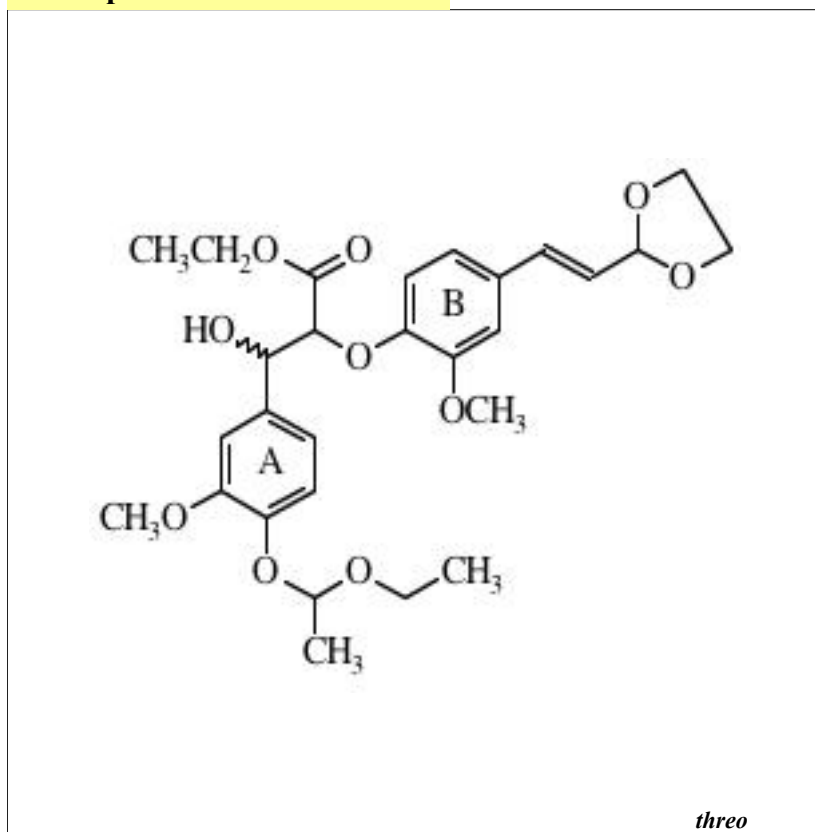
**Notes:**

S. Quideau  
intermediate toward β--O-4 dehydro  
diferulic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A γ CH3	13.82	47				
CH3	14.93	57				
CH3	20.10	36				
OMe	55.54	54				
OMe	55.63	37				
4 CH2	61.01	50				
A CH2	61.84	32				
B CH2	64.82	100				
B CH2	64.82	100				
α	73.57	33				
β	83.09	25				
	100.92	35				
	103.59	57				
	110.04	40				
	110.76	27				
	117.40	27				
	118.63	31				
	119.09	34				
	120.07	43				
	124.08	43				
	131.25	30				
	133.82	18				
	133.84	18				
	134.08	44				
	145.39	16				
	147.22	21				
	150.12	9				
	150.40	31				
γ	169.03	35				

Compound Number 2046

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	-					
CH3	-					
CH3	-					
OMe	55.59	100				
OMe	55.59	100				
CH2	61.86	55				
CH2						
CH2	74.51	22				
α	84.39	21				
β	100.94	61				
	109.98	12				
	110.69	48				
	116.92	14				
	118.70	55				
	124.14	74				
	132.73	12				
	134.06	62				
	145.67	17				
	147.26	24				
	149.92	16				
	150.00	56				

<sup>1</sup>H (chloroform)

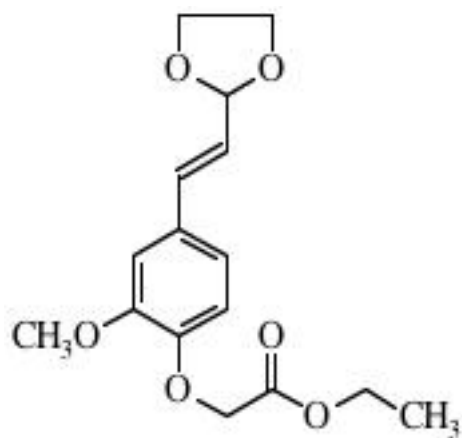
Atom	H Shifts	Mult	J
β	4.56	d	6.6
α	5.06	br d	6.3

**Notes:**

S. Quideau  
intermediate toward b--O-4 dehydro diferulic acid

Compound Number 2047

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.09	100				
OMe	55.84	72				
CH2	61.27	63				
CH2	65.01	94				
CH2	65.01	94				
CH2	66.42	60				
γ	103.90	71				
2	109.88	67				
5	113.88	67				
6	120.14	66				
β	123.75	68				
α	130.39	39				
1	134.47	66				
3	147.58	31				
4	149.56	34				
C=O	168.78	30				

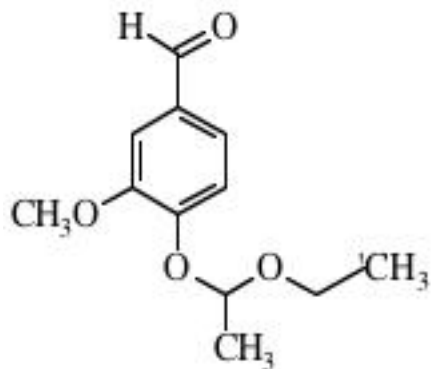
<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
CH3	1.26	t	7.1
OMe	3.87	s	
CH2	3.90-4.05	m	
CH2	4.24	q	7.1
CH2	4.67	s	
γ	5.39	d	6.1
β	6.05	dd	15.9, 6.1
α	6.69	d	15.9
5	6.76	d	8.3
6	6.90	dd	8.3, 2.0
2	6.99	d	2.0

**Notes:**

S. Quideau  
For synthesis of b--O-4 dehydro diferulic acid

Compound Number 2048

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
'CH3	15.03	85				
CH3	19.95	98				
OMe	55.90	94				
CH2	61.72	85				
CH	100.61	92				
2	109.81	79				
5	116.59	100				
6	126.06	81				
1	130.97	47				
3	150.78	37				
4	151.64	37				
α	190.89	91				

<sup>1</sup>H (chloroform)

Atom	H Shifts	Mult	J
'CH3	1.21	t	7.1
CH3	1.58	d	5.3
CH2	3.50-3.85	m	
OMe	3.92	s	
CH	5.54	q	5.3
Aromatics	7.21-7.43		
α	9.87	s	

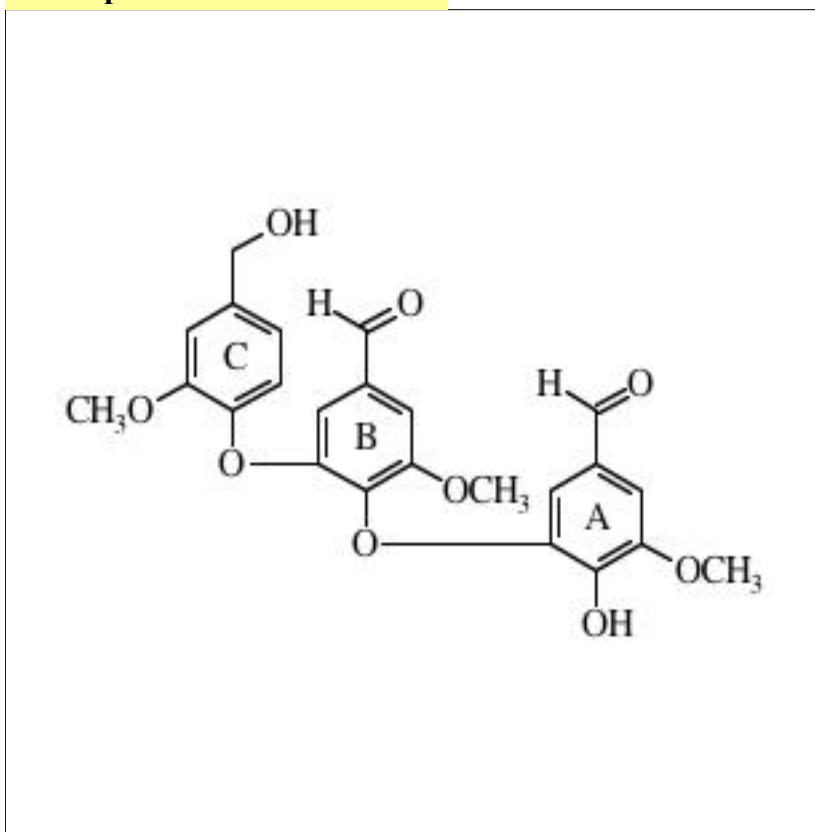
**Notes:**

S. Quideau  
Intermediate for synthesis of β-O-4 dehydro diferulic acid



Compound Number 2049

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
C3 OMe			56.07	100		
A3 OMe			56.75	97		
B3 OMe			56.89	90		
C α			64.25	33		
B2			108.03	70		
A2			108.40	50		
B6			109.92	67		
A6			110.17	50		
C2			112.36	40		
C6			119.76	93		
C5			122.66	87		
A1			128.73	37		
B1			134.75	53		
B4			138.25	20		
C1			142.09	47		
C4			142.49	37		
A4			143.04	33		
A5			147.16	27		
A3			149.70	30		
C3			152.34	37		
B5			153.71	33		
B3			155.04	47		
α			191.02	55		
B α			191.69	55		

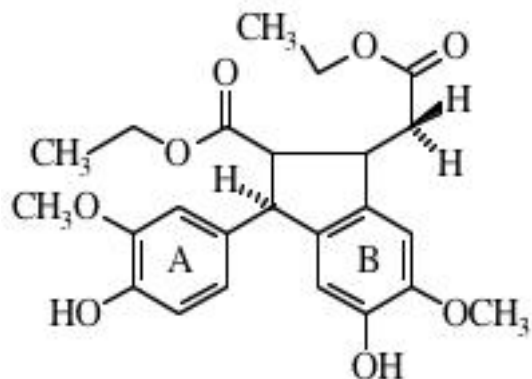
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
C3 OMe	3.72	s	
B3 OMe	3.90	s	
A3 OMe	3.94	s	
C α	4.62	s	
B6	6.88	d	1.7
C6	6.94	dd	8.1, 1.7
C5	7.00	d	8.1
A6	7.01	d	1.7
C2	7.14	d	1.7
A2	7.26	d	1.7
B2	7.40	d	1.7
α	9.74	s	
B α	9.86	s	

**Notes:**

S. Quideau  
5-O-4 trimer

Compound Number 2050

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A CH3	14.19	93	14.52	91	13.97	100
B CH3	14.22	88	14.47	89	14.07	100
B β	36.90	57	37.50	80	36.41	44
B α	42.15	75	43.06	85	41.74	54
α	51.31	66	52.35	80	50.93	46
A3 OMe	55.93	100	56.23	99	55.56	74
B3 OMe	56.10	99	56.39	100	55.64	97
β	58.66	67	59.09	87	56.96	53
B CH2	60.47	80	60.79	84	59.94	88
A CH2	60.63	78	60.95	84	60.07	76
B2	106.61	68	108.23	75	107.86	45
B5	110.87	80	112.04	82	111.25	42
A2	110.99	77	112.60	93	112.08	41
A5	114.29	91	115.76	92	115.32	45
A6	121.39	75	121.75	96	120.35	48
A1	134.34	58	135.02	55	133.25	53
B1	135.12	43	135.58	50	133.61	46
B6	137.10	49	137.90	47	136.47	49
A4	144.54	63	146.45	56	145.36	53
B4	145.61	60	147.43	57	146.34	58
B3	146.04	52	147.92	46	147.08	52
A3	146.50	59	148.37	48	147.51	55
B γ	172.30	54	172.45	58	171.45	77
γ	172.43	55	173.00	61	172.10	61

<sup>1</sup>H (acetone)

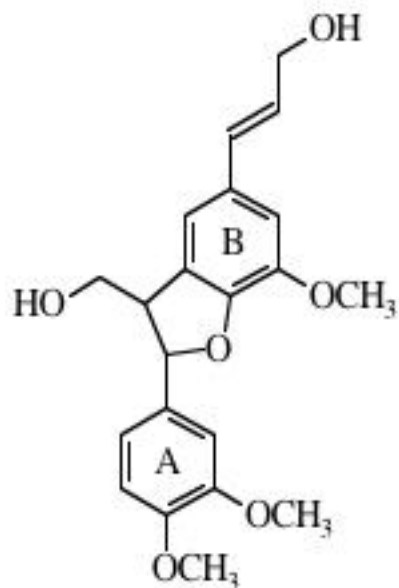
Atom	H Shifts	Mult	J
B β1	2.43	dd	16.0, 8.0
B β2	2.61	dd	16.0, 7.0
β	3.43	dd	9.85, 8.20
B α	3.90	brq	8.0
α	4.56	d	10.1

**Notes:**

S. Quideau  
Stereochemistry determined from NOESY  
experiments  
αβ-/α6 model

Compound Number 2051

<sup>13</sup>C



4-[3-Hydroxymethyl-5-(3-hydroxypropenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-1,2-dimethoxyphenyl

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	3.52	br q	
A3 OMe	3.77	s	
A4 OMe	3.78	s	
B3 OMe	3.86	s	
γ's	3.80-3.92	m	
B γ OH	4.14	t	5.50
B γ	4.19	td	5.7, 1.7
α	5.58	d	6.4
B β	6.23	dt	15.8, 5.5
B α	6.52	dt	15.8, 1.7
A5	6.91	d	8.1
A,B6 + B2	6.94-9.67	m	
A2	7.03	d	1.8

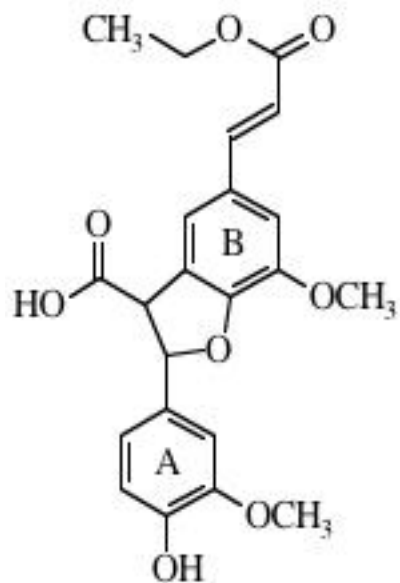
**Notes:**

S. Quideau  
veratryl phenylcoumaran

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			54.81	63		
A3 OMe			56.12	100		
A4 OMe			56.12	95		
B3 OMe			56.39	84		
B γ			63.38	71		
γ			64.65	61		
α			88.34	71		
A2			110.84	79		
B2			111.74	72		
A5			112.67	84		
B6			116.08	73		
A6			119.02	83		
B β			128.42	69		
B5			130.30	41		
B α			130.49	74		
B1			132.00	54		
A1			135.59	45		
B3			145.18	38		
B4			148.93	26		
A4			150.15	30		
A3			150.45	31		

Compound Number 2052

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.63	85		
β			55.43	46		
A3 OMe			56.30	97		
B3 OMe			56.47	100		
CH2			60.51	79		
α			88.70	59		
A2			110.70	79		
B2			113.20	68		
A5			115.72	91		
B β			116.46	76		
B6			119.08	69		
A6			120.05	86		
B5			128.35	32		
B1			129.20	54		
A1			132.64	52		
B α			145.36	76		
B3			145.70	53		
A4			147.70	38		
A3			148.47	44		
B4			151.03	34		
B γ			167.31	60		
γ			172.24	20		

<sup>1</sup>H (acetone)

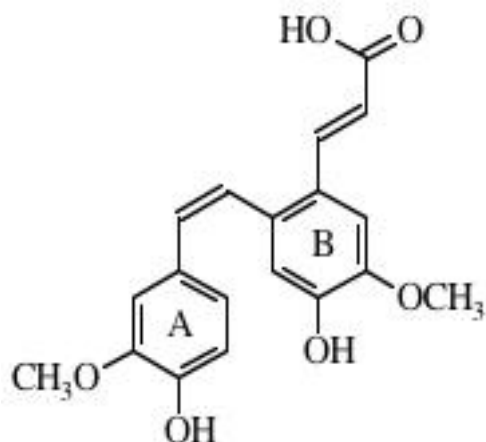
Atom	H Shifts	Mult	J
β	4.37	br d	7.8
α	6.06	d	7.9
B β	6.38	d	15.9
B α	7.60	d	15.9

**Notes:**

S. Quideau

Compound Number 2053

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe			56.25	100		
B3 OMe			56.56	80		
B2			109.15	74		
A2			110.16	83		
A5			115.99	83		
B β			116.50	76		
β			120.61	78		
B6			120.84	74		
A6			121.14	88		
B5			125.47	48		
B1			126.98	56		
α			130.68	81		
A1			130.90	58		
B α			146.00	69		
B4			146.96	50		
A4			147.61	55		
A3			148.61	46		
B3			148.83	54		
B γ			168.22	47		

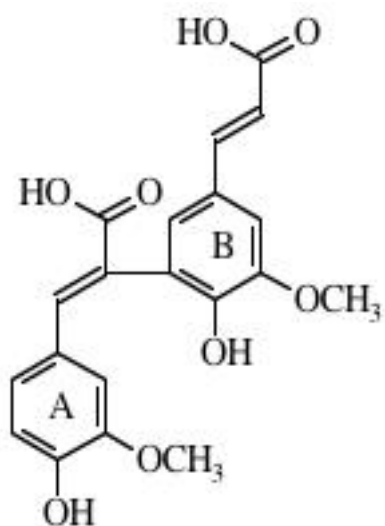
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A3 OMe	3.91	s	
B3 OMe	3.95	s	
B β	6.44	d	15.9
A5	6.83	d	8.1
A6	7.05	dd	8.1, 2.0
A2	7.22	d	2.0
B2	7.23	d	1.9
α	7.31	dd	16.5, 7.38
β	7.33	dd	16.5, 7.38
B6	7.54	d	1.9
B α	7.63	d	15.9

**Notes:**

S. Quideau

Compound Number 2054

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe			55.48	100	54.62	100
B3 OMe			56.55	95	56.06	90
B2			110.27	67	109.76	36
A2			113.26	78	112.79	47
A5			115.63	74	115.63	47
B β			116.23	67	115.92	48
B5			125.14	40	124.57	42
B6			125.60	71	124.38	42
β			126.34	57	125.90	67
A6			126.36	80	124.95	48
B1			127.26	62	125.66	49
A1			127.58	62	125.88	67
α			141.81	62	139.75	34
B α			145.80	66	144.28	43
A3			147.86	54	145.82	32
B4			148.01	43	147.00	64
A4			148.98	50	148.05	65
B3			149.10	53	148.12	46
B γ			168.56	41	167.86	80
γ			169.15	36	168.38	68

<sup>1</sup>H (acetone)

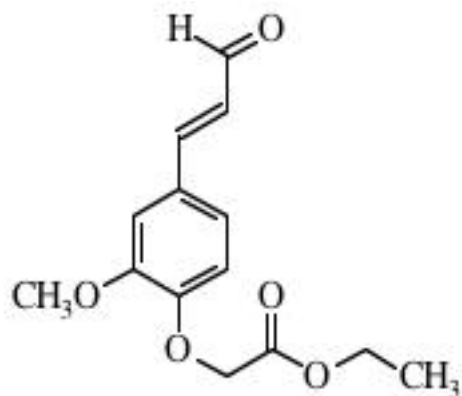
Atom	H Shifts	Mult	J
A3 OMe	3.45	s	
B3 OMe	3.95	s	
B β	6.38	d	15.4
A5	6.71	d	8.2
A2	6.73	d	1.9
A6	6.85	dd	8.2, 2.0
B6	7.03	d	1.9
B2	7.37	d	1.9
B α	7.60	d	15.9
α	7.81	s	

**Notes:**

S. Quideau  
 JCS Perkin 1, 3485-98 (1994)  
 Cmpd 14  
 Not soluble in CDCl<sub>3</sub>

Compound Number 2055

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.06	91				
OMe	55.95	97				
CH2	61.44	86				
CH2	65.99	88				
2	110.77	93				
5	113.40	94				
6	122.75	97				
α	127.17	99				
1	128.31	54				
3	149.74	46				
4	149.96	40				
β	152.36	84				
C=O	168.25	44				
γ	193.41	100				

<sup>1</sup>H (acetone)

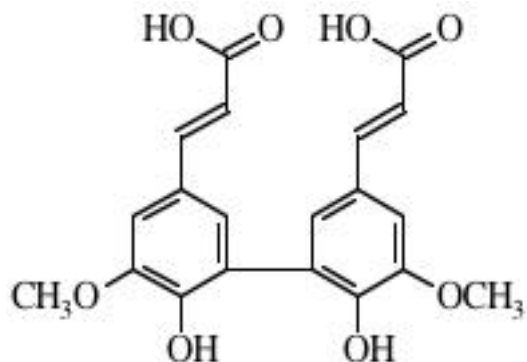
Atom	H Shifts	Mult	J
CH3	1.25	t	7.1
OMe	3.89	s	
CH2	4.23	q	7.1
CH2	4.69	s	
β	6.57	dd	15.8, 7.7
5	6.78	d	7.9
2,6	7.06-7.08	m	
α	7.36	d	15.8
γ	9.62	d	7.7

**Notes:**

S. Quideau  
intermediate for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2056

<sup>13</sup>C



5-5', Dehydrodiferulic Acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.52	100	56.04	55
2			109.97	89	109.44	56
β			116.28	94	115.82	64
5			125.62	54	125.20	60
6			126.07	96	125.05	60
1			126.60	64	124.83	74
α			145.89	100	144.56	55
4			147.38	40	146.43	71
3			148.92	58	147.90	99
γ			168.36	59	167.94	100

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.97	s	
β	6.42	d	15.4
6	7.21	d	2.0
2	7.35	d	2.0
α	7.64	d	15.9

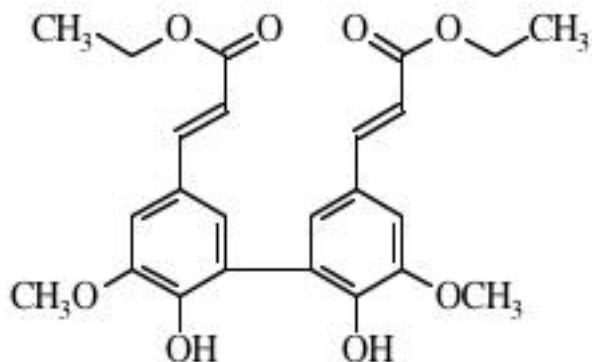
**Notes:**

S. Quideau JCS Perkin 1, 3485-98 (1994) Cmpd 16  
 Note chemical shift differences of 5,6,1 between solvents. Shifts were verified in both solvents As this compound has a plane of symmetry the shifts for the other half are identical.



Compound Number 2057

<sup>13</sup>C



5-5 Dehydrodiferulate diethyl ester

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.31	100	14.64		14.22	
OMe	56.17	84	56.56		56.03	
CH2	60.34	79	60.46		59.63	
2	108.78	61	109.95		109.47	
β	116.21	71	116.23		114.70	
5	123.59	34	125.59		125.20	
6	124.81	68	126.22		125.35	
1	126.73	51	126.64		124.58	
α	144.46	70	145.58		144.98	
4	145.10	37	147.47		146.84	
3	147.27	46	148.93		147.94	
γ	167.14	47	167.39		166.59	

<sup>1</sup>H (acetone)

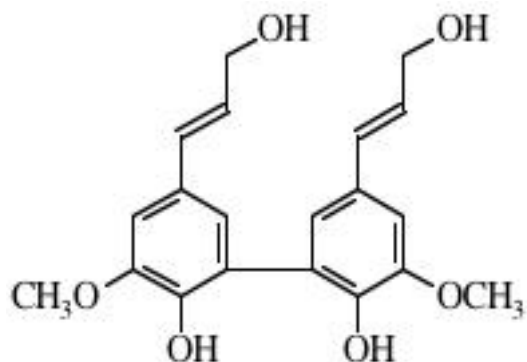
Atom	H Shifts	Mult	J
CH3	1.26	t	7.1
CH2	4.18	q	7.1
OMe	3.97	s	
β	6.43	d	15.9
6	7.20	d	2.0
2	7.36	d	2.0
α	7.62	d	15.9

**Notes:**

S. Quideau  
As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 2058

<sup>13</sup>C



5,5' Dehydrodiconiferyl Alcohol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.52	100		
γ			63.49	68		
2			108.97	69		
6			123.16	79		
5			126.15	21		
β			128.53	71		
1			129.69	45		
α			130.57	80		
4			144.53	26		
3			148.87	27		

<sup>1</sup>H (acetone)

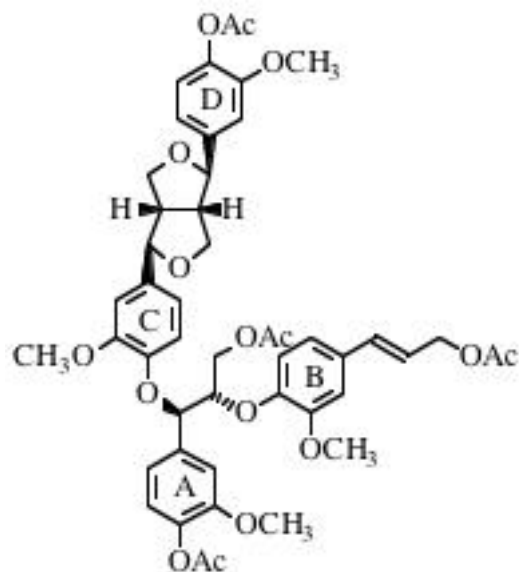
Atom	H Shifts	Mult	J
A3 OMe	3.89	s	
γ	4.21	br d	5.4
β	6.26	dt	15.8, 5..5
α	6.54	dt	15.8, 1.6
A6	6.92	d	2.0
A2	7.06	d	2.0
ArOH	7.42	s	

**Notes:**

S. Quideau Run only in acetone, no HMBC run. Assignment of quaternary carbons based on shift assignments of diacid/diester parents. Poor solubility on CDCl<sub>3</sub>... sample degraded, no DMSO data. As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 2059

<sup>13</sup>C



Guaiacylglycerol- $\alpha$ -pinoresinol- $\beta$ -coniferyl-bis-ether (Ac'd)

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
$\alpha$	5.60	d	5.6
$\beta$	4.86	m	
$\gamma$ 1	4.45	dd	11.9, 3.8
$\gamma$ 2	4.53	dd	11.9, 5.9
C $\alpha$	4.66	s	
C $\alpha$	3.06	m	
C $\gamma$ 1	3.83	m	
C $\gamma$ 2	4.17	m	
D $\alpha$	4.74	d	4.5
D $\gamma$	4.23	m	

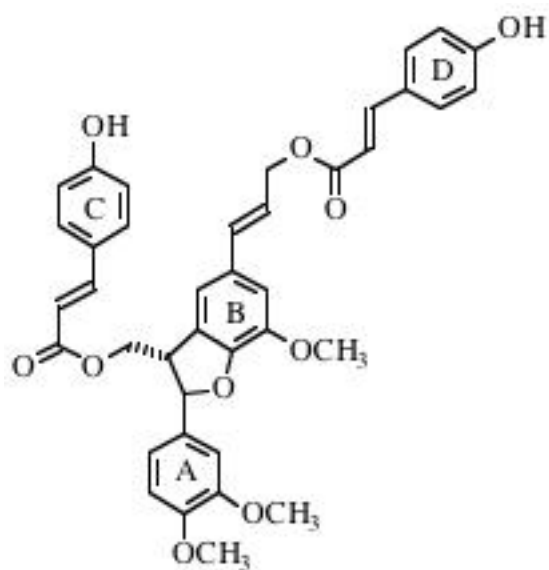
**Notes:**

S.Quideau  
not substantiated in CDCl<sub>3</sub> & d<sub>6</sub> DMSO  
Peracetate/diastereomeric mixture

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.59	99	20.45	99	20.35	99
Ac Me	20.59	99	20.45	99	20.35	99
Ac Me	20.70	70	20.62	50	20.43	49
Ac Me	20.93	70	20.78	70	20.70	49
C $\beta$	53.91	66	55.11	64	53.49	61
B $\beta$	54.39	74	55.36	60	53.74	63
A3 OMe	55.82	70	56.19	100	55.59	74
B3 OMe	55.95	100	56.23	100	55.65	74
D3 OMe	55.95	100	56.23	100	55.71	100
C3 OMe	56.11	56	56.40	100	55.79	100
A $\gamma$	63.45	36	63.62	40	62.44	36
B $\gamma$	65.05	69	65.38	59	64.40	61
C $\gamma$	71.88	70	72.37	48	71.07	52
D $\gamma$	71.88	70	72.48	48	71.18	52
A $\alpha$	80.34	43	80.88	30	78.69	33
A $\beta$	81.87	43	81.73	43	79.56	32
D $\alpha$	85.53	51	86.20	51	84.67	47
C $\alpha$	85.64	45	86.27	51	84.75	47
D2	110.01	89	111.07	74	110.38	44
B2	110.35	59	111.31	74	110.20	82
C2	110.39	59	111.47	54	110.71	82
A2	111.55	35	112.77	28	111.89	34
C5	116.58	30	117.29	29	115.64	37
D6	117.93	79	118.62	71	116.96	41
C6	118.19	31	118.90	29	118.18	76
B5	118.87	39	119.11	51	117.83	76
A6	119.65	59	120.51	75	119.43	52
B6	119.65	59	120.51	75	119.43	52
B $\beta$	122.08	57	123.14	55	122.17	43
A5	122.45	49	123.25	79	122.37	86
D5	122.73	76	123.43	79	122.55	86
B1	131.55	40	132.27	34	130.46	33
B $\alpha$	133.93	59	134.23	57	133.01	51
C1	135.13	35	136.85	25	135.21	29
A1	136.93	35	137.72	39	136.37	31
D4	139.19	29	140.08	31	138.42	17
A4	139.62	37	140.62	31	138.86	30
D1	140.23	44	141.84	44	140.50	33
C4	146.94	22	147.42	23	145.70	19
B4	147.63	30	148.67	30	147.00	21
C3	150.46	29	151.27	19	149.61	17
B3	150.93	39	151.86	36	150.06	24
A3	151.12	39	152.10	31	150.43	24
D3	151.27	39	152.24	34	150.72	22
A4 AcC=O	168.71	30	168.90	35	168.36	27
D4 AcC=O	168.98	40	169.05	35	168.54	25
B $\gamma$ AcC=O	170.68	36	170.78	40	170.08	25
A $\gamma$ AcC=O	170.76	36	170.81	40	170.12	25

Compound Number 2060

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	50.40	30	51.33	39	49.47	15
A3 OMe	55.90	100	56.09	56	55.48	57
A4 OMe	55.90	100	56.13	32	55.76	22
B3 OMe	56.03	33	56.41	55	55.82	55
B γ	65.19	31	65.42	40	64.46	21
γ	65.38	25	65.92	33	64.80	12
α	88.86	34	89.15	42	87.87	20
A2	109.31	41	110.93	47	110.01	29
B2	110.67	26	112.25	33	111.03	11
A5	111.06	42	112.65	50	111.67	28
D β	114.53	39	115.08	51	113.68	21
C β	115.14	43	115.49	51	114.05	32
B6	115.39	32	116.36	40	115.31	16
D3	115.93	96	116.68	100	115.77	100
D5	115.83	96	116.68	100	115.77	100
C3	115.96	96	116.70	100	115.77	100
C5	115.96	96	116.70	100	115.77	100
A6	118.91	43	119.44	52	118.66	28
B β	121.37	36	122.40	41	121.56	18
D1	126.75	29	126.85	33	124.94	24
C1	126.98	29	126.97	37	125.08	29
B5	127.79	35	129.21	36	128.08	22
C2	130.00	34	130.94	100	130.34	100
C6	130.00	34	130.94	100	130.34	100
D2	130.06	97	131.02	100	130.34	100
D6	130.06	97	131.02	100	130.34	100
B1	130.62	34	131.51	27	130.06	24
A1	132.86	33	134.52	34	133.61	18
B α	134.27	36	134.78	44	132.79	29
B3	144.40	33	145.42	36	143.91	22
C α	144.94	40	145.50	50	144.89	29
D α	145.40	37	145.91	45	145.13	23
B4	148.27	26	149.42	25	147.65	23
A3	149.14	38	150.43	25	148.72	36
A4	149.17	38	150.51	28	148.81	21
D4	158.05	31	160.61	25	159.87	34
C4	158.23	31	160.71	25	159.94	27
C γ	167.20	34	167.23	38	166.38	5
D γ	167.37	29	167.23	38	166.38	14

<sup>1</sup>H (acetone)

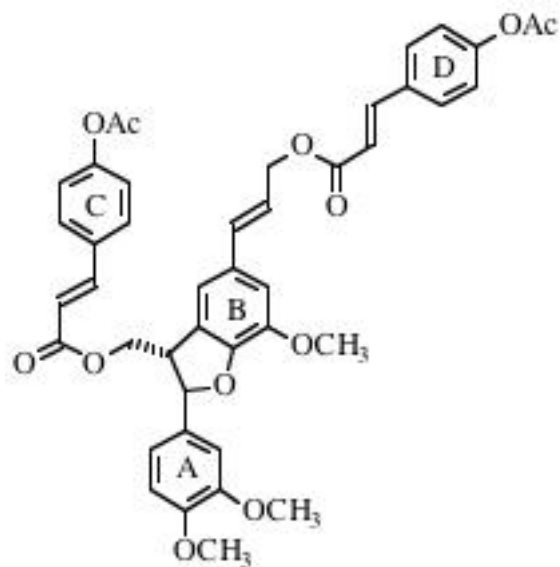
Atom	H Shifts	Mult	J
A3,4 OMe	3.77	s	
β	3.85	m	
B3 OMe	3.88	s	
γ1	4.45	dd	11.1, 7.6
γ2	4.58	dd	11.1, 5.4
B γ	4.78	dd	6.5, 1.2
a	5.61	d	7.1
B β	6.31	dt	15.8, 6.5
D β	6.33	d	15.9
C β	6.37	d	15.9
B α	6.70	dt	15.8, 1.2
C,D 3,5	6.88	m	
A5	6.93	d	8.3
A6	7.00	d	8.3, 2.0
A,B 2	7.07	br d	2.0
B6	7.11	br s	
D 2,6	7.51	m	
C 2,6	7.54	m	
C α	7.63	d	15.9
D α	7.53	d	15.9

**Notes:**

S. Quideau  
 C3,4,5 and D3,4,5 Can be interchanged  
 not substantiated in CDCl<sub>3</sub> & DMSO

Compound Number 2061

<sup>13</sup>C



<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.26	s	
A3,4 OMe	3.76	s	
B3 OMe	3.88	s	
β	~3.88	m	
γ1	4.48	dd	11.1, 7.5
γ2	4.61	dd	11.1, 5.4
B γ	4.81	dd	6.5, 1.3
α	5.61	d	7.2
B β	6.32	dt	15.8, 6.5
A5	6.43	d	8.3
D β	6.50	d	16.0
C β	6.54	d	16.0
B α	6.71	dt	15.8, 1.2
A6	7.00	dd	8.2, 2.0
A2	7.08	d	2.0
B2	7.08	br s	
B6	7.11	br s	
C,D 3,5	7.16-7.21	m	
D 2,6	7.68	m	
C α	7.70	d	16.0
C 2,6	7.72	m	

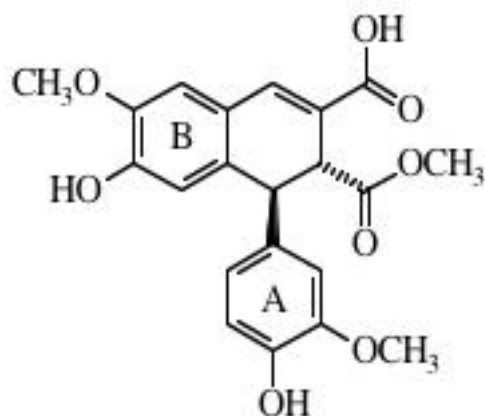
**Notes:**

S. Quideau  
 C4,D4 and Cg,Dg Can be interchanged  
 Not substantiated in CDCl<sub>3</sub> & DMSO

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
C4 AcMe	21.08	85	20.94	91	20.76	100
D4 AcMe	21.08	85	20.94	91	20.76	100
β	50.45	30	51.21	31	49.36	32
A3 OMe	55.97	52	56.08	46	55.50	95
A4 OMe	56.00	47	56.14	31	55.50	95
B3 OMe	56.13	47	56.41	42	55.76	85
B γ	65.31	30	65.71	32	64.66	31
γ	65.56	23	66.15	23	64.98	26
α	88.94	35	89.17	34	87.72	31
A2	109.53	32	110.97	38	110.11	48
B2	110.96	25	112.28	26	111.18	30
A5	111.26	40	112.63	39	111.77	48
B6	115.41	30	116.35	30	115.30	32
D β	117.59	37	118.61	41	117.65	49
C β	118.21	41	119.01	41	118.01	57
A6	118.94	42	119.53	38	118.65	49
B β	121.34	34	122.17	31	121.32	33
D3	122.14	100	123.23	100	122.24	96
D5	122.14	100	123.23	100	122.24	96
C3	122.19	100	123.23	100	122.28	96
C5	122.19	100	123.23	100	122.28	96
B5	127.79	27	129.17	27	128.02	47
C2	129.21	57	130.16	96	129.49	44
C6	129.21	57	130.16	96	129.49	44
D2	129.42	24	130.21	93	129.53	96
D6	129.42	24	130.21	93	129.53	96
B1	130.66	26	131.47	26	130.01	41
D1	131.92	23	132.77	25	131.47	47
C1	132.16	23	132.91	25	131.62	46
A1	132.96	28	134.41	28	132.74	41
B α	134.47	31	134.99	31	133.72	41
C α	143.91	40	144.43	39	143.59	24
D α	144.39	37	144.79	37	143.81	55
B3	144.53	24	145.42	26	143.87	47
B4	148.45	18	149.44	19	147.67	32
A3	149.36	30	150.45	25	148.81	45
C4	152.21	17	153.46	21	151.99	47
D4	152.36	17	153.53	21	152.03	47
C γ	166.47	30	166.80	48	165.84	45
D γ	166.61	23	166.80	48	165.87	45
C4 C=O	168.97	30	169.45	34	168.87	52
D4 C=O	169.01	30	169.45	34	168.87	52

Compound Number 2062

<sup>13</sup>C



Methyl 7-hydroxy-5-methoxy-1-(4-hydroxy-3-methoxyphenyl)- trans-1,1-dihydronaphthalene-3-carboxylic Acid 2-carboxylate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A γ OMe	3.55	s	
A3 OMe	3.74	s	
B3 OMe	3.87	s	
β	3.96	d	3.1
α	4.51	d	3.1
A6	6.43	dd	8.3, 1.9
A5	6.657	d	8.3
B5	6.661	s	
A2	6.77	d	2.0
B2	7.06	s	
B α	7.66	s	

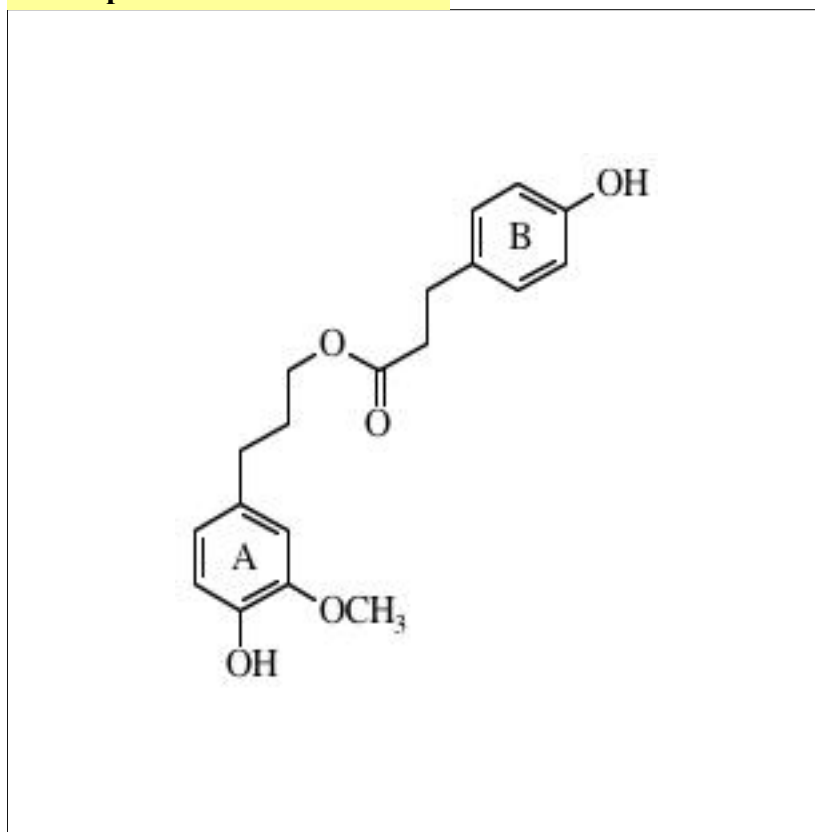
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			46.46	87		
β			48.06	64		
A g OMe			52.25	96		
A3 OMe			56.18	95		
B3 OMe			56.36	95		
A2			112.01	95		
B2			113.11	87		
A5			115.52	72		
B5			116.75	64		
A6			120.82	100		
B β			123.97	24		
B1			124.58	64		
B6			132.08	64		
A1			135.45	73		
B α			138.07	56		
A4			146.14	35		
B3			147.51	48		
A3			148.11	48		
B4			149.34	35		
B γ			168.80	12		
A γ			173.44	63		

Compound Number 2063

<sup>13</sup>C



Dihydroconiferyl 4-hydroxydihydrocinnamate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	30.11	46	30.75	47	29.49	37
β	30.40	42	31.33	47	29.95	38
α	31.75	44	32.24	47	30.91	36
B β	36.17	45	36.69	49	35.47	39
OMe	55.87	47	56.16	45	55.48	47
γ	63.85	44	64.03	48	63.13	35
A2	110.96	48	112.73	49	112.43	40
A5	114.28	47	115.62	45	115.28	92
B3	115.31	99	116.00	89	115.03	39
B5	115.31	99	116.00	89	115.03	39
A6	120.93	51	121.55	51	120.30	43
B2	129.37	100	130.05	100	129.04	100
B6	129.37	100	130.05	100	129.04	100
B1	132.46	25	132.38	23	130.50	30
A1	133.09	28	133.55	25	131.83	33
A4	143.76	25	146.58	22	144.53	35
A3	146.40	23	148.16	17	147.38	31
B4	154.13	26	156.57	22	155.55	33
B γ	173.26	24	173.09	21	172.32	34

<sup>1</sup>H (acetone)

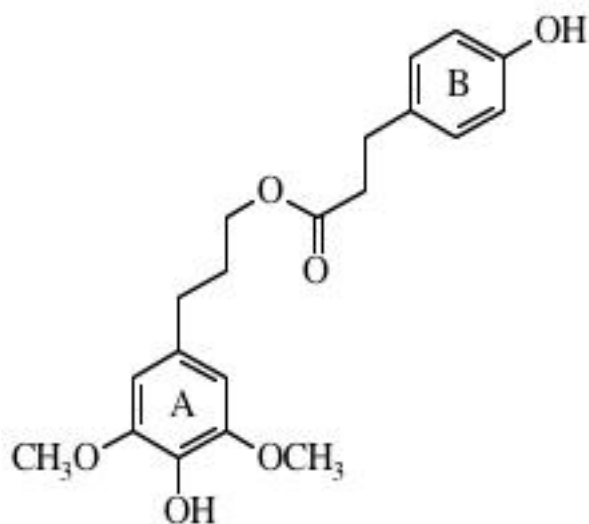
Atom	H Shifts	Mult	J
β	1.86	m	
α	2.55	t	7.4
B β	2.56	t	7.6
B α	2.82	t	7.6
OMe	3.80	s	
γ	4.03	t	6.5
A6	6.61	dd	8.0, 2.0
A5	6.73	d	7.9
B 3,5	6.75	m	
A2	6.79	d	2.0
B 2,6	7.06	m	
ArOH	7.86	s	
ArOH	8.10	s	

**Notes:**

S. Quideau

Compound Number 2064

<sup>13</sup>C



Dihydrosinapyl dihydro-p-coumarate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	30.11	48	30.77	49	29.49	36
β	30.41	44	31.31	48	29.90	37
α	32.26	46	32.71	47	31.41	32
B β	36.17	46	36.71	49	35.46	36
OMe	56.27	96	56.57	92	55.87	100
OMe	56.27	96	56.57	92	55.87	100
γ	63.82	48	64.04	49	63.15	33
A2	105.03	94	106.69	90	105.63	69
A6	105.03	94	106.69	90	105.63	69
B3	115.32	95	116.01	92	115.02	81
B5	115.32	95	116.01	92	115.02	81
B2	129.34	100	130.07	100	129.03	91
B6	129.34	100	130.07	100	129.03	91
B1	132.28	31	132.40	26	130.50	25
A1	132.36	24	132.59	27	131.04	27
A4	132.93	26	135.07	23	133.55	25
A3	146.93	50	148.62	43	147.85	53
A5	146.93	50	148.62	43	147.85	53
B4	154.19	28	156.61	25	155.55	28
B γ	173.21	29	173.08	26	172.32	30

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	1.87	m	
α	2.55	t	7.6
B β	2.56	t	7.5
B α	2.82	t	7.6
OMe	3.79	s	
γ	4.03	t	6.5
A 2,6	6.48	s	
B 3,5	6.74	m	
A4 OH	6.89	s	
B 2,6	7.06	m	
B4 OH	8.08	s	

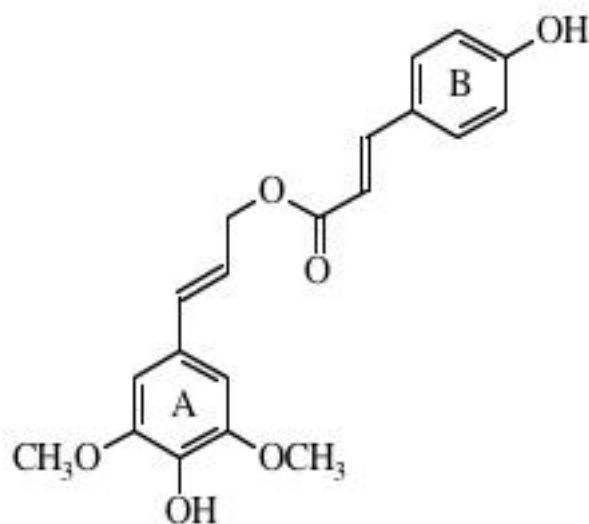
**Notes:**

S. Quideau



Compound Number 2065

<sup>13</sup>C



Sinapyl p-coumarate

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.84	s	
γ	4.78	dd	6.5, 1.3
β	6.28	dt	15.8, 6.5
B β	6.38	d	15.9
α	6.64	dt	15.8, 1.3
A 2,6	6.79	s	
B 3,5	6.89	m	
B 2,6	7.55	m	
B α	7.63	d	15.9

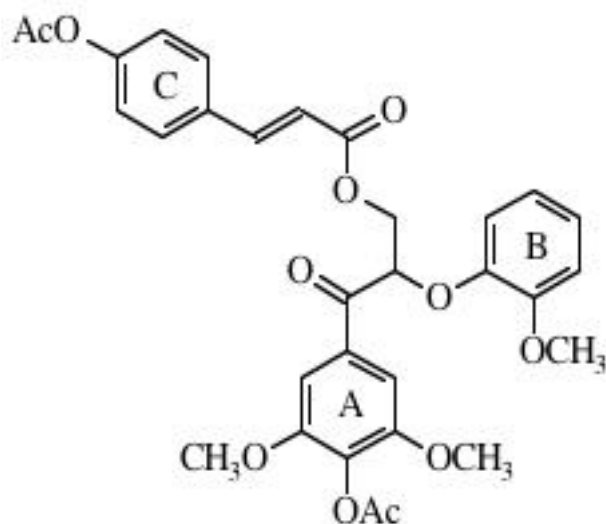
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.28	100	56.61	91	□55.97	100
OMe	56.28	100	56.61	91	55.97	100
γ	65.15	43	65.42	43	64.50	23
A2	103.55	89	105.16	91	104.20	64
A6	103.55	89	105.16	91	104.20	64
B β	115.15	45	115.52	45	114.08	38
B3	115.92	93	116.70	100	115.78	64
B5	115.92	93	116.70	100	115.78	64
β	121.44	44	122.07	48	121.06	28
B1	126.98	28	126.99	24	125.08	25
A1	127.84	27	128.22	25	126.47	26
B2	129.98	94	130.95	99	130.34	73
B6	129.98	94	130.95	99	130.34	73
α	134.53	44	135.14	47	134.03	30
A4	135.03	28	137.27	22	135.80	26
B α	144.91	39	145.45	45	144.88	36
A3	147.10	59	148.84	49	148.04	64
A5	147.10	59	148.84	49	148.04	64
B4	158.06	32	160.62	27	159.87	25
B γ	167.32	26	167.22	23	166.40	24

Compound Number 2066

<sup>13</sup>C



2-(4-Acetoxy-3,5-dimethoxybenzoyl)-2-(2-methoxyphenoxy)ethyl 4-acetoxycinnamate

<sup>1</sup>H (acetone)

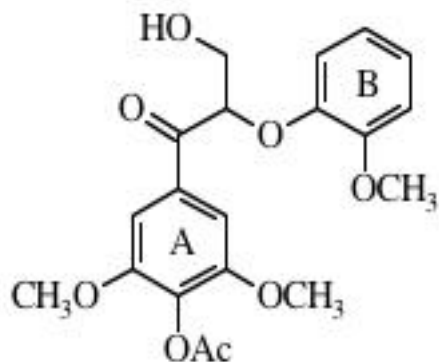
Atom	H Shifts	Mult	J
Ac Me	2.26	s	
Ac Me	2.26	s	
B3 OMe	3.75	s	
OMe	3.86	s	
γ1	4.60	dd	12.0, 6.8
γ2	4.86	dd	12.0, 3.6
β	5.96	dd	6.8, 3.6
C α	6.50	d	16.0
B6	6.83	ddd	7.9, 8.8, 2.5
B 1,2,5	6.98	m	
C 3,5	7.18	m	
A 2,6	7.56	s	
C β	7.62	d	16.0
C 2,6	7.69	m	

**Notes:**

S. Quideau  
B5 and C β can be interchanged

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac	20.41	52	20.21	45	20.08	56
Ac	21.10	51	20.94	45	20.83	50
B3 OMe	55.71	52	56.12	49	55.55	63
OMe	56.34	93	56.68	89	56.21	100
OMe	56.34	93	56.68	89	56.21	100
γ	64.70	31	65.07	36	63.82	20
β	80.76	41	80.41	44	78.23	28
A2	105.93	76	106.52	84	105.47	52
A6	105.93	76	106.52	84	105.47	52
B2	112.59	49	113.82	47	112.95	34
B5	117.42	43	118.33	50	116.01	35
C β	118.35	48	118.38	51	117.39	41
B6	121.03	47	121.64	47	120.63	40
C3	122.18	100	123.24	100	122.38	90
C5	122.18	100	123.24	100	122.38	90
B1	123.60	45	123.34	8	122.55	32
C2	129.32	96	130.27	91	129.69	87
C6	129.32	96	130.27	91	129.69	87
C1	131.84	31	132.66	8	131.49	34
A1	132.66	30	133.94	26	132.49	34
A4	133.39	20	134.24	27	132.55	30
C α	144.59	42	145.13	13	144.28	36
B4	146.72	31	147.84	42	146.32	37
B3	150.37	29	151.34	24	149.51	39
A3	152.28	63	153.40	22	151.95	76
A5	152.28	63	153.40	22	151.95	76
C4	152.36	31	153.59	49	152.13	34
C γ	166.62	35	166.84	23	165.85	33
Ac C=O	168.05	29	168.13	26	167.63	37
Ac C=O	169.08	29	169.41	22	168.94	42
α	194.44	33	194.92	24	194.02	35

Compound Number 2067

<sup>13</sup>C

1(4-acetoxy-3,5-dimethoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy)propanone

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B3 OMe	3.77	s	
OMe	3.85	s	
γ	4.10	dd	6.2, 5.0
γ OH	4.28	t	6.2
β	5.56	t	5.0
A 2,6	7.49	s	
B6	6.80	m	
B 1,5	6.41	m	
B2	6.96	m	

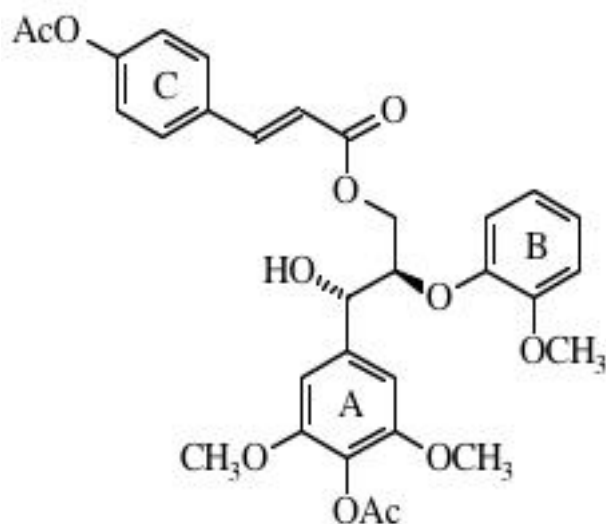
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.20	46		
B3 OMe			56.11	48		
OMe			56.62	94		
OMe			56.62	94		
γ			63.90	47		
β			84.04	50		
A2			106.56	100		
A6			106.56	100		
B2			113.67	50		
B5			117.03	46		
B6			121.61	53		
B1			123.24	53		
A4			133.99	13		
A1			134.39	25		
B4			148.26	21		
B3			151.03	21		
A3			153.25	48		
A5			153.25	48		
Ac C=O			168.15	24		
α			196.77	26		

Compound Number 2068

<sup>13</sup>C



*erythro*

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac			20.25	50		
Ac			20.94	51		
B3 OMe			56.21	45		
OMe			56.39	94		
OMe			56.39	94		
γ			64.01	31		
α			73.49	40		
β			83.04	40		
A2			104.37	75		
A6			104.37	75		
B2			113.66	46		
C β			118.84	42		
B5			119.77	46		
B6			121.73	47		
C3			123.18	100		
C5			123.18	100		
B1			123.67	43		
A4			128.89	15		
C2			130.15	94		
C6			130.15	94		
C1			132.86	28		
A1			140.77	30		
C α			144.38	42		
B4			148.69	25		
B3			152.04	25		
A3			152.89	52		
A5			152.89	52		
C4			153.43	24		
C γ			166.80	28		
Ac C=O			168.58	21		
Ac C=O			169.43	30		

<sup>1</sup>H (acetone)

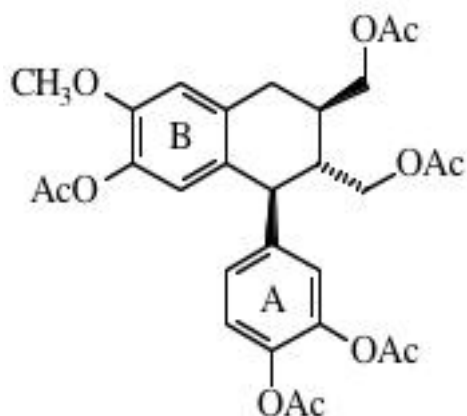
Atom	H Shifts	Mult	J
Ac	2.20	s	
Ac	2.26	s	
OMe	3.78	s	
B3 OMe	3.81	s	
γ1	4.47	dd	11.9, 3.9
γ2	4.52	dd	11.9, 6.1
β	4.73	m	
α OH	4.78	d	4.5
α	5.07	br t	4.8
C β	6.41	d	16.0
B6	6.84	ddd	7.9, 6.4, 2.7
A 2,6	6.88	s	
B 1,2	6.95	m	
B5	7.04	br dd	1.4
C 3,5	7.17	m	
C α	7.51	d	16.0
C 2,6	7.66	m	

**Notes:**

S. Quideau

Compound Number 2069

<sup>13</sup>C



Isotaxiresinol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.01	s	
Ac Me	2.10	s	
β	2.14	m	
Ac Me	2.22	s	
Ac Me	2.24	s	
B β	2.26	m	
B α	2.90	m	
A3 OMe	3.78	s	
γ1	3.90	dd	11.7, 3.5
α	4.06	br d	10.2
Bγ1	4.11	dd	11.2, 6.0
γ2	4.12	dd	11.7, 3.5
B γ2	4.22	dd	11.2, 4.4
B5	6.34	d	0.9
B2	6.88	br s	
A2	7.04	d	2.1
A6	7.10	dd	8.3, 4.1
A5	7.14	d	8.3

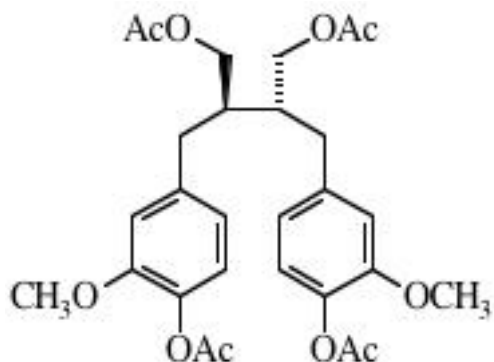
**Notes:**

S. Quideau  
 Diaxial configuration on 6-membered ring --Trans 7,8  
 Natural occurring isomer is (+), i.e. 7S.8R, 8R'

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 Ac Me			20.36	85		
A4 Ac Me			20.45	100		
B4 Ac Me			20.50	88		
Ac Me			20.60	83		
Ac Me			20.72	86		
B α			33.50	67		
B β			36.27	82		
β			44.34	80		
α			47.51	80		
OMe			56.18	96		
γ			63.57	65		
B γ			66.69	72		
B2			112.97	74		
B5			124.12	74		
A5			124.36	82		
A2			124.92	78		
A6			127.98	79		
B6			131.84	54		
B1			135.41	55		
B4			139.26	46		
A4			142.08	41		
A3			143.41	42		
A1			144.19	58		
B3			150.55	44		
A4 Ac C=O			168.52	46		
B4 Ac C=O			168.63	46		
A3 Ac C=O			168.92	45		
Ac C=O			171.04	58		
Ac C=O			171.05	55		

Compound Number 2070

<sup>13</sup>C



Seco-isolariciresinol

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
4 Ac Me			20.47	100		
γ AcMe			20.83	84		
α			35.51	64		
β			40.81	77		
γ			64.67	68		
2			114.00	79		
6			121.67	80		
5			123.32	80		
4			139.14	45		
1			140.00	1		
3			152.01	50		
4 Ac C=O			169.04	46		
γAc C=O			171.04	52		

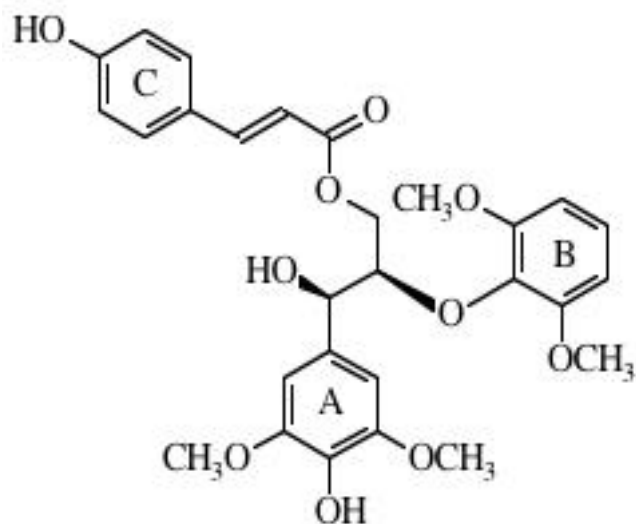
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	2.00	s	
4 Ac Me	2.21	s	
β	2.22	m	
α1	2.70	dd	13.9, 7.9
α2	2.83	dd	13.8, 6.7
A3 OMe	3.74	s	
γ1	4.03	dd	11.4, 5.5
γ2	4.25	dd	11.4, 6.1
A6	6.70	dd	8.0, 1.95
A2	6.87	d	1.92
A5	6.92	d	8.0

**Notes:**

S. Quideau  
 natural occurring isomer (-), i.e. 8R, 8R'  
 As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 2071

<sup>13</sup>C*threo*<sup>1</sup>H (acetone)

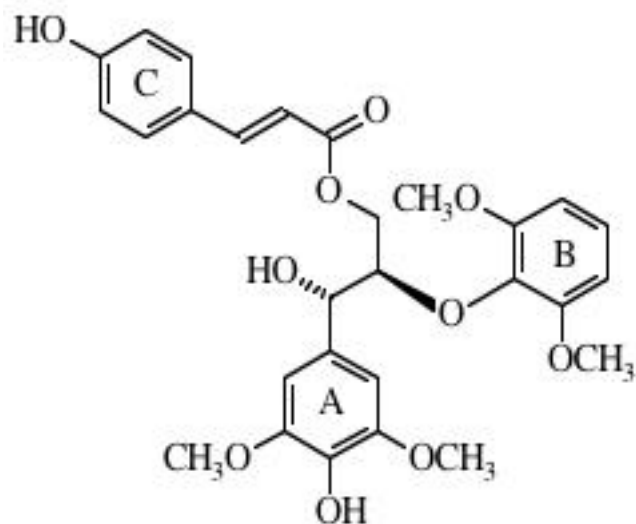
Atom	H Shifts	Mult	J
A 3,5 OMe	3.76	s	
B 3,5 OMe	3.83	s	
γ1	4.06	dd	11.9, 4.2
β	4.27	ddd	7.3, 4.2, 3.1
γ2	4.45	dd	12.0, 3.2
α	5.00	br d	7.1
α OH	4.60	d	3.2
C β	6.33	d	16.0
B 2,6	6.68	d	8.4
A 2,1	6.67	d	0.3
C 3,5	6.89	m	
B1	7.01	dd	8.7, 8.1
C α	7.48	d	16.0
C 2,6	7.53	m	

**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	56.01	54	56.44	81	55.78	26
B OMe	56.01	54	56.44	81	55.78	26
A OMe	56.25	56	56.59	49	55.93	100
A OMe	56.25	56	56.59	49	55.93	100
γ	63.92	23	64.78	28	64.09	8
α	74.66	35	74.81	35	72.17	17
β	87.07	29	86.87	38	83.84	17
A2	103.75	78	105.39	72	104.32	36
A6	103.75	78	105.39	72	104.32	36
B2	105.16	98	106.35	100	105.58	51
B6	105.16	98	106.35	100	105.58	51
C β	114.87	38	115.52	42	114.12	36
C3	115.97	96	116.68	95	115.82	74
C5	115.97	96	116.68	95	115.82	74
B1	124.30	44	124.72	40	123.62	22
C1	126.83	32	126.97	44	125.07	25
C2	129.98	100	130.92	91	130.21	54
C6	129.98	100	130.92	91	130.21	54
A1	130.58	41	132.00	30	131.16	26
A4	134.50	38	136.27	24	134.63	32
B4	136.62	33	137.85	20	136.12	28
C α	144.86	44	145.28	41	144.38	13
A3	146.99	79	148.38	53	147.49	40
A5	146.99	79	148.38	53	147.49	40
B3	152.93	71	154.03	51	152.97	63
B5	152.93	71	154.03	51	152.97	63
C4	158.23	37	160.58	32	159.80	24
C γ	167.12	23	167.12	27	166.25	32

Compound Number 2072

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	56.20	92	56.48	78	55.77	76
B OMe	56.20	92	56.48	78	55.77	76
A OMe	56.33	89	56.60	76	55.92	100
A OMe	56.33	89	56.60	76	55.92	100
γ	62.59	30	63.57	31	63.38	19
α	71.90	36	73.19	40	72.62	27
β	83.18	41	84.40	42	83.51	28
A2	102.78	85	104.59	88	103.77	62
A6	102.78	85	104.59	88	103.77	62
B2	105.36	92	106.34	96	105.32	69
B6	105.36	92	106.34	96	105.32	69
C β	115.19	46	115.73	46	114.12	42
C3	115.91	97	116.65	45	115.81	87
C5	115.91	97	116.65	45	115.81	87
B1	124.44	44	124.75	37	123.40	31
C1	126.85	36	127.03	32	125.03	37
C2	129.88	100	130.82	100	130.11	83
C6	129.88	100	130.82	100	130.11	83
A1	129.75	32	131.66	28	132.10	29
A4	133.91	29	135.91	24	134.45	32
B4	134.69	30	136.59	24	135.92	36
C α	144.58	44	144.99	47	144.16	37
A3	147.00	69	148.49	57	147.63	67
A5	147.00	69	148.49	57	147.63	67
B3	153.69	70	154.53	57	152.89	84
B5	153.69	70	154.53	57	152.89	84
C4	158.15	35	160.43	34	159.74	32
C γ	167.29	37	167.16	32	166.27	38

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A 3,5 OMe	3.79	s	
B 3,5 OMe	3.82	s	
γ1	4.23	dd	11.8, 3.4
γ2	4.45	dd	11.8, 7.3
β	4.58	m	
α OH	4.697	d	3.9
α	4.96	br m	
C β	6.15	d	16.0
B 2,6	6.68	d	8.4
A 2,6	6.71	d	0.7
C 3,5	6.84	m	
B1	7.01	dd	8.6, 8.2
C α	7.33	d	16.0
C 2,6	7.46	m	

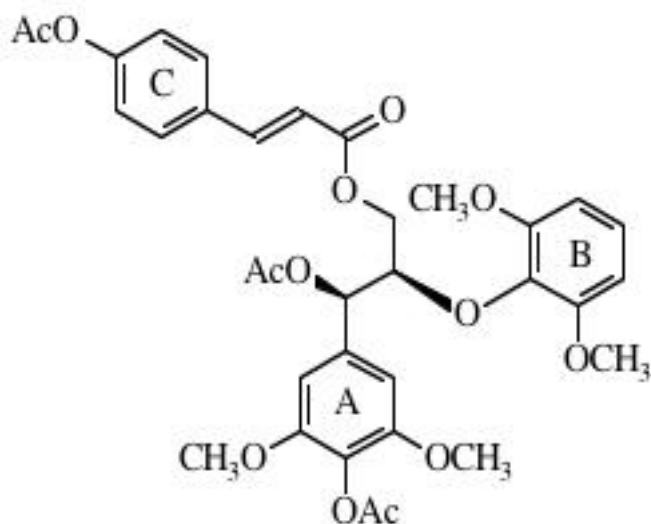
**Notes:**

S. Quideau



Compound Number 2073

<sup>13</sup>C



*threo*

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α Ac Me	1.97	s	
Ac Me	2.02	s	
Ac Me	2.27	s	
OMe	3.78	s	
OMe	3.79	s	
γ1	4.07	dd	11.9, 4.7
γ2	4.41	dd	11.9, 3.8
β	4.68	ddd	6.8, 4.7, 3.8
α	6.18	d	6.8
C β	6.56	d	16.0
B 2,6	6.66	d	8.4
A 2,6	6.86	br s	
B1	6.99	t	8.4
C 3,5	7.19	m	
C α	7.55	d	16.0
C 2,6	7.72	m	

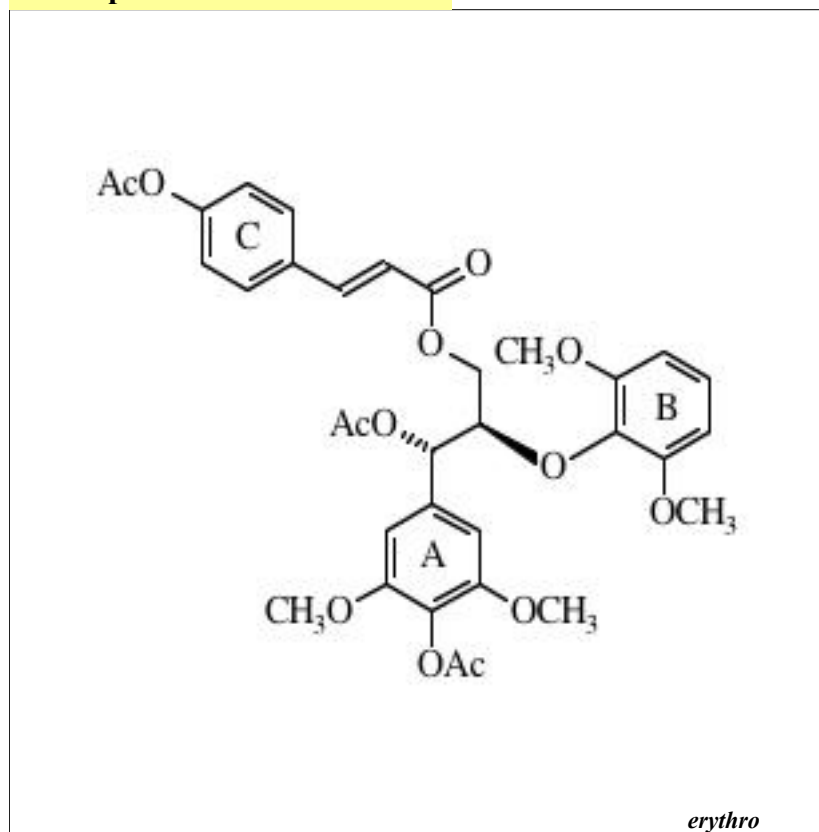
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.36	49	20.23	47	20.15	54
Ac Me	21.02	83	20.95	73	20.75	47
α Ac Me	21.02	83	20.95	73	20.88	52
OMe	55.89	<b>100</b>	56.35	72	55.80	77
OMe	55.89	100	56.35	72	55.80	77
OMe	56.13	78	56.49	73	56.01	56
OMe	56.13	78	56.49	73	56.01	56
γ	64.01	22	64.66	25	63.72	10
α	75.63	30	76.79	34	75.97	16
β	80.86	29	81.83	32	80.62	18
A2	104.10	51	104.92	61	103.89	34
A6	104.10	51	104.92	61	103.89	34
B2	105.09	69	106.22	77	105.29	70
B6	105.09	69	106.22	77	105.29	70
C β	117.75	34	118.88	38	117.82	27
C3	122.09	79	123.20	<b>100</b>	122.43	<b>100</b>
C5	122.09	79	123.20	100	122.43	100
B1	123.74	31	124.47	37	123.68	22
A4	128.57	18	129.54	14	127.74	25
C2	129.19	96	130.22	88	129.68	67
C6	129.19	96	130.22	88	129.68	67
C1	131.92	26	132.90	24	131.66	31
B4	135.42	30	136.76	36	135.61	27
A1	136.56	24	137.85	20	136.15	31
C α	143.86	33	144.48	39	143.76	29
A3	151.94	55	153.07	53	151.55	74
A5	151.94	55	153.07	53	151.55	74
C4	152.10	24	153.46	24	152.09	30
B3	153.14	53	154.19	53	152.69	66
B5	153.14	53	154.19	53	152.69	66
C γ	166.24	27	166.62	26	165.86	32
Ac C=O	168.45	25	168.46	21	168.06	28
Ac C=O	169.05	41	169.45	29	169.06	38
Ac C=O	169.68	27	169.93	27	169.44	30

Compound Number 2074

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.36	57	20.24	42	20.15	61
α Ac Me	21.02	86	20.95	71	20.76	54
Ac Me	21.02	86	20.95	71	20.87	53
B OMe	55.87	100	56.32	80	55.78	100
B OMe	55.87	100	56.32	80	55.78	100
A OMe	56.07	100	56.47	79	55.97	88
A OMe	56.07	100	56.47	79	55.97	88
γ	63.13	25	63.73	28	62.64	15
α	74.50	34	75.58	37	74.23	26
β	80.92	35	81.67	38	80.19	26
A2	103.93	65	104.60	84	103.45	55
A6	103.93	65	104.60	84	103.45	55
B2	105.05	75	106.12	83	105.27	69
B6	105.05	75	106.12	83	105.27	69
C β	117.84	41	118.80	42	117.70	36
C3	122.03	87	123.19	100	122.43	99
C5	122.03	87	123.19	100	122.43	99
B1	124.00	3	124.72	43	124.00	29
A4	128.37	21	129.35	15	127.59	31
C2	129.19	94	130.15	90	129.57	82
C6	129.19	94	130.15	90	129.57	82
C1	131.98	31	132.85	26	131.56	33
B4	135.39	27	136.69	34	134.77	39
A1	135.73	33	136.77	21	135.43	34
C α	143.73	39	144.29	41	143.54	36
A3	151.84	62	153.06	55	151.58	85
A5	151.84	62	153.06	55	151.58	85
C4	152.04	29	153.44	23	152.06	36
B3	153.32	66	154.34	56	152.85	94
B5	153.32	66	154.34	56	152.85	94
C γ	166.42	32	166.52	27	165.70	36
Ac C=O	168.49	30	168.51	25	168.10	40
Ac C=O	169.04	35	169.44	27	169.05	45
Ac C=O	169.43	30	170.00	26	169.49	39

<sup>1</sup>H (acetone)

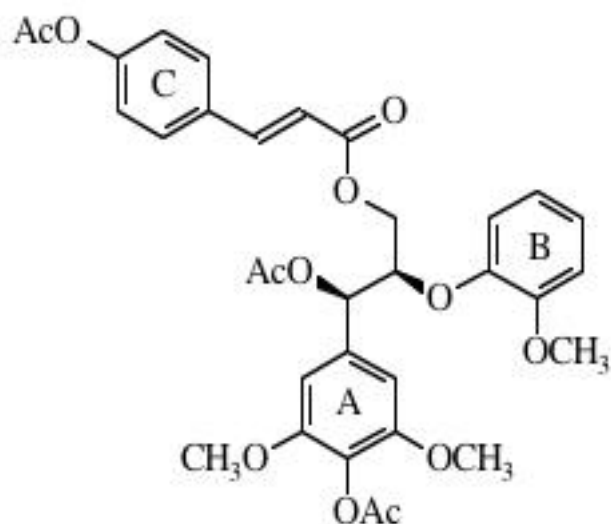
Atom	H Shifts	Mult	J
α Ac Me	2.15	s	
Ac Me	2.21	s	
Ac Me	2.26	s	
B 3,5 OMe	3.79	s	
A 3,5 OMe	3.81	s	
γ1	4.36	dd	11.9, 4.0
γ2	4.53	dd	11.9, 6.2
β	4.80	dt	6.2, 4.0
α	6.14	d	4.2
C β	6.35	d	16.0
B 2,6	6.65	d	8.4
A 2,6	6.83	br s	
B1	6.99	t(dd)	8.4
C 3,5	7.18	m	
C α	7.44	d	16.0
C 2,6	7.66	m	

**Notes:**

S. Quideau  
B3,5 OMe and A3,5 OMe can be interchanged

Compound Number 2075

<sup>13</sup>C



*threo*

$\gamma$ -p-coumaroylated syringylglycerol- $\beta$ 04-guaiacol ether (Ac'd)

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
$\alpha$ Ac Me	2.04	s	
Ac Me	2.20	s	
Ac Me	2.27	s	
B OMe	3.79	s	
A 3,5 OMe	3.81	s	
$\gamma$ 1	4.19	dd	12.0, 5.5
$\gamma$ 2	4.39	dd	11.9, 3.9
$\beta$	4.88	ddd	6.6, 5.5
$\alpha$	6.15	d	6.6
C $\beta$	6.54	d	16.0
B6	6.87	m	
A 2,6	6.88	br s	
B 1,2	6.93 - 7.00	m	
B5	7.08 - 7.10	m	
C 3,5	7.19	m	
C $\alpha$	7.58	d	16.0
C 2,6	7.71	m	

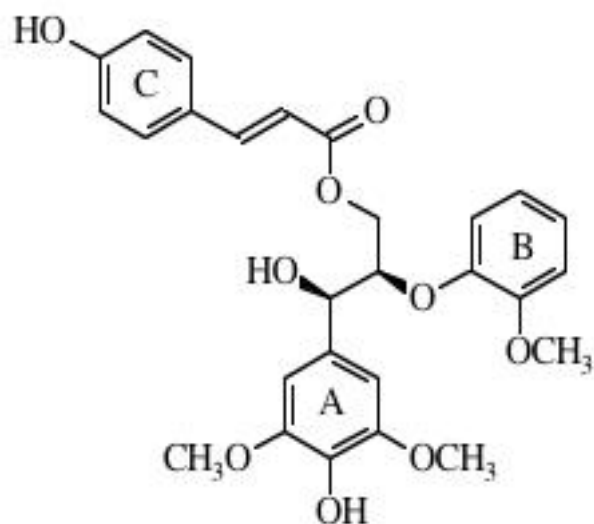
**Notes:**

S. Quideau  
Not run in DMSO

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42		20.23	25		
Ac Me	21.10		20.94	40		
$\alpha$ Ac Me	21.10		20.94	40		
B3 OMe	35.77		56.21	30		
OMe	56.20		56.51	51		
OMe	56.20		56.51	51		
$\gamma$	63.39		63.97	14		
$\alpha$	74.88		75.92	20		
$\beta$	80.50		80.89	19		
A2	104.09		105.00	41		
A6	104.09		105.00	41		
B2	112.45		113.74	31		
C $\beta$	117.52		118.62	24		
B5	118.85		119.25	26		
B6	121.00		121.70	27		
C3	122.14		123.22	100		
C5	122.14		123.22	100		
B1	123.34		123.75	24		
A4	128.81		129.70	7		
C2	129.31		130.26	56		
C6	129.31		130.26	56		
C1	131.91		132.83	15		
A1	134.81		136.23	17		
C $\alpha$	144.25		144.78	25		
B4	147.99		149.16	13		
B3	150.86		151.87	13		
A3	152.01		153.21	29		
A5	152.01		153.21	29		
C4	152.20		153.53	18		
C $\gamma$	166.32		166.64	19		
Ac C=O	168.47		168.43	14		
Ac C=O	169.09		169.43	22		
Ac C=O	169.71		170.03	14		

Compound Number 2076

<sup>13</sup>C



*threo*

$\gamma$ -p-coumaroylated syringylglycerol- $\beta$ 04-guaiacyl ether

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe	55.82	50	56.27	38	55.60	54
OMe	56.31	91	56.59	74	55.88	95
OMe	56.31	91	56.59	74	55.88	95
$\gamma$	63.19	29	64.23	31	63.47	15
$\alpha$	74.70	39	74.11	32	71.53	31
$\beta$	86.09	36	84.42	41	81.02	29
A2	103.82	80	105.41	85	104.24	68
A6	103.82	80	105.41	85	104.24	68
B2	112.19	50	113.60	48	112.70	46
C $\beta$	114.66	44	115.30	46	113.86	43
C3	115.95	99	116.68	99	115.78	100
C5	115.95	99	116.68	99	116.25	100
B5	120.53	49	119.33	50	116.25	54
B6	121.45	50	121.82	51	120.71	47
B1	124.12	52	123.52	47	121.71	35
C1	126.89	33	126.96	30	125.00	48
C2	130.04	100	130.97	100	130.30	95
C6	130.04	100	130.97	100	131.30	95
A1	130.29	34	132.11	25	131.22	36
A4	134.73	36	136.36	18	134.67	53
C $\alpha$	145.18	44	145.57	46	144.84	35
A3	147.11	68	148.47	45	147.58	99
A5	147.11	68	148.47	45	147.58	99
B4	147.91	32	149.37	24	147.86	46
B3	150.91	32	151.80	23	149.91	55
C4	158.08	36	160.60	30	159.87	41
C $\gamma$	166.86	36	167.15	29	166.38	52

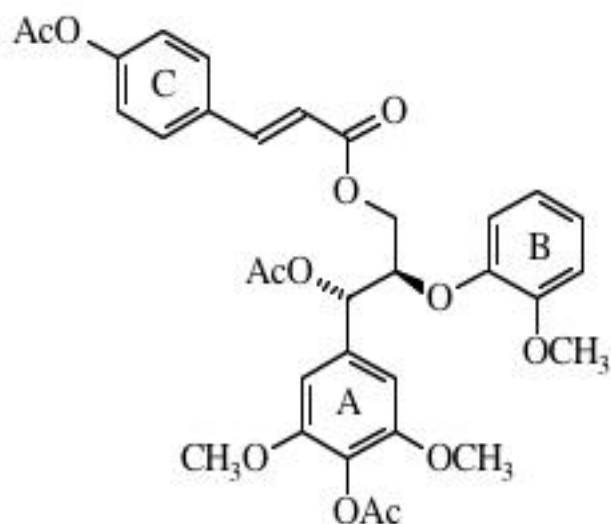
<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A OMe	3.79	s	
B3 OMe	3.84	s	
$\gamma$ 1	4.11	dd	12.0, 6.2
$\gamma$ 2	4.36	dd	12.0, 3.4
$\beta$	4.57	td	6.1, 3.4
$\alpha$	4.96	(br)d	5.9
C $\beta$	6.31	d	16.0
A 2,6	6.82	d	0.4
B6	6.85-6.90	m	
C 3,5	6.88	m	
B 1,2	6.94-7.01	m	
B5	7.15	dd	7.9, 1.5
C $\alpha$	7.48	d	16.0
C 2,6	7.51	m	

**Notes:**

S. Quideau

Compound Number 2077

<sup>13</sup>C*erythro***γ-p-coumaroylated syringylglycerol-β04-guiacol ether (Ac'd)**<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
α Ac Me	2.09	s	
Ac Me	2.21	s	
Ac Me	2.26	s	
B3 OMe	3.81	s	
A OMe	3.81	s	
γ1	4.43	dd	11.9, 4.3
γ2	4.49	dd	11.9, 5.8
β	4.94	m	
α	6.12	d	5.1
C β	6.45	d	16.0
B6	6.85	m	
A 2,6	6.89	d	0.4
B 1,2	6.95-7.00	m	
B5	7.03-7.06	m	
C 3,5	7.19	m	
C α	7.57	d	16.0
C 2,6	7.69	m	

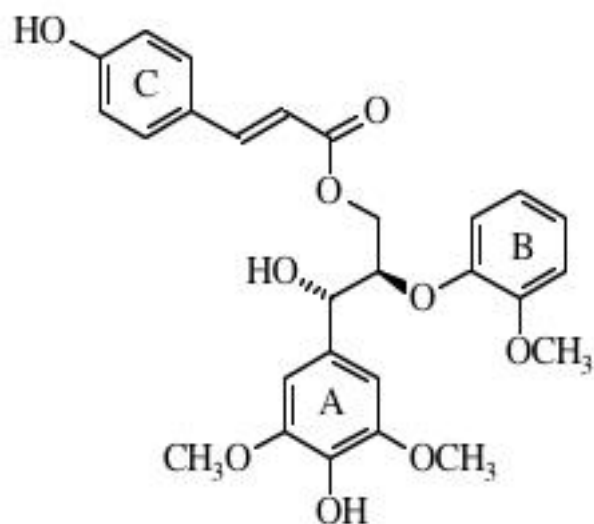
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.40	51	20.24	43	20.12	50
α Ac Me	21.01	47	20.90	37	20.70	51
Ac Me	21.06	58	20.94	47	20.84	54
B3 OMe	55.73	52	56.20	47	55.61	58
A OMe	56.14	93	56.50	82	55.97	99
A OMe	56.14	93	56.50	82	55.97	99
γ	62.98	27	63.41	27	62.35	18
α	74.17	35	74.99	35	73.53	29
β	80.31	36	80.38	34	78.34	24
A2	104.43	73	105.14	70	104.10	53
A6	104.43	73	105.14	70	104.10	53
B2	112.51	43	113.75	43	112.88	43
C β	117.59	43	118.57	40	117.53	40
B5	119.50	43	119.79	41	117.81	42
B6	120.95	45	121.65	42	120.69	45
C3	122.09	95	123.21	100	122.38	100
C5	122.09	95	123.21	100	122.38	100
B1	123.58	41	124.02	38	122.81	34
A4	128.67	20	129.57	13	127.73	27
C2	129.28	100	130.22	83	129.63	86
C6	129.28	100	130.22	83	129.63	86
C1	131.93	30	132.79	24	131.51	33
A1	134.92	31	136.25	26	134.99	32
C α	144.23	41	144.74	38	143.94	39
B4	147.24	31	148.36	22	146.75	36
B3	151.07	32	152.03	21	150.27	41
A3	151.98	61	153.07	45	151.48	70
A5	151.98	61	153.07	45	151.48	70
C4	152.16	29	153.51	21	152.08	36
C γ	166.44	30	166.63	26	165.76	33
Ac C=O	168.49	28	168.48	21	168.01	33
Ac C=O	169.06	33	169.43	25	168.97	37
α Ac C=O	169.48	27	169.95	21	169.34	30

Compound Number 2078

<sup>13</sup>C



*erythro*

$\gamma$ -p-coumaroylated syringylglycerol- $\beta$ 04-guaiacyl ether

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe	55.83	53	56.23	48	55.54	
OMe	56.29	100	56.60	89	55.90	
OMe	56.29	100	56.60	89	55.90	
$\gamma$	62.70	30	64.04	33	63.29	
$\alpha$	72.39	33	73.51	35	71.77	
$\beta$	84.23	40	83.41	42	80.92	
A2	103.13	84	105.23	84	104.38	
A6	103.13	84	105.23	84	104.38	
B2	112.22	49	113.63	47	112.74	
C $\beta$	114.40	46	115.37	45	113.93	
C3	115.95	99	116.67	100	115.75	
C5	115.95	99	116.67	100	115.75	
B5	120.53	49	119.55	48	116.89	
B6	121.46	54	121.72	48	120.62	
B1	124.03	46	123.46	45	121.83	
C1	126.44	36	126.92	28	124.99	
C2	129.98	99	130.90	94	130.24	
C6	129.98	99	130.90	94	130.24	
A1	130.16	37	132.59	31	132.05	
A4	134.15	37	136.12	26	134.61	
C $\alpha$	145.25	44	145.42	43	144.71	
A3	147.00	60	148.42	51	147.52	
A5	147.00	60	148.42	51	147.52	
B4	147.02	39	148.91	24	147.52	
B3	151.42	35	152.00	22	150.03	
C4	158.68	38	160.58	31	159.82	
C $\gamma$	167.39	39	167.28	28	166.41	

<sup>1</sup>H (acetone)

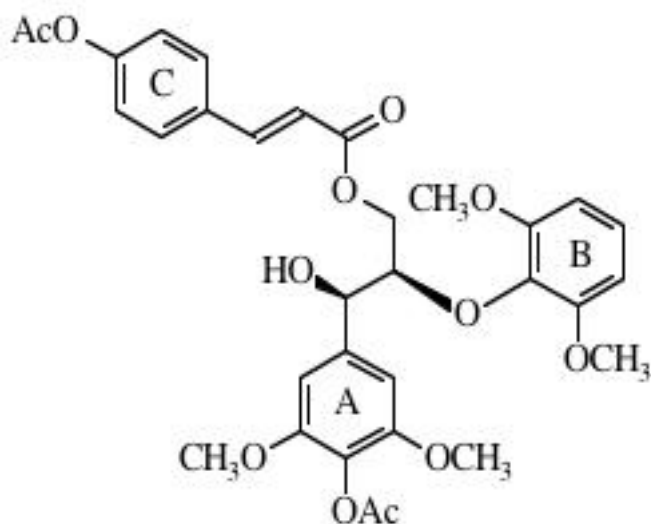
Atom	H Shifts	Mult	J
OMe	3.80	s	
B3 OMe	3.81	s	
$\gamma$ 1	4.41	dd	11.8, 3.8
$\gamma$ 2	4.47	dd	11.8, 6.4
$\beta$	4.68	ddd	6.4, 5.0, 3.8
$\alpha$	4.98	br d	4.9
C $\beta$	6.25	d	16.0
A 2,6	6.81	brs	
B6	6.83	m	
C 3,5	6.87	m	
B 1,2	6.91-6.96	m	
B5	7.05	br dd	7.8, 1.5
C $\alpha$	7.44	d	16.0
C 2,6	7.48	m	

**Notes:**

S. Quideau

Compound Number 2079

<sup>13</sup>C



*threo*

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.19	s	
Ac Me	2.27	s	
A OMe	3.75	s	
B OMe	3.82	s	
γ1	4.16	dd	11.9, 4.6
β	4.38	ddd	6.3, 4.5, 3.6
γ2	4.50	dd	11.9, 3.6
α	5.07	br d	6.4
C β	6.47	d	16.0
B 2,6	6.68	d	8.4
A 2,6	6.87	br s	
B1	7.01	t	8.4
C 3,5	7.19	m	
C α	7.63	d	16.0
C 2,6	7.70	m	

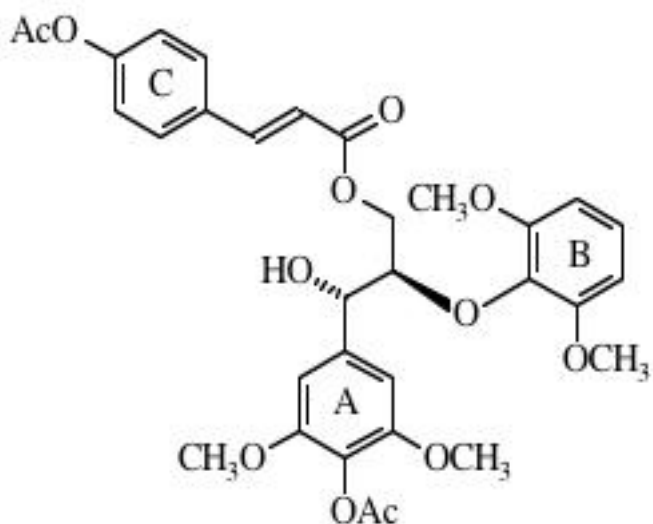
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.25	53		
Ac Me			21.06	53		
A OMe			56.36	83		
A OMe			56.36	83		
B OMe			56.45	81		
B OMe			56.45	81		
γ			64.93	30		
α			74.56	23		
β			85.88	37		
A2			104.48	69		
A6			104.48	69		
B2			106.35	88		
B6			106.35	88		
C β			118.98	40		
C3			123.19	100		
C5			123.19	100		
B1			124.80	43		
A4			128.98	14		
C2			130.17	91		
C6			130.17	91		
C1			132.93	39		
B4			137.65	21		
A1			140.28	21		
C α			144.26	40		
A3			152.82	53		
A5			152.82	53		
C4			153.43	24		
B3			154.07	54		
B5			154.07	54		
C γ			166.65	26		
Ac C=O			168.54	25		
Ac C=O			169.45	36		

Compound Number 2080

<sup>13</sup>C



*erythro*

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.19	s	
Ac Me	2.26	s	
A OMe	3.78	s	
B OMe	3.83	s	
γ1	4.30	dd	11.7, 3.8
γ2	4.51	dd	11.7, 6.9
β	4.62	m	
α	5.05	br t	3.7
C β	6.34	d	16.0
B 2,6	6.09	d	8.4
A 2,6	6.82	br s	
B1	7.03	t	8.4
C 3,5	7.17	m	
C α	7.44	d	16.0
C 2,6	7.66	m	

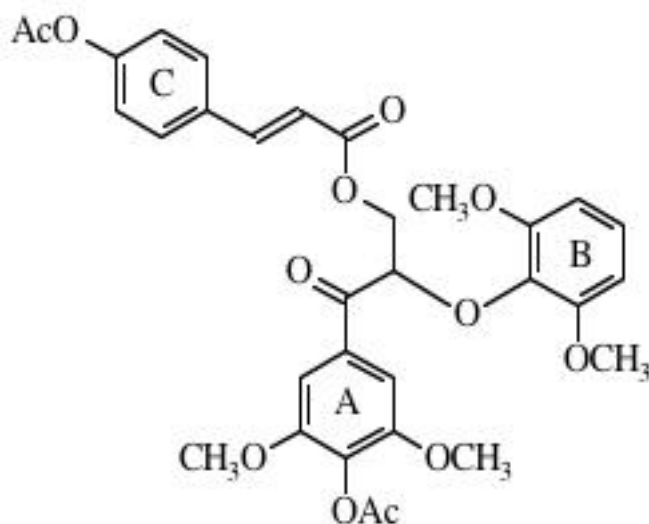
**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.26	47		
Ac Me			20.94	54		
A OMe			56.38	86		
A OMe			56.38	86		
B OMe			56.48	97		
B OMe			56.48	97		
γ			63.67	31		
α			73.30	37		
β			84.07	39		
A2			103.76	82		
A6			103.76	82		
B2			106.31	88		
B6			106.31	88		
C β			119.10	44		
C3			123.16	100		
C5			123.16	100		
B1			124.83	43		
A4			128.69	14		
C2			130.11	89		
C6			130.11	89		
C1			132.93	29		
B4			136.57	21		
A1			140.05	25		
C α			144.00	42		
A3			152.94	48		
A5			152.94	48		
C4			153.36	21		
B3			154.51	52		
B5			154.51	52		
C γ			166.71	28		
Ac C=O			168.59	23		
Ac C=O			169.45	27		



Compound Number 2081

<sup>13</sup>C<sup>1</sup>H (acetone)

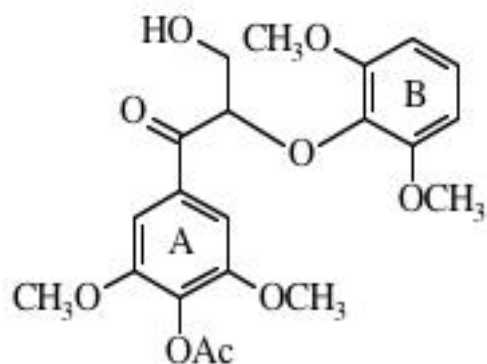
Atom	H Shifts	Mult	J
Ac Me	2.26	s	
Ac Me	2.28	s	
B OMe	3.72	s	
A OMe	3.85	s	
γ1	4.63	dd	11.7, 6.2
γ2	4.74	dd	11.7, 4.6
β	5.69	dd	6.2, 4.6
C β	6.39	d	16.0
B 2,6	6.64	d	8.4
B1	6.49	t	8.4
C 3,5	7.17	m	
C α	7.50	d	16.0
A 2,6	7.58	br s	
C 2,6	7.64	m	

**Notes:**

S. Quideau

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.40	42	20.23		20.12	47
Ac Me	21.08	40	20.95		20.85	40
B OMe	55.88	85	56.31		55.80	100
B OMe	55.88	85	56.31		55.80	100
A OMe	56.28	82	56.67		56.20	92
A OMe	56.28	82	56.67		56.20	92
γ	64.49	27	64.90		63.77	17
β	81.85	38	81.50		79.82	26
B2	105.11	91	106.18		105.39	63
B6	105.11	91	106.18		105.39	63
A2	106.37	82	106.93		105.86	49
A6	106.37	82	106.93		105.86	49
C β	117.67	43	118.55		117.57	33
C3	122.15	100	123.25		122.45	76
C5	122.15	100	123.25		122.45	76
B1	124.23	46	124.99		124.07	28
C2	129.21	97	130.19		129.61	71
C6	129.21	97	130.19		129.61	71
C1	131.90	33	132.72		131.48	32
A4	133.05	19	133.96		132.28	26
A1	133.49	35	134.72		133.31	33
B4	135.68	24	136.63		135.12	32
C α	144.02	44	144.62		143.83	32
A3	152.08	69	153.20		151.80	69
A5	152.08	69	153.20		151.80	69
C4	152.16	28	153.52		152.11	31
B3	153.03	65	154.07		152.53	70
B5	153.03	65	154.07		152.53	70
C γ	166.34	33	166.55		165.73	32
Ac C=O	168.06	29	168.19		167.72	33
Ac C=O	169.08	29	169.43		169.02	32
α	194.81	33	195.26		184.38	31

Compound Number 2082

<sup>13</sup>C

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.21	51		
B OMe			56.28	100		
B OMe			56.28	100		
A OMe			56.61	97		
A OMe			56.61	97		
γ			63.35	42		
β			86.41	48		
B2			106.22	97		
B6			106.22	97		
A2			106.51	91		
A6			106.51	91		
B1			124.92	47		
A4			133.59	14		
A1			135.01	29		
B4			137.01	20		
A3			153.06	51		
A5			153.06	51		
B3			153.77	50		
B5			153.77	50		
Ac C=O			168.18	22		
α			196.25	27		

<sup>1</sup>H (acetone)

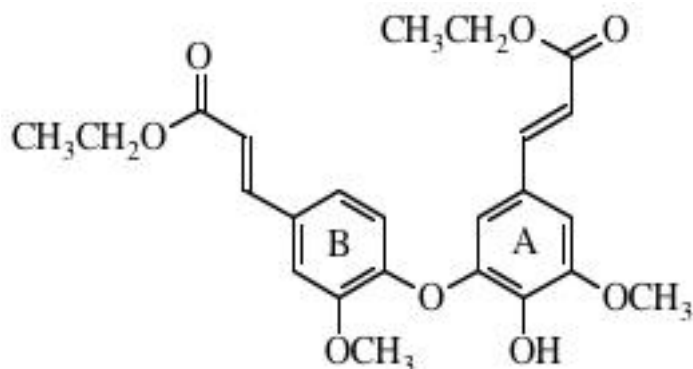
Atom	H Shifts	Mult	J
Ac Me	2.27	s	
B OMe	3.73	s	
A OMe	3.86	s	
γ + γ OH	3.90-3.98	m	
β	5.22	dd	5.7, 4.5
B 2,6	6.67	d	8.4
B1	7.02	dd t	8.6, 8.2, 8.4
A 2,6	7.48	s	

**Notes:**

S.Quideau

Compound Number 3001

<sup>13</sup>C



4-O-5 dehydrodiethylferulate

3-{3-[4-(2-ethoxycarbonyl-vinyl)-2-methoxy-phenoxy]-4-hydroxy-5-methoxy-phenyl}acrylic acid ethyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A CH3	1.24	t	7.1
B CH3	1.27	t	7.1
B3 OMe	3.93	s	
A3 OMe	3.96	s	
A CH2	4.16	q	7.1
B CH2	4.19	q	7.1
A β	6.36	d	15.9
B β	6.48	d	15.95
B5	6.81	d	8.3
A6	6.89	d	1.9
B6	7.17	dd	8.7, 2.0
A2	7.22	d	1.9
B2	7.46	d	2.0
A α	7.53	d	15.9
B α	7.62	d	15.95

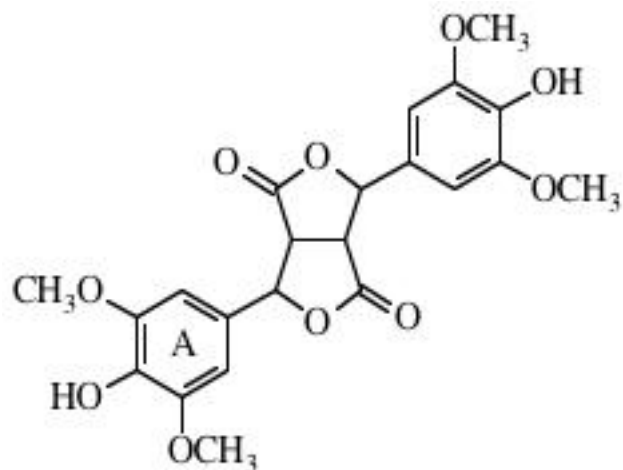
**Notes:**

jrf107.P1 /1 (H1), /2 (C13), /3 (Dept135)

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A CH3			14.60	100		
B CH3			14.60	92		
B3 OMe			56.41	89		
A3 OMe			56.77	82		
A CH2			60.53	71		
B CH2			60.64	72		
A2			107.99	69		
B2			112.66	78		
A6			114.45	73		
A β			116.99	76		
B β			117.93	80		
B5			118.36	69		
B6			122.84	78		
A1			126.67	56		
B1			131.04	53		
A4			141.41	19		
A5			144.45	40		
B α			144.81	75		
A α			144.94	73		
B4			149.35	39		
A3			150.12	34		
B3			151.41	43		
B γ			167.15	53		
A γ			167.16	56		

Compound Number 3002

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			49.06			
OMe			56.77			
OMe			56.77			
α			83.39			
2			104.31			
6			104.31			
4			129.87			
1			137.51			
3			149.04			
5			149.04			
g			176.05			

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.83	s	
β	4.11	s	
α	5.95	s	
2,6	6.73	s	
OH	7.42	s	

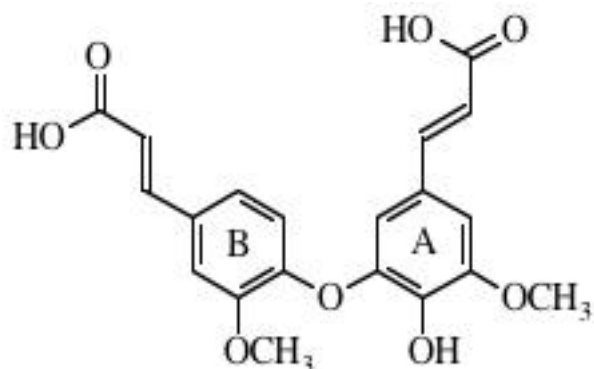
**Notes:**

FLJ144

As this dimer contains a plane of symmetry the CS's are reported for one unit.

Compound Number 3003

<sup>13</sup>C



4-O-5 dehydrodiferulic acid

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe			56.40	94	55.85	100
A3 OMe			56.76	100	56.24	93
A2			108.03	70	107.58	32
B2			112.7	75	111.86	39
A6			114.46	79	114.05	46
A β			117.00	75	116.96	25
B β			117.95	76	118.00	21
B5			118.33	79	116.34	43
B6			122.80	79	121.91	46
A1			126.71	63	125.22	61
B1			131.06	63	129.43	54
A4			141.38	46	140.35	64
A5			144.44	54	142.94	64
A α			145.23	76	143.81	36
B α			145.38	73	143.63	29
B4			149.34	56	148.05	64
A3			150.12	56	149.28	71
B3			151.38	58	149.56	79
B γ			168.02	62	167.82	61
A γ			168.05	66	167.82	61

<sup>1</sup>H (acetone)

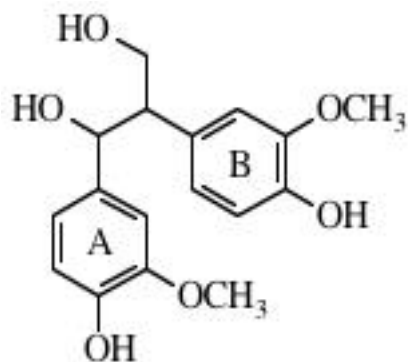
Atom	H Shifts	Mult	J
B3 OMe	3.58	s	
A3 OMe	3.88	s	
A β	6.36	d	15.9
B β	6.47	d	15.95
B5	6.82	d	8.3
A6	6.90	d	1.9
B6	7.22	dd	8.3, 2.0
A2	7.22	d	1.9
B2	7.45	d	2.0
A α	7.54	d	15.9
B α	7.63	d	15.95
<u>DMSO</u>			
B3 OMe	3.85		
A3 OMe	3.86		
A β	6.35		
B β	6.47		
B5	6.59		
A6	6.85		
B6	7.12		
A2	7.20		
B2	7.43		
A α	7.42		
B α	7.51		

**Notes:**

Acetone: jrf117 /2 (C13) and /1 (H1) DMSO: jrf127.c7/2 Not soluble in chloroform  
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) δ: 3.85 (B3-OMe), 3.86 (A3-OMe), 6.35 (A8), 6.47 (B8),  
 6.59 (B5), 6.85 (A6), 7.12 (B6), 7.20 (A2), 7.43 (B2), 7.42 (A7), 7.51 (B7)  
 JCS Perkin 1, 3485-98 (1994) Cmpd 17

Compound Number 3004

<sup>13</sup>C



*erythro*

1,2-diguaiacylpropane-1,3-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	2.93	m	
γ1	3.72	m	
γ2	3.87	m	
α	5.02	bd	
B6	6.60	bd	
B5	6.66	dd	
A5	6.68	d	8.1
A6	6.68	m	
A2	6.71	m	
B2	6.74	d	1.9

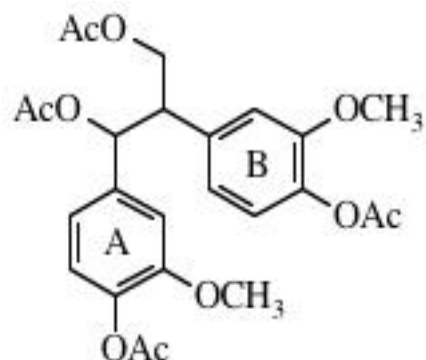
**Notes:**

jrlz 15  
Liming Zhang, isolate from mild acidolysis

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			55.85	100		
OMe			55.95	100		
β			56.31	45		
γ			64.21	38		
α			74.66	57		
A2			111.01	99		
B2			114.00	99		
A5			114.81	35		
B5			115.00	36		
A6			119.95	95		
B6			123.05	95		
B1			132.24	64		
A1			136.67	38		
B4			145.96	16		
A4			146.17	16		
B3			147.56	18		
A3			147.63	16		

Compound Number 3005

<sup>13</sup>C



*threo*

Acetic acid 3-acetoxy-2,3-bis-(4-acetoxy-3-methoxyphenyl)propyl ester

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.41	96		
Ac Me			20.44	93		
Ac Me			20.72	81		
Ac Me			21.01	92		
β			50.71	78		
OMe			56.18	91		
OMe			56.21	100		
γ			64.71	68		
α			76.50	75		
A2			112.51	80		
B2			114.33	76		
A6			119.77	80		
B6			121.85	84		
A5			123.14	82		
B5			123.22	84		
B1			137.82	60		
A1			138.39	54		
B4			139.96	36		
A4			140.35	38		
B3			151.76	41		
A3			151.85	45		
Ac C=O			168.84	45		
Ac C=O			168.88	40		
α Ac C=O			170.01	47		
γ Ac C=O			170.81	43		

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.93	s	
α Ac Me	2.09	s	
Ac Me	2.18	s	
Ac Me	2.19	s	
β	3.56	m	
OMe	3.67	s	
OMe	3.71	s	
γ1	4.38	dd	11.2, 5.2
γ2	4.54	dd	11.2, 7.2
α	6.02	d	8.2
B6	6.77	ddd	8.1, 2.0, 0.3
A2	6.79	bd	1.9
A6	6.82	ddd	8.1, 1.9, 0.5
B2	6.85	bd	1.9
B5	6.90	d	8.1
A5	6.91	d	8.1

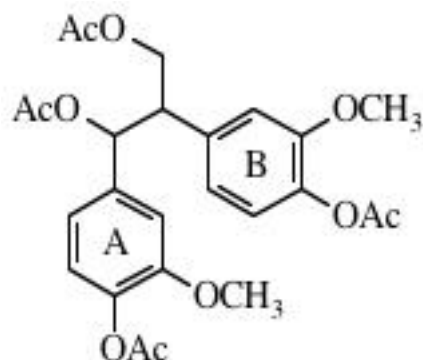
**Notes:**

jrlz9.1

Liming Zhang, isolate from mild acidolysis

Compound Number 3006

<sup>13</sup>C



*erythro*

Acetic acid 3-acetoxy-2,3-bis-(4-acetoxy-3-methoxyphenyl)propyl ester

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.43	98		
Ac Me			20.46	100		
Ac Me			20.65	83		
Ac Me			20.83	85		
β			50.98	76		
OMe			56.20	97		
OMe			56.22	92		
γ			64.86	65		
α			75.56	75		
A2			112.09	74		
B2			114.52	75		
A6			119.73	76		
B6			121.93	75		
B5			123.13	78		
A5			123.30	84		
B1			137.43	50		
A1			138.72	50		
B4			140.05	40		
A4			140.51	39		
B3			151.80	46		
A3			152.00	49		
Ac C=O			168.89	41		
Ac C=O			168.95	38		
α Ac C=O			169.94	46		
γ Ac C=O			170.74	46		

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.92	s	
α Ac Me	1.97	s	
Ac Me	2.20	s	
Ac Me	2.21	s	
β	3.50	m	6.7
OMe	3.69	s	
OMe	3.73	s	
γ1	4.20	dd	11.2, 6.7
γ2	4.37	dd	11.2, 6.8
α	6.16	d	6.6
B6	6.84	ddd	8.1, 1.9, 0.3
A2	6.84	bd	1.8
A6	6.87	ddd	8.1, 1.8, 0.5
B2	6.92	bd	1.9
B5	6.96	d	8.1
A5	6.98	d	8.1

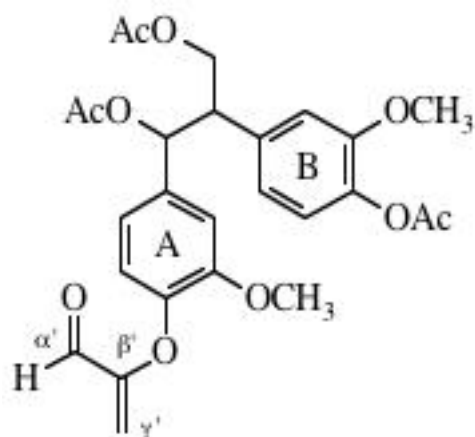
**Notes:**

jrlz11.1  
Liming Zhang, isolate from mild acidolysis  
1H data at 600 MHz



Compound Number 3007

<sup>13</sup>C



*erythro*

Acetic acid 3-acetoxy-2,3-bis-(4-acetoxy-3-methoxyphenyl)propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.94	s	
α Ac Me	2.00	s	
Ar Ac Me	2.07	s	
β	3.50	m	
OMe	3.69	s	
OMe	3.76	s	
γ1	4.22	dd	11.2, 6.8
γ2	4.38	dd	11.2, 6.8
γ1'	5.00	d	2.8
γ2'	5.38	d	2.8
α	6.19	d	6.4
B6	6.81	dd	8.1, 1.6
A2	6.88	bd	
A6	6.89	dd	7.3, 1.5
B5	6.94	d	8.1
A5	6.97		
A2	6.99		
a'	9.45		

**Notes:**

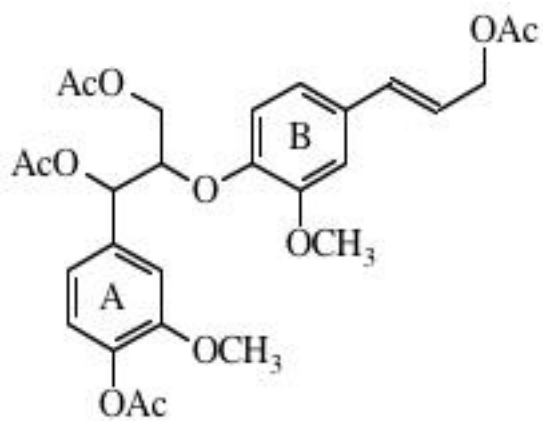
jrlz 13

Liming Zhang, isolate from mild acidolysis

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.60	114	20.43	58		
Ac Me	20.79	80	20.66	51		
Ac Me	20.96	67	20.83	54		
β	50.13	61	51.07	41		
OMe	55.85	120	56.12	66		
OMe	55.85	120	56.22	66		
γ	63.96	49	64.82	42		
α	74.76	68	75.38	40		
γ'	107.76	51	108.01	34		
A2	111.65	73	122.68	40		
B2	113.15	58	114.44	41		
A6	119.35	65	120.17	43		
B6	121.12	65	122.12	48		
A5	121.61	68	122.14	31		
B5	122.45	79	123.16	52		
B1	135.71	51	137.41	27		
A1	136.32	58	138.17	29		
B4	139.10	43	140.07	19		
A4	142.55	43	143.24	18		
B3	150.75	68	151.76	25		
A3	150.75	68	151.81	27		
β'	157.84	60	159.33	25		
B4 Ac C=O	168.79	29	168.91	21		
α Ac C=O	169.70	52	169.94	23		
γAc C=O	170.69	65	170.71	24		
α'	186.74	93	187.55	45		

Compound Number 3008

<sup>13</sup>C



*threo*

Acetic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-  
2-[4-(3-acetoxypropenyl)-2-methoxyphenoxy]propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.95	s	
B γ Ac Me	2.01	s	
α Ac Me	2.02	s	
A4 Ac Me	2.21	s	
OMe	3.82	s	
OMe	3.85	s	
γ1	4.02	dd	11.9, 5.7
γ2	4.25	dd	11.9, 4.1
B γ	4.66	dd	6.4, 1.3
β	4.81	m	
α	6.10	d	6.4
B β	6.26	dt	15.9, 6.4
B α	6.63	bd	15.9
B6	6.95	dd	8.3, 2.0
B5	7.00	d	8.3
A5	7.03	d	8.2
A6	7.09	dd	8.2, 1.7
B2	7.14	d	1.9
A2	7.22	d	1.6

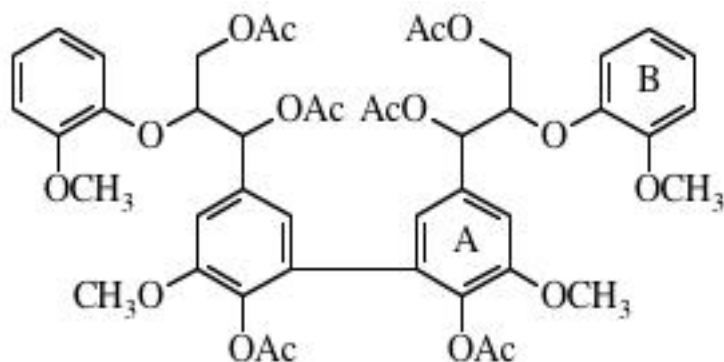
**Notes:**

jrlz 35  
Liming Zhang, isolate from mild acidolysis

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.41	56		
Ac Me			20.55	58		
Ac Me			20.75	45		
Ac Me			20.89	50		
OMe			56.23	56		
OMe			56.27	56		
γ			63.54	44		
B γ			65.33	57		
α			75.29	56		
β			80.62	57		
B2			111.30	58		
A2			112.63	47		
B5			118.73	57		
A6			120.28	44		
B6			120.52	44		
B β			123.25	57		
A5			123.54	51		
B1			132.34	32		
B α			134.14	54		
A1			136.59	31		
A4			140.90	22		
B4			149.08	26		
B3			151.74	23		
A3			152.21	22		
A4 Ac C=O			168.85	26		
α Ac C=O			169.95	30		
γ Ac C=O			170.64	23		
B γ Ac C=O			170.64	23		

Compound Number 3009

<sup>13</sup>C



*threo*

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.77	s	
OMe	3.85	s	
γ1	4.09	m	
γ2	4.29	m	
β	4.78	m	
α	6.08	d	
A6,B6	6.80-6.90	m	
B1	6.96	m	
B2	6.99	m	
B5	7.02	m	
A2	7.26	m	

**Notes:**

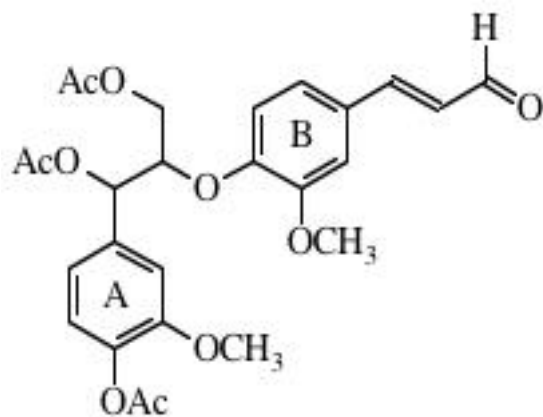
J.Ralph jrf79.5

As this dimer contains a plane of symmetry the CS's are reported for one unit.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.26	69		
Ac Me			20.61	112		
Ac Me			20.93	77		
OMe			56.17	86		
OMe			56.52	78		
γ			63.51	56		
α			75.31	34		
β			80.70	52		
A2			111.90	41		
B2			113.72	65		
B5			119.41	42		
A6			121.64	101		
B6			121.68	101		
B1			123.87	55		
A5			131.91	25		
A1			135.93	45		
A4			138.48	18		
B4			148.99	46		
B3			151.87	35		
A3			152.58	32		
4 Ac C=O			168.88	11		
α Ac C=O			170.09	39		
γ Ac C=O			170.71	36		
erythro isomer						
γ			62.95			
α			74.59			
β			80.34			
B5			120.09			
B1			124.19			
A5			131.70			
A4			138.36			
B4			148.19			
B3			152.11			

Compound Number 3010

<sup>13</sup>C



*threo*

Acetic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-  
2-[2-methoxy-4-(3-oxopropenyl)phenoxy]propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.08	s	
Ac Me	2.21	s	
OMe	3.82	s	
OMe	3.91	s	
γ 1	4.07	dd	12.0, 5.8
γ 2	4.28	dd	12.0, 4.1
β	4.96	m	
α	6.11	d	6.4
Bβ	6.70	dd	15.9, 7.7
A5	7.03	d	8.1
A6	7.08	dd	8.5, 1.4
B5	7.15	d	8.4
A2	7.24	bd	
B6	7.25	dd	8.8, 1.7
B2	7.40	d	1.8
B α	7.59	d	16.0
B γ	9.66	d	7.6

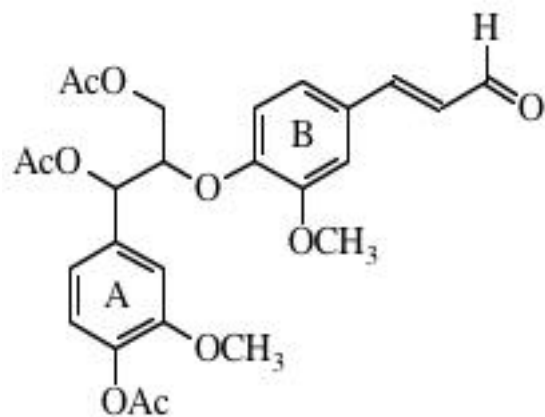
**Notes:**

jrlz 29 1mg  
Liming Zhang, isolate from mild acidolysis  
see 3011 some shifts taken from isomer mix

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
g Ac Me	20.60	80	20.43	39		
a Ac Me	20.68	45	20.57	24		
A4 Ac Me	20.94	60	20.88	20		
OMe	55.90	71	56.30	39		
OMe	55.98	85	56.41	25		
γ	62.81	25	63.45	25		
α	74.14	28	75.19	25		
β	79.67	30	80.26	24		
B2	111.28	31	112.56	27		
A2	111.58	35	112.66	31		
B5	117.36	31	117.85	32		
A6	119.48	38	120.34	28		
A5	122.71	32	123.61	24		
B6	122.89	32	123.76	31		
B β	127.40	34	128.23	27		
B1	128.88	22	129.89	14		
A1	134.87	24	136.40	18		
A4	140.01	19	140.99	15		
B4	150.72	24	151.73	22		
B3	150.68	24	151.73	22		
A3	151.16	23	152.26	16		
B α	152.26	45	153.29	26		
A4 Ac C=O	168.72	23	168.87	17		
α Ac C=O	169.41	24	169.85	15		
γ Ac C=O	170.48	24	170.66	15		
B γ	193.43	58	193.61	32		

Compound Number 3011

<sup>13</sup>C



*erythro*

Acetic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-  
2-[2-methoxy-4-(3-oxopropenyl)phenoxy]propyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me			
Ac Me			
Ac Me			
OMe	3.82	s	
OMe	3.90	s	
γ 1	4.27	m	
γ 2	4.37	m	
β	4.99	m	
α	6.07	d	5.2
B β	6.79	dd	15.9, 7.7
A5	7.02	d	8.1
A6	7.07	m	
B5	7.11	d	8.3
A2	7.23	m	
B6	7.27	d	1.8
B2	7.38	d	2.0
B α	7.58	d	15.9
B γ	9.65	d	7.7

**Notes:**

jrlz41  
Liming Zhang, isolate from mild acidolysis  
CS's taken from isomer mix spectrum

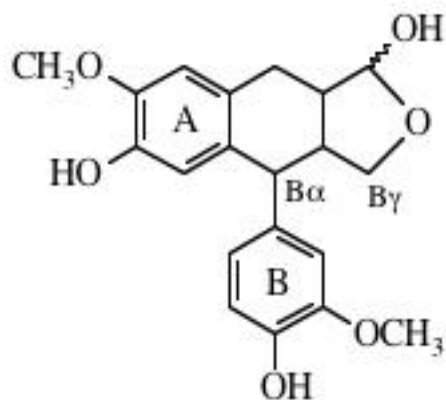
Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.60	80	20.65	73		
α Ac Me	20.68	45	20.79	45		
A4 Ac Me	20.94	60	21.10	38		
OMe	55.87	71	56.51	53		
OMe	55.90	85	56.65	39		
γ	62.44	25	63.19	30		
α	73.55	28	74.57	27		
β	79.56	27	80.02	31		
B2	111.38	32	112.85	32		
A2	112.00	28	113.08	33		
B5	117.93	29	118.49	32		
A6	119.76	29	120.75	33		
A5	122.61	29	123.50	37		
B6	122.81	29	123.91	36		
B β	127.47	34	128.53	33		
B1	129.10	22	130.22	19		
A1	134.80	22	136.48	21		
A4	139.90	17	141.11	15		
B4	150.02	18	151.22	16		
B3	150.95	22	152.12	20		
A3	151.00	22	152.35	16		
B α	152.26	45	153.45	32		
A4 Ac C=O	168.74	23	169.09	23		
α Ac C=O	169.57	22	170.07	20		
γ Ac C=O	170.65	22	170.88	20		
B γ	193.43	58	194.10	66		





Compound Number 3014

<sup>13</sup>C



4-(4-hydroxy-3-methoxyphenyl)-7-methoxy-1,3,3a,4,9,9a-hexahydronaphtho[2,3-c]furan-1,6-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A β	1.98	m	
B β	2.54	m	
A α1	2.84	m	
A α2	3.00	m	
B γ1	3.47	dd	10.0, 8.0
B α	3.64	d	12.2
B γ2	3.77	m	
OMe	3.77	s	
OMe	3.80	s	
A γ OH	4.99	d	4.3
A γ	5.40	d	4.3
A5	6.22	d	0.9
B6	6.63	dd	8.0, 2.0
A2	6.72	s	
B2	6.74	d	2.0
B5	6.77	d	8.0
A4 OH	7.17	s	
B4 OH	7.39	s	

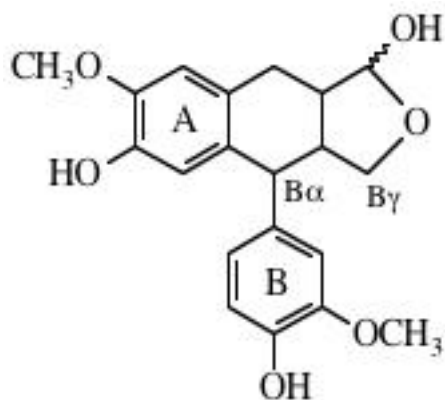
**Notes:**

jrlz5, mixture of 2 isomers in ca. 2:1 ratio.  
Data for major isomer  
Liming Zhang, isolate from mild acidolysis

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			29.84	55		
B β			46.24	56		
β			47.00	30		
B α			51.09	62		
OMe			55.96	79		
OMe			56.05	86		
B γ			72.06	57		
γ			98.75	34		
B2			112.38	29		
A2			112.84	57		
B5			115.51	32		
A5			116.17	35		
B6			121.75	42		
A1			128.34	44		
A6			133.42	39		
B1			137.28	38		
A4			145.11	19		
B4			145.93	17		
A3			146.61	21		
B3			148.24	20		



Compound Number 3015

<sup>13</sup>C

4-(4-hydroxy-3-methoxyphenyl)-7-methoxy-1,3,3a,4,9,9a-hexahydronaphtho[2,3-c]furan-1,6-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A β	1.98	m	
B β	2.28	m	
A α1	2.80	m	
A α2	3.00	m	
B γ 1,2	3.64	m	
B α	3.72	bd	11.4
OMe	3.77	s	
OMe	3.80	s	
A γ	5.18	d	6.2
A γOH	5.28	d	
A5	6.55	d	
B6	6.62	dd	10.1, 2.0
A2	6.72	s	
B2	6.74	d	2.0
B5	6.77	d	8.0
A4 OH	7.17	s	
B4 OH	7.39	s	

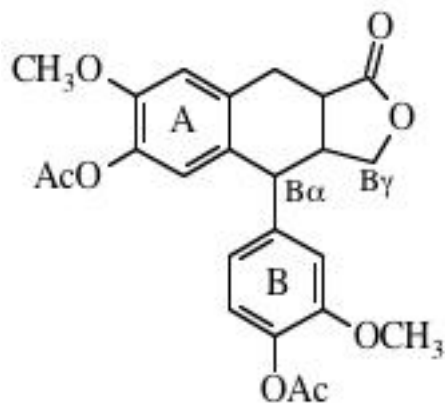
**Notes:**

jrlz5, mixture of 2 isomers in ca. 2:1 ratio.  
Data for minor isomer  
Liming Zhang, isolate from mild acidolysis

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			31.98	22		
Bβ			49.88	48		
β			49.88	48		
B α			50.12	18		
OMe			55.96	79		
OMe			56.05	86		
Bγ			70.96	23		
γ			104.08	14		
B2			112.28	29		
A2			112.79	27		
B5			115.51	32		
A5			116.28	14		
B6			121.75	42		
A1			127.93	18		
A6			133.38	17		
B1			136.75	14		
A4			145.31	9		
B4			145.95	11		
A3			146.63	11		
B3			148.20	9		

Compound Number 3016

<sup>13</sup>C



Acetic acid 4-(4-acetoxy-3-methoxyphenyl)-7-methoxy-1-oxo-1,3,3a,4,9,9a-hexahydroanphtho[2,3-c]furan-6-yl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.13	s	
Ac Me	2.23	s	
B β	2.75	m	
A β	2.78	m	
A α1	2.98	m	
A α2	3.18	dd	16.0, 5.0
OMe	3.75	s	
OMe	3.81	s	
B α	4.16	m	
B γ	4.16	m	
A5	6.44	s	
B6	6.83	dd	8.1, 1.9
B2	6.96	d	1.9
A2	6.98	s	
B5	7.03	d	8.1

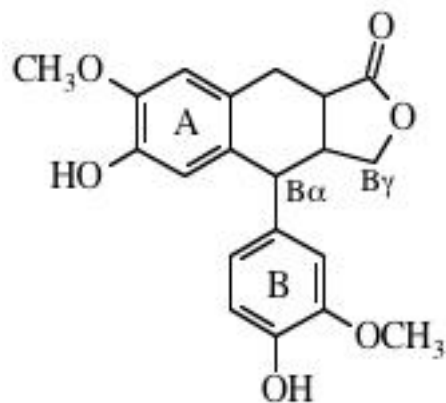
**Notes:**

jrlz25  
Liming Zhang, isolate from mild acidolysis

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.53	82	20.36	48		
Ac Me	20.63	86	20.48	50		
α	29.57	49	30.12	23		
β	41.66	83	41.87	48		
B β	47.44	74	47.65	47		
Bα	49.93	71	50.09	45		
OMe	55.87	92	56.20	84		
OMe	55.93	103	56.20	84		
B γ	71.60	63	71.85	44		
B2	111.77	22	113.40	17		
A2	112.98	80	114.00	42		
B6	120.61	36	121.45	19		
B5	123.20	50	123.86	45		
A5	123.70	78	124.12	50		
A6	130.39	57	132.09	27		
A1	133.59	48	134.97	27		
A4	138.36	45	139.27	23		
B4	139.08	30	140.00	21		
B1	140.74	56	142.52	35		
A3	149.92	54	150.80	25		
B3	151.59	34	152.59	19		
Ac C=O	168.90	53	168.75	21		
Ac C=O	169.03	36	168.75	21		
γ	176.43	60	176.77	26		

Compound Number 3017

<sup>13</sup>C



6-Hydroxy-4-(4-hydroxy-3-methoxyphenyl)-7-methoxy-3a,4,9,9a-tetrahydro-3H-naphtho[2,3-c]furan-1-one

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B β	2.67	m	
A β	2.67	m	
A α	3.07	dd	16.2, 4.5
OMe	3.78	s	
OMe	3.82	s	
B α	3.95	bd	9.5
B γ	4.10	m	
A5	6.26	d	0.9
B6	6.69	dd	8.0, 2.0
A2	6.79	s	
B2	6.80	d	2.0
B5	6.80	d	8.0

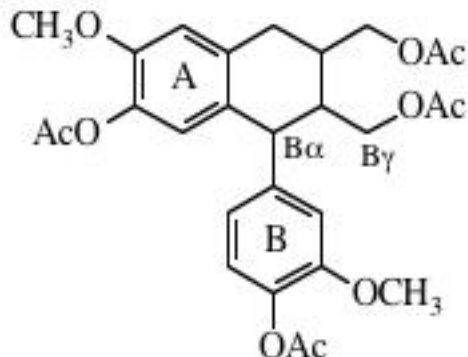
**Notes:**

jrlz33  
Liming Zhang, isolate from mild acidolysis

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			29.73	66		
β			41.98	80		
B β			47.61	75		
B α			49.95	70		
OMe			55.99	80		
OMe			56.03	85		
B γ			71.78	66		
B2			112.25	18		
A2			112.93	67		
B5			115.61	23		
A5			116.23	26		
B6			121.92	30		
A1			126.77	51		
A6			132.87	42		
B1			135.09	45		
A4			145.61	14		
B4			146.29	12		
A3			146.89	19		
B3			148.42	17		
γ			177.15	42		

Compound Number 3018

<sup>13</sup>C



Acetic acid 8-(4-acetoxy-3-methoxyphenyl)-6,7-bis-acetoxy methyl-3-methoxy-5,6,7,8-tetrahydronaphthalen-2-yl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.02	s	
Ac Me	2.11	s	
Ac Me	2.22	s	
Bβ	2.16	m	
β	2.29	m	
α	2.92	m	
OMe	3.74	s	
OMe	3.78	s	
Bγ1	3.92	dd	11.7, 3.6
Bα	4.02	d	10.5
Bγ2	4.09	m	
Aγ1	4.11	m	
Aγ2	4.23	dd	11.1, 5.3
A5	6.34	bs	
B6	6.74	dd	8.1, 2.0
A2	6.87	s	
B2	6.92	d	2.0
B5	6.99	d	8.1

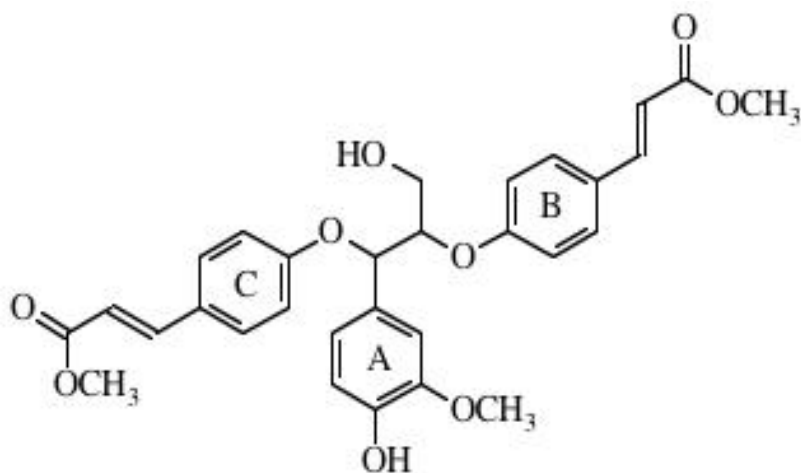
**Notes:**

jrlz27  
Liming Zhang, isolate from mild acidolysis

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.56	67	20.36	54		
Ac Me	20.65	67	20.47	51		
Ac Me	20.77	67	20.69	51		
Ac Me	20.82	93	20.72	51		
α	33.02	45	33.53	33		
β	35.13	58	36.29	44		
B β	43.44	56	44.25	43		
B α	47.22	50	47.98	39		
OMe	55.83	65	56.17	45		
OMe	55.91	77	56.19	45		
B γ	63.04	48	63.57	37		
γ	66.20	46	66.74	40		
A2	111.81	65	112.90	50		
B2	113.17	42	114.53	46		
B6	121.52	55	121.11	57		
B5	122.81	53	123.64	44		
A5	123.71	53	124.16	40		
A6	131.13	46	132.26	26		
A1	134.05	38	135.25	31		
A4	138.03	34	139.17	19		
B4	138.03	34	139.63	26		
B1	142.77	46	144.24	23		
A3	149.35	43	150.46	20		
B3	151.16	41	152.28	22		
Ac C=O	168.91	26	168.93	23		
Ac C=O	169.11	25	168.96	23		
Ac C=O	170.80	41	171.06	31		
Ac C=O	170.97	49	171.06	31		

Compound Number 3019

<sup>13</sup>C



*erythro*

3-(4-{3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2[4-(2-methoxy carbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B $\gamma$ OMe	3.70	s	
C $\gamma$ OMe	3.71	s	
A3 OMe	3.78	s	
$\gamma$ 's	3.95	m	5.8
$\gamma$ OH	4.16	t	5.8
$\beta$	4.88	m	
$\alpha$	5.60	d	5.5
C $\beta$	6.34	d	16.0
B $\beta$	6.37	d	16.0
A5	6.79	d	8.1
A6	7.00	m	
C2,6	6.97	m	8.8
B2,6	7.02	m	8.8
A2	7.12	d	1.9
C3,5	7.50	m	8.6
B3,5	7.54	m	8.6
C $\alpha$	7.55	d	16.0
B $\alpha$	7.59	d	16.0

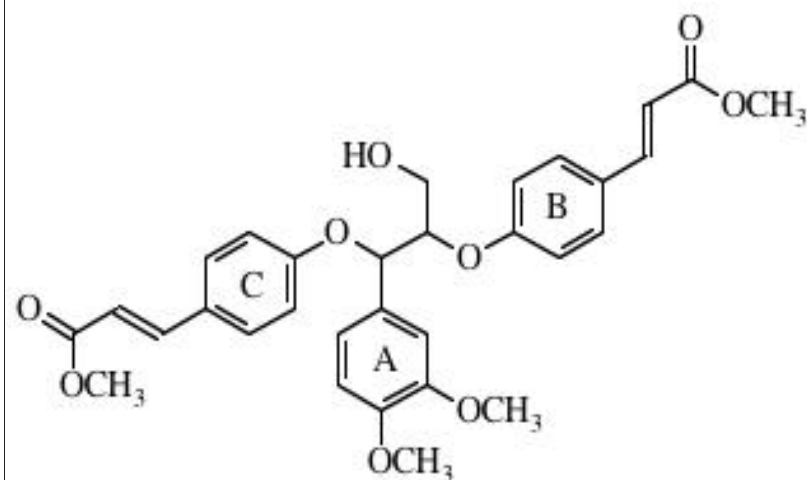
**Notes:**

jrf101.C9-12  
Authenticated assignments in acetone.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
C $\gamma$ OMe	51.55	54	51.52	51	51.27	59
B $\gamma$ OMe	51.59	50	51.53	51	55.63	66
A3 OMe	55.92	65	56.26	58	55.80	22
$\gamma$	61.43	27	61.42	24	59.79	15
$\alpha$	78.70	35	79.32	34	77.75	18
$\beta$	81.89	35	82.67	32	81.24	18
A2	109.26	33	112.00	35	111.78	17
A5	114.48	35	115.55	24	115.29	27
B $\beta$	115.68	41	116.15	45	115.13	37
C $\beta$	115.86	45	116.25	42	115.13	37
C2	116.24	87	117.23	86	116.20	50
C6	116.24	87	117.23	86	116.20	50
B2	116.54	93	117.34	92	116.24	64
B6	116.54	93	117.34	92	116.24	64
A6	120.21	33	121.43	34	120.28	19
C1	127.73	38	128.19	42	126.74	44
B1	128.00	38	128.22	43	126.86	43
A1	128.67	45	129.37	38	127.73	40
B3	129.57	84	130.46	86	129.93	100
B5	129.57	84	130.46	86	129.93	100
C3	129.61	100	130.48	100	129.93	100
C5	129.61	100	130.48	100	129.93	100
C $\alpha$	144.12	43	144.87	39	144.16	24
B $\alpha$	144.23	38	144.94	43	144.26	29
A4	145.72	49	147.35	22	146.29	41
A3	146.78	45	148.23	25	147.31	52
C4	159.14	41	160.49	45	159.17	43
B4	159.81	42	161.67	44	160.5	53
C $\gamma$	167.62	44	167.67	40	166.86	55
B $\gamma$	167.63	48	167.72	39	166.92	56

Compound Number 3020

<sup>13</sup>C



*erythro*

3-(4-{1-(3,4-dimethoxyphenyl)-3-hydroxy-2[4-(2-methoxycarbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B γ OMe	3.693	s	
C γ OMe	3.711	s	
A4 OMe	3.732	s	
A3 OMe	3.752	s	
γ 's	3.954	m	5.9, *
γ OH	4.157	t	5.9
β	4.881	m	5.5, 4.9
α	5.603	d	5.5
C β	6.335	d	16.0
B β	6.363	d	16.0
A5	6.876	d	8.2
C2,6	6.973	m	8.8
B2,6	7.015	m	8.7
A6	7.047	dd	8.2, 1.9
A2	7.126	d	1.9
C3,5	7.515	m	8.8
B3,5	7.550	m	8.7
C α	7.543	d	16.0
B α	7.582	d	16.0

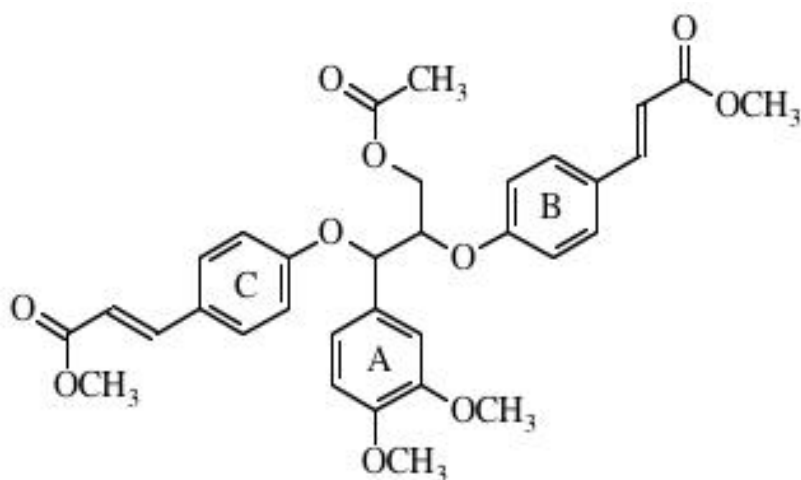
**Notes:**

jrf119.C2  
assignments not authenticated - from #3019

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
C γ OMe			51.52	38		
B γ OMe			51.52	38		
A4 OMe			55.97	40		
A3 OMe			56.12	40		
γ			61.38	20		
α			79.21	34		
β			82.64	34		
A2			112.38	32		
A5			112.47	28		
B β			116.21	40		
C β			116.33	34		
C2			117.26	86		
C6			117.26	86		
B2			117.38	98		
B6			117.38	98		
A6			121.02	38		
C1			128.26	30		
B1			128.32	32		
B3			130.51	100		
B5			130.51	100		
C3			130.52	94		
C5			130.52	94		
A1			130.56	32		
C α			144.87	38		
B α			144.96	40		
A4			150.25	32		
A3			150.26	28		
C4			160.50	30		
B4			161.69	32		
C γ			167.66	30		
B γ			167.72	28		

Compound Number 3021

<sup>13</sup>C



*erythro*

3-(4-{3-carboxyoxy-1-(3,4-dimethoxyphenyl)-2-[4-(2-methoxy carbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.920	s	
B γ OMe	3.694	s	
C γ OMe	3.712	s	
A4 OMe	3.736	s	
A3 OMe	3.759	s	
γ 1	4.460	dd	11.9, 6.2
γ 2	4.507	dd	11.9, 3.8
β	5.084	m	6.2, 5.8, 3.8
α	5.629	d	5.8
C β	6.343	d	16.0
B β	6.378	d	16.0
A5	6.888	d	8.3
C2,6	6.992	m	8.7
B2,6	7.018	m	8.7
A6	7.073	dd	8.3, 2.0
A2	7.161	d	2.0
C3,5	7.527	m	8.7
B3,5	7.570	m	8.7
Cα	7.548	d	16.0
Bα	7.584	d	16.0

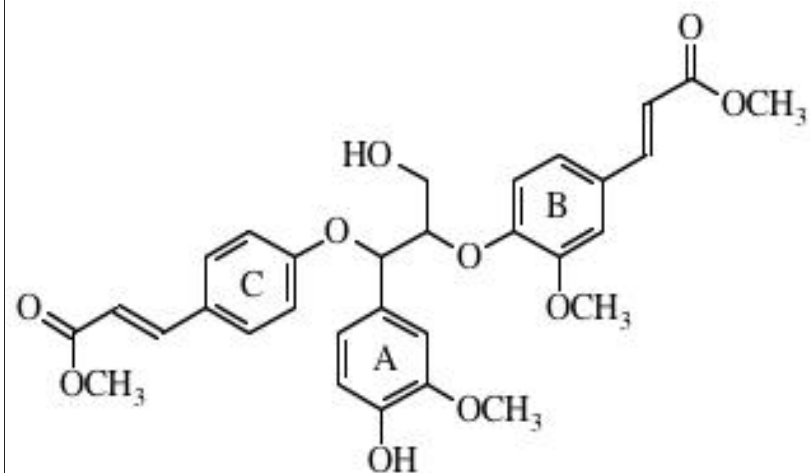
**Notes:**

jrf137  
 assignments not authenticated - from #3019/3020  
 A4 vs A3 OMe may be switched

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me			20.58	53		
C γ OMe			51.54	53		
B γ OMe			51.57	47		
A4 OMe			55.97	53		
A3 OMe			56.14	55		
γ			63.49	34		
α			79.32	39		
β			79.81	39		
A2			112.17	42		
A5			112.47	42		
B β			116.49	45		
C β			116.55	47		
C2			117.27	95		
C6			117.27	95		
B2			117.41	97		
B6			117.41	97		
A6			120.88	39		
C1			128.55	24		
B1			128.74	24		
A1			130.09	34		
B3			130.53	100		
B5			130.53	100		
C3			130.61	97		
C5			130.61	97		
C α			144.81	82		
B α			144.81	82		
A4			150.38	26		
A3			150.43	24		
C4			160.24	26		
B4			161.18	26		
C γ			167.66	29		
B γ			167.69	26		
γ Ac C=O			170.79	24		

Compound Number 3022

<sup>13</sup>C



*erythro*

3-(4-{3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-[2-methoxy-4-(2-methoxycarbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B γ OMe	3.696	s	
C γ OMe	3.720	s	
A3 OMe	3.804	s	
B3 OMe	3.853	s	
γ 's	3.95	m	
β	4.791	m	
α	5.621	d	5.3
C β	6.330	d	16.0
B β	6.417	d	16.0
A5	6.798	d	8.2
C2,6	6.978	m	8.8
A6	7.013	dd	8.2, 1.9
B5	7.065	d	8.3
B6	7.123	dd	8.3, 1.9
A2	7.205	d	1.9
B2	7.283	d	1.9
C3,5	7.493	d	8.8
C α	7.554	d	16.0
B α	7.584	d	16.0

**Notes:**

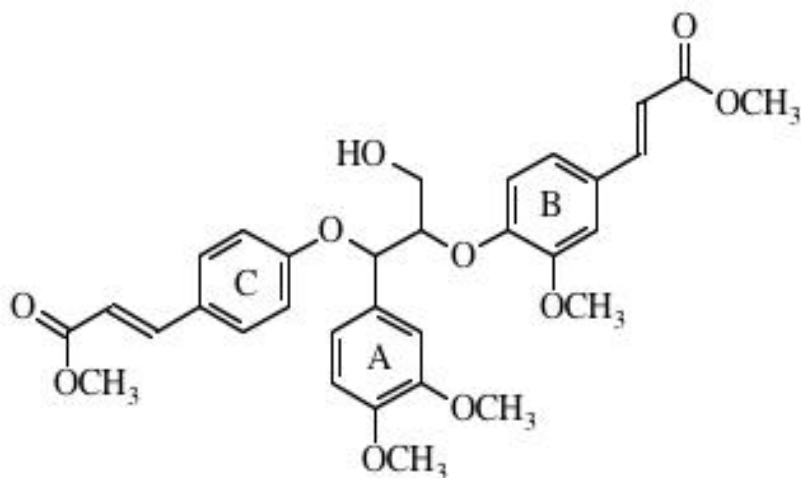
jrf103.C12-25  
fully authenticated in acetone

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ OMe	51.55	57	51.52	59	51.27	89
C γ OMe	51.66	56	51.56	56	51.28	82
A3 OMe	55.83	69	56.22	69	55.48	99
B3 OMe	55.96	69	56.32	66	55.79	100
γ	61.29	31	61.31	30	59.66	28
α	78.46	42	79.44	41	77.95	34
β	86.25	42	84.21	42	81.84	34
B2	110.87	46	112.14	49	111.43	40
A2	109.37	42	112.21	41	112.01	34
A5	114.49	44	115.38	38	114.89	36
C β	115.62	47	116.16	52	115.16	44
B β	116.77	48	116.59	51	115.24	49
C2	116.28	100	117.23	98	116.22	92
C6	116.28	100	117.23	98	116.22	92
B5	120.21	43	117.54	48	115.45	47
A6	119.50	47	121.53	41	120.44	34
B6	122.14	48	123.04	49	122.48	44
C1	127.67	39	128.13	41	126.79	62
B1	129.92	39	129.21	44	127.27	65
A1	129.32	43	129.39	46	127.54	60
C3	129.57	97	130.42	100	129.91	90
C5	129.57	97	130.42	100	129.91	90
C α	144.21	46	144.89	48	144.18	46
B α	144.28	47	145.23	48	144.61	44
A4	145.68	46	147.29	37	146.27	65
A3	146.78	42	148.17	38	147.24	74
B4	149.40	42	151.24	43	149.76	79
B3	151.14	46	151.54	46	150.11	69
C4	159.30	43	160.57	43	159.25	63
C γ	167.39	45	167.68	44	166.86	76
B γ	167.64	44	167.71	46	166.95	71



Compound Number 3023

<sup>13</sup>C



*erythro*

3-(4-{1-(3,4-dimethoxyphenyl)-3-hydroxy-2-[2-methoxy-4-(2-methoxycarbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B γ OMe	3.693	s	
C γ OMe	3.715	s	
A3 OMe	3.741	s	
A4 OMe	3.773	s	
B3 OMe	3.865	s	
γ *	*	*	
β	4.787	m	
α	5.640	d	5.3
C β	6.337	d	16.0
B β	6.416	d	16.0
A5	6.871	d	8.3
C2,6	6.981	m	8.8
A6	7.067	dd	8.3, 1.9
B5	7.068	d	8.3
B6	7.134	dd	8.3, 1.9
A2	7.200	d	1.9
B2	7.302	d	1.9
C3,5	7.517	d	8.8
C α	7.537	d	16.0
B α	7.573	d	16.0

**Notes:**

jrf121.C5-7

assignments not authenticated - from #3022 and 3020

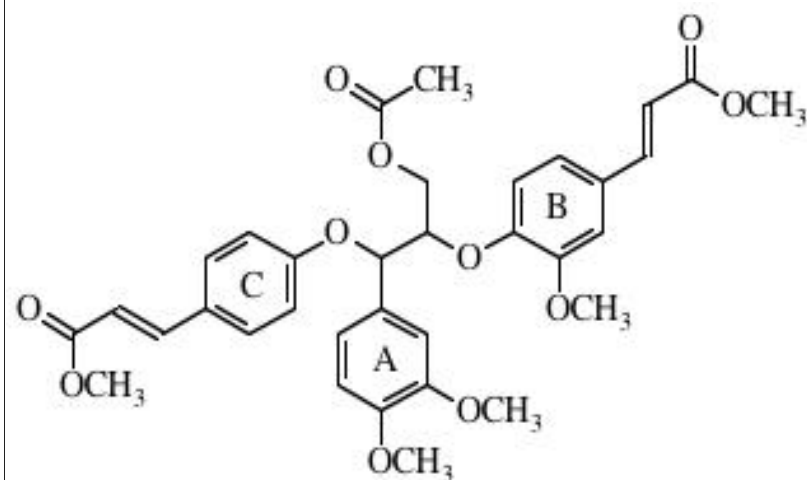
A4 vs A3 OMe may be switched

\*γ and γ-OH protons buried, C-H correlations not run.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ OMe			51.52	53		
C γ OMe			51.55	45		
A4 OMe			55.98	50		
A3 OMe			56.07	50		
B3 OMe			56.37	50		
γ			61.29	23		
α			79.37	37		
β			84.19	32		
B2			112.19	42		
B5			112.24	40		
A2			112.70	37		
C β			116.27	42		
B β			116.67	42		
C2			117.29	97		
C6			117.29	97		
B5			117.60	42		
A6			121.14	39		
B6			123.10	42		
C1			128.25	27		
B1			129.30	31		
C3			130.49	100		
C5			130.49	100		
A1			130.59	31		
C α			144.91	42		
B α			145.25	40		
A4			150.20	26		
A3			150.23	27		
B4			151.31	24		
B3			151.65	27		
C4			160.63	27		
C γ			167.68	27		
B γ			167.71	26		

Compound Number 3024

<sup>13</sup>C



*erythro*

3-(4-{3-carboxyoxy-1-(3,4-dimethoxyphenyl)-2-[2-methoxy-4-(2-methoxycarbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.920	s	
B γ OMe	3.695	s	
C γ OMe	3.716	s	
A3 OMe	3.745	s	
A4 OMe	3.775	s	
B3 OMe	3.877	s	
γ1	4.428	dd	11.9, 3.8
γ2	4.487	dd	11.9, 6.2
β	4.988	m	6.2, 5.3, 3.8
α	5.659	d	5.3
C β	6.345	d	16.0
B β	6.431	d	16.0
A5	6.888	d	8.3
C2,6	6.995	m	8.8
B5	7.051	m	8.3
A6	7.066	dd	8.3, 2.0, 0.4
B6	7.143	dd	8.3, 2.0, 0.4
A2	7.190	d	2.0
B2	7.323	d	2.0
C3,5	7.527	m	8.8
C α	7.553	d	16.0
B α	7.576	d	16.0

**Notes:**

jrf139  
 assignments not authenticated - from #3023 and 3021  
 A4 vs A3 OMe may be switched  
 Note γ's, J's switch from #3021!!

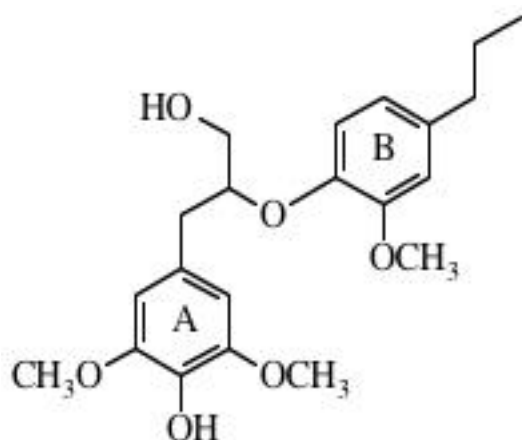
Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
g Ac Me			20.61	46		
B γ OMe			51.54	54		
C γ OMe			51.58	46		
A4 OMe			55.99	50		
A3 OMe			56.09	52		
B3 OMe			56.35	50		
γ			63.49	30		
α			79.62	37		
β			81.21	35		
A2			112.24	33		
B5			112.38	76		
B2			112.38	76		
C β			116.42	37		
B β			116.98	39		
C2			117.28	91		
C6			117.28	91		
B5			118.21	39		
A6			120.82	35		
B6			122.93	39		
C1			128.46	30		
B1			129.89	26		
A1			130.14	30		
C3			130.52	100		
C5			130.52	100		
C α			144.85	41		
B α			145.14	41		
A4			150.33	28		
A3			150.37	28		
B4			150.72	26		
B3			151.80	30		
C4			160.44	28		
C γ			167.67	35		
B γ			167.67	35		
γ OAc C=O			170.79	30		





Compound Number 3027

<sup>13</sup>C



3-(4-hydroxy-3,5-dimethoxyphenyl)-2-(2-methoxy-4-propylphenoxy)propan-1-ol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B γ	0.894	t	7.4
B β	1.585	m	
B α	2.491	m	
α1	2.85	dd	13.9, 6.2
α2	2.922	dd	13.9, 6.1
γ	3.602	m	
γ OH	3.734	t	
A OMe	3.770	s	
B OMe	3.806	s	
β	4.335	m	
A2,6	6.596	s	
B6	6.646	ddt	8.2, 2.1, 0.6
B2	6.817	d	2.1
B5	6.833	d	8.2
Ar OH	6.940		

Notes:

jrbha67

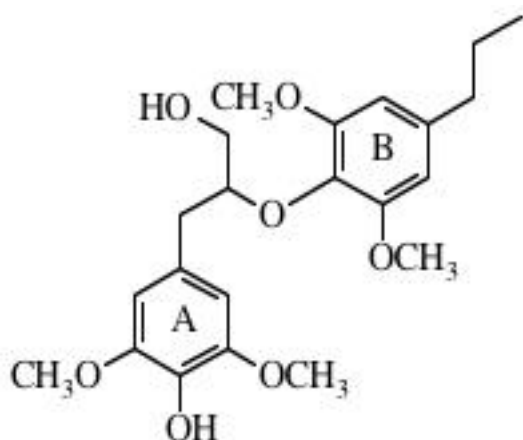
Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.77	63	14.01	45	13.67	66
B β	24.57	84	25.40	49	24.22	75
A α	37.76	53	38.21	41	36.90	59
B α	37.94	48	38.23	45	36.90	59
B OMe	55.77	31	56.19	19	55.47	62
A OMe	56.28	53	56.56	33	55.82	97
γ	63.47	53	63.46	22	61.84	28
β	85.35	48	83.47	31	80.56	38
A2	106.13	100	107.93	100	106.83	50
A6	106.13	100	107.93	100	106.83	50
B2	112.30	67	113.81	50	112.74	41
B5	120.04	70	118.54	45	115.44	47
B6	121.03	69	121.36	58	120.11	41
A1	128.98	60	129.59	27	128.24	47
A4	133.32	52	135.34	20	133.78	56
B1	138.31	52	137.38	28	135.09	44
B4	145.32	51	146.85	22	145.41	44
A3	146.97	95	148.48	35	147.64	100
A5	146.97	95	148.48	35	147.64	100
B3	150.89	52	151.57	22	149.53	47

<sup>1</sup> H	CDCl <sub>3</sub>	DMSO
B γ	0.910	0.86
B β	1.589	1.54
B α	2.499	2.45
α1	2.856	2.74
α2	3.032	2.84
γ1	3.578	
γ2	3.655	
γ OH		4.75
A OMe	3.831	3.68
B OMe	3.841	3.71
β	4.160	4.30
A2,6	6.478	6.49
B6	6.628	6.62
B2	6.697	6.76
B5	6.651	6.83
Ar OH	8.03	8.03

Compound Number 3028

<sup>13</sup>C



3-(4-hydroxy-3,5-dimethoxyphenyl)-2-(2,5-dimethoxy-4-propylphenoxy)propan-1-ol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B γ	0.917	t	7.4
B β	1.620	m	
B α	2.525	m	
α1	2.925	dd	13.6, 8.1
α2	3.074	dd	13.6, 5.3
γ1	3.402	m	12.0, 4.1
γ2	3.486	m	12.0, 3.6
γ OH	3.47	m	
A OMe	3.793	s	
B OMe	3.825	s	
β	4.142	m	
B2,6	6.544	s	
A2,6	6.573	s	
Ar OH	6.949	s	

**Notes:**

jrbha63 Hγ's are dd's after adding D2O to acetone - otherwise complex multiplets; J's are from D2O exchanged spectra. In acetone: Many peaks were split with a 2:1 ratio. Aα 38.38 & 38.50, Bα 38.80 & 38.93, A1 129.69 & 129.86, B4 134.94 & 134.97, A4 135.24 & 135.28, B1 139.10 & 139.26, A3/5 148.44 & 148.49, B3/5 154.07 & 154.12

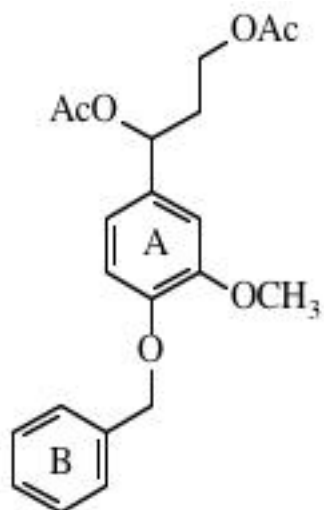
Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.70	37	14.06	100	13.82	49
B β	24.47	100	25.30	82	24.18	48
α	37.65	39	38.38	45	37.35	25
B α	38.24	47	38.80	45	37.60	27
A OMe	55.96	90	56.43	72	55.91	100
B OMe	56.19	86	56.58	76	55.97	96
γ	62.19	51	62.93	49	61.88	27
β	84.19	49	85.20	56	83.32	23
B2	105.42	37	106.57	59	105.67	11
B6	105.42	37	106.57	59	105.67	11
A2	106.12	35	107.83	55	106.89	10
A6	106.12	35	107.83	55	106.89	10
A1	129.21	49	129.69	38	128.54	30
B4	133.07	29	134.94	14	133.46	24
A4	133.28	28	135.24	16	133.70	28
B1	138.64	43	139.10	38	137.61	25
A3	146.75	55	148.44	45	147.65	48
A5	146.75	55	148.44	45	147.65	48
B3	152.92	79	154.07	54	152.79	52
B5	152.92	79	154.07	54	152.79	52

<sup>1</sup> H	CDCl <sub>3</sub>	DMSO
B γ	0.917	0.879
B β	1.592	1.562
B α	2.489	2.45
α1	2.950	2.756
α2	3.175	2.868
γ1	3.408	
γ2	3.542	
γ OH	3.47	4.334?
A OMe	3.798	3.692
B OMe	3.829	3.696
β	4.152	4.103
B2,6	6.386	6.449
A2,6	6.498	6.462
Ar OH	5.493	8.044

Compound Number 3029

<sup>13</sup>C



1-(4-benzyloxy-3-methoxyphenyl)propane-1,3-diol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.99	s	
α Ac Me	2.03	s	
β	2.18	m	
OMe	3.83	s	
γ	4.08	m	
B α	5.09	s	
α	5.85	dd	8.2, 5.7
A6	6.91	dd	8.3, 2.0
A5	6.99	d	8.3
A2	7.04	d	2.0
Bz H's	7.28-7.51	m	

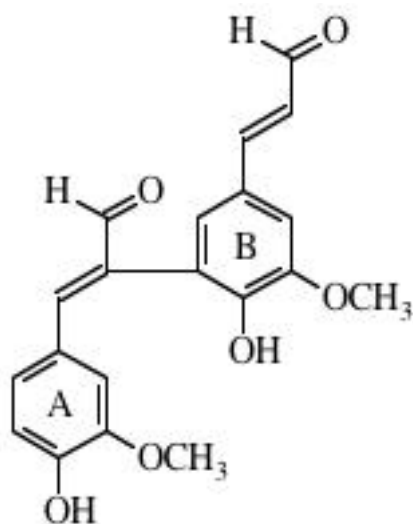
Notes:

JRHKC25

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me			20.70			
α Ac Me			21.01			
β			35.78			
OMe			56.16			
γ			61.20			
B α			71.26			
α			73.17			
A2			111.49			
A5			114.64			
A6			119.58			
B3			128.28			
B5			128.28			
B2			129.09			
B6			129.09			
B4			128.45			
A1			134.19			
B1			138.33			
A4			149.02			
A3			150.68			
α Ac C=O			170.17			
γ Ac C=O			170.80			

Compound Number 3030

<sup>13</sup>C



beta-[5-(2-formylvinyl)-2-hydroxy-3-methoxyphenyl]  
coniferyl aldehyde

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A3 OMe	3.47	s	
B3 OMe	3.96	s	
B β	6.66	dd	15.8, 7.8
A5	6.77	d	8.3
A2	6.87	d	2.0
A6	6.98	dd	8.3, 2.0
B6	7.01	d	2.0
B2	7.44	d	2.0
A α	7.57	s	
B α	7.57	d	15.8
OH	8.43	s	
B γ	9.61	d	7.8
A γ	9.69	s	

**Notes:**

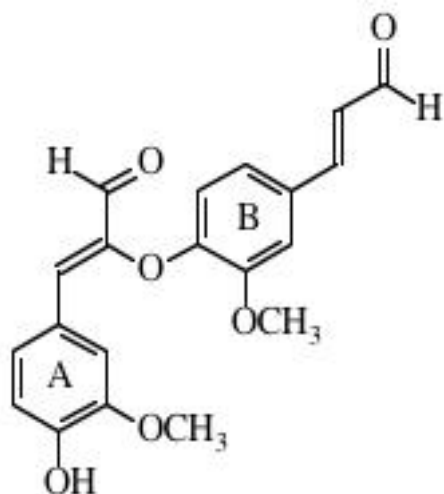
JRHKB117 (Higuchi)  
13mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe			55.55			
B3 OMe			56.63			
B2			110.61			
A2			113.56			
A5			115.95			
A β			123.15			
B6			126.36			
A6			126.92			
B β			127.29			
A1			127.38			
B1			127.44			
B5			136.33			
A3			148.13			
B4			148.59			
A3			149.30			
B4			150.16			
A α			151.36			
B α			153.79			
A γ			193.43			
B γ			193.96			



Compound Number 3031

<sup>13</sup>C



beta-[4-(2-formylvinyl)-2-methoxyphenoxy] coniferyl aldehyde

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J

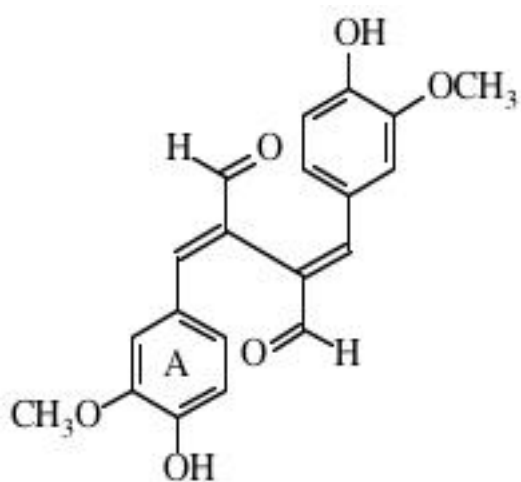
**Notes:**

JRHKB119 (Higuchi)  
4 mg

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe A3 OMe			56.01 56.52			
B2			112.55			
A2			113.98			
B5			115.25			
A5			116.25			
B6			123.63			
A1			125.31			
A6			126.80			
B β			128.32			
B1			130.20			
A α			138.21			
A β			147.70			
B3			148.48			
B4			148.90			
A3			150.37			
A4			150.56			
B α			153.15			
A γ			197.48			
B γ			193.85			

Compound Number 3032

<sup>13</sup>C



2,3-diformyl-1,4-bis(4-hydroxy-3-methoxyphenyl)  
buta-1,3-diene

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.70	s	
5	6.82	d	8.31
6	7.21	dd	8.31, 2.15
2	7.28	d	2.15
α	7.78	s	
OH	8.29	s	
γ	9.66	s	

**Notes:**

JRHKb121 11mg

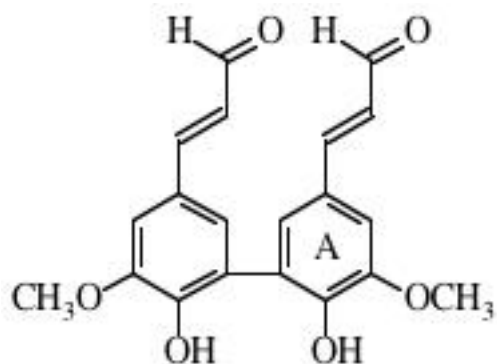
Higuchi

As this dimer contains a plane of symmetry the CSs are reported for one unit.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.11			
2			113.71			
5			116.24			
6			126.25			
1			127.47			
β			134.42			
3			148.41			
4			150.51			
α			152.83			
γ			192.74			

Compound Number 3033

<sup>13</sup>C



5,5'-bis-conferyl aldehyde

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.95	s	
β	6.68	dd	15.84, 7.84
6	7.27	s	2.0
2	7.36	s	2.0
α	7.59	s	15.84
γ	9.65	s	7.84

**Notes:**

JRHKb123 37mg

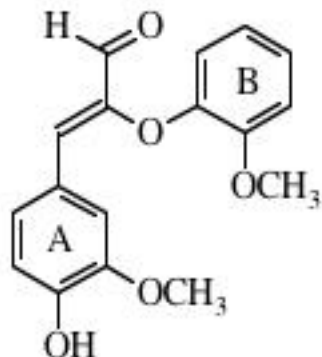
Higuchi

As this dimer contains a plane of symmetry the CSs are reported for one unit.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.52			
2			110.00			
1			126.05			
5			126.13			
β			126.81			
6			127.10			
3			149.42			
4			149.63			
α			154.40			
γ			193.92			

Compound Number 3034

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe B3 OMe			55.84 56.17			
B2 A2			113.51 113.82			
B5 A5			114.85 116.07			
B6			121.34			
B1			123.35			
A1			125.49			
A6			126.57			
α			137.82			
B4			146.22			
β			148.09			
A3 B3			148.30 149.89			
A4			150.20			
γ			187.90			

<sup>1</sup>H (acetone)

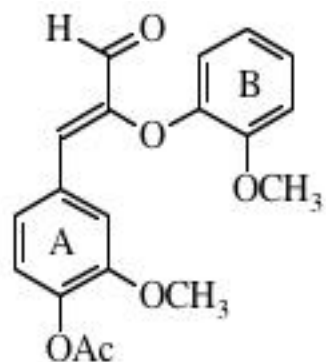
Atom	H Shifts	Mult	J
A4 OMe B3 OMe	3.73 3.88	s s	
B5	6.72	dd	8.0, 2.0
B6	6.76	ddd	8.2, 7.1, 2.0
A5	6.87	d	8.3
B1	6.95	ddd	8.2, 7.1, 2.0
B2	7.05	dd	8.2, 2.0
α	7.26	s	
A6	7.33	dd	8.3, 2.0
A2	7.59	d	2.0
γ	9.50	s	

Notes:

HKc63.4

Compound Number 3035

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.41			
A3 OMe B3 OMe			55.97			
B2			56.20			
A2			113.62			
B5			114.66			
B6			115.56			
B1			121.39			
A5			123.83			
A6			124.06			
A1			124.53			
α			132.33			
A4			135.40			
B4			142.47			
β			146.01			
B3			149.94			
A3			150.01			
Ac C=O			152.27			
γ			168.73			
			188.21			

<sup>1</sup>H (acetone)

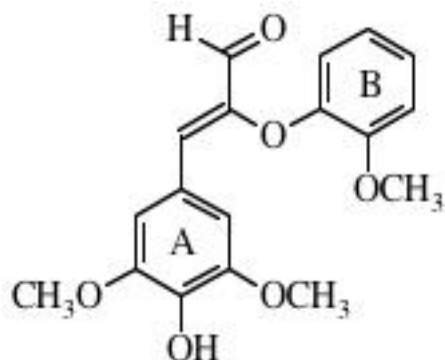
Atom	H Shifts	Mult	J
Ac Me	2.23	s	
A3 OMe B3 OMe	3.73 3.87	s s	
B5	6.79	m	
B6	6.79	m	
B1	6.97	m	
B2	7.06	bd	7.8
A5	7.11	d	8.3
α	7.30	s	
A6	7.45	dd	8.3, 2.0
A2	7.68	d	2.0
γ	9.55	s	

**Notes:**

HKc 63.4Ac

Compound Number 3036

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe			56.11			
A3 OMe			56.31			
A5 OMe			56.31			
A2			109.27			
A6			109.27			
B2			113.39			
B5			114.53			
B6			121.32			
B1			123.27			
A1			124.05			
α			138.23			
A4			139.74			
B4			146.16			
β			148.15			
A3			148.57			
A5			148.57			
B3			149.76			
γ			187.91			

<sup>1</sup>H (acetone)

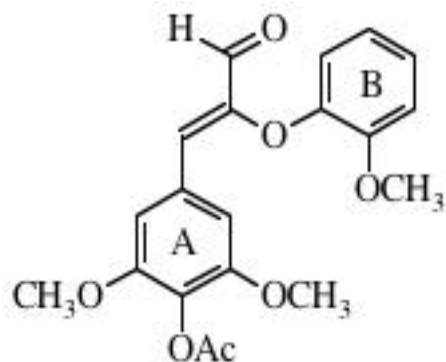
Atom	H Shifts	Mult	J
A3,5 OMe	3.74	s	
B3 OMe	3.88	s	
B5	6.70	dd	8.2, 1.7
B6	6.76	ddd	8.2, 7.2, 1.5
B1	6.94	ddd	8.2, 7.2, 1.7
B2	7.05	dd	8.2, 1.5
A2,6	7.24	s	
α	7.26	s	
γ	9.51	s	

Notes:

HKd 59.1

Compound Number 3037

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.17			
B3 OMe			56.14			
A3 OMe			56.29			
A5 OMe			56.29			
A2			108.10			
A6			108.10			
B2			113.48			
B5			115.07			
B6			121.37			
B1			123.68			
A1			131.35			
A4			131.53			
α			136.12			
B4			145.97			
b			149.81			
B3			149.84			
A3			153.20			
A5			153.20			
Ac C=O			168.30			
γ			188.26			

<sup>1</sup>H (acetone)

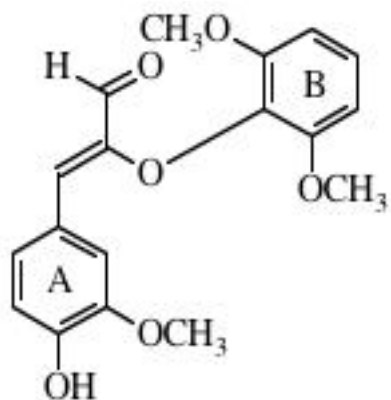
Atom	H Shifts	Mult	J
Ac Me	2.21	s	
A3,5 OMe	3.73	s	
B3 OMe	3.88	s	
B5	6.76	dd	8.2, 2.4
B6	6.77	ddd	8.2, 6.5, 1.4
B1	6.97	ddd	8.2, 6.5, 2.4
B2	7.06	dd	8.2, 1.4
A2,6	7.29	s	
α	7.31	s	
γ	9.57	s	

**Notes:**

HKd 59.1 Ac

Compound Number 3038

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe			56.07			
B3 OMe			56.53			
B5 OMe			56.53			
B2			106.40			
B6			106.40			
A2			114.55			
A5			115.95			
B1			124.17			
A6			125.77			
A1			126.72			
α			129.06			
B4			135.22			
A3			148.04			
A4			149.05			
β			150.82			
B3			152.47			
B5			152.47			
γ			186.64			

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
B3,5 OMe	3.74	s	
A3 OMe	3.81	s	
α	6.64	s	
B2,6	6.65	d	8.2
A5	6.88	d	8.3
B1	6.99	dd	8.2, 7.6
A6	7.45	dd	8.3, 2.0
A2	7.60	d	2.0
γ	9.25	s	

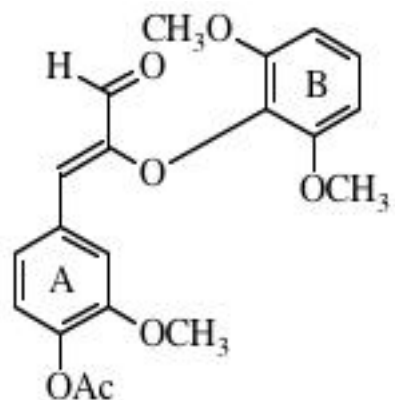
Notes:

HKd 23.3



Compound Number 3039

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
A3 OMe			56.09			
B3 OMe			56.52			
B5 OMe			56.52			
B2			106.29			
B6			106.29			
A2			115.15			
A5			123.78			
A6			124.04			
B1			124.53			
α			126.73			
A1			133.43			
B4			134.81			
A4			141.52			
A3			152.04			
β			152.11			
B3			152.41			
B5			152.41			
Ac C=O			168.85			
γ			187.00			

<sup>1</sup>H (acetone)

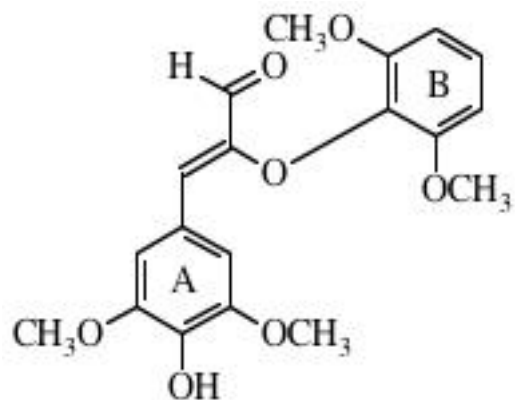
Atom	H Shifts	Mult	J
Ac Me	2.24	s	
B3,5 OMe	3.75	s	
A3 OMe	3.80	s	
B2,6	6.67	d	8.3
α	6.71	s	
B1	7.01	dd	8.3, 7.9
A5	7.11	d	8.2
A6	7.54	dd	8.2, 1.9
A2	7.68	d	1.9
γ	9.32	s	

Notes:

HKd 23.3 Ac

Compound Number 3040

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe			56.51			
A5 OMe			56.51			
B3 OMe			56.59			
B5 OMe			56.59			
B2			106.50			
B6			106.50			
A2			109.41			
A6			109.41			
B1			124.18			
A1			125.37			
α			129.08			
B4			135.21			
A4			138.72			
A3			148.44			
A5			148.44			
β			150.91			
B3			152.46			
B5			152.46			
γ			186.60			

<sup>1</sup>H (acetone)

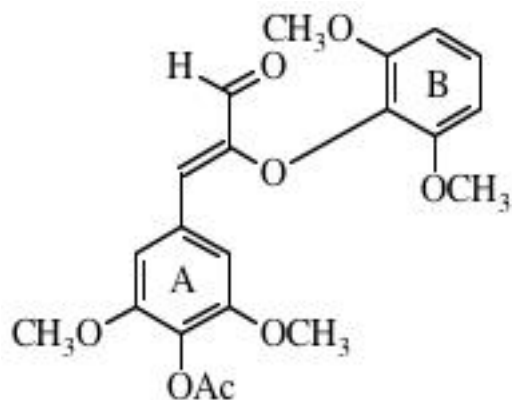
Atom	H Shifts	Mult	J
B3,5 OMe	3.75	s	
A3,5 OMe	3.80	s	
α	6.63	s	
B2,6	6.66	d	8.3
B1	6.99	t	8.3
A2,6	7.31	s	
γ	9.25	s	

Notes:

HKd 63.1

Compound Number 3041

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.22			
B3 OMe			56.35			
B5 OMe			56.35			
A3 OMe			56.56			
A5 OMe			56.56			
B2			106.37			
B6			106.37			
A2			108.07			
A6			108.07			
B1			124.51			
α			126.81			
A4			130.47			
A1			132.69			
B4			134.76			
β			152.09			
B3			152.35			
B5			152.35			
A3			153.01			
A5			153.01			
Ac C=O			168.43			
γ			186.95			

<sup>1</sup>H (acetone)

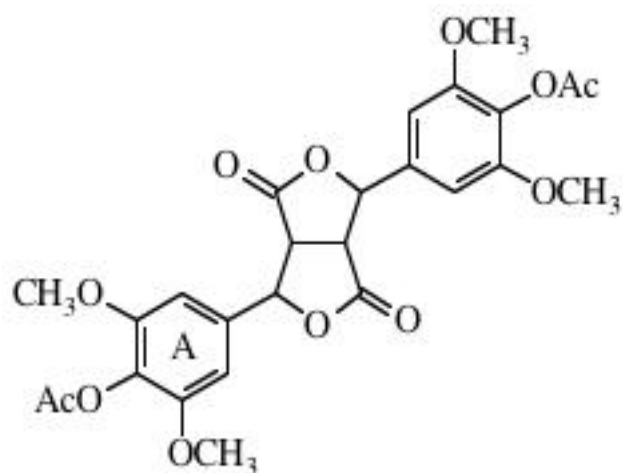
Atom	H Shifts	Mult	J
Ac Me	2.23	s	
A3,5 OMe	3.77	s	
B3,5 OMe	3.78	s	
B2,6	6.67	d	8.3
α	6.69	s	
B1	7.01	dd	8.6, 8.2
A2,6	7.34	s	
γ	9.32	s	

**Notes:**

HKd 63.1 Ac

Compound Number 3042

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.18			
β			48.76			
3 OMe			55.56			
5 OMe			55.56			
α			82.61			
2			103.05			
6			103.05			
4			129.76			
1			137.84			
3			153.54			
5			153.54			
Ac C=O			168.50			
γ			175.77			

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.23	s	
OMe	3.81	s	
β	4.20	s	
α	5.86	s	
2,6	6.81	s	

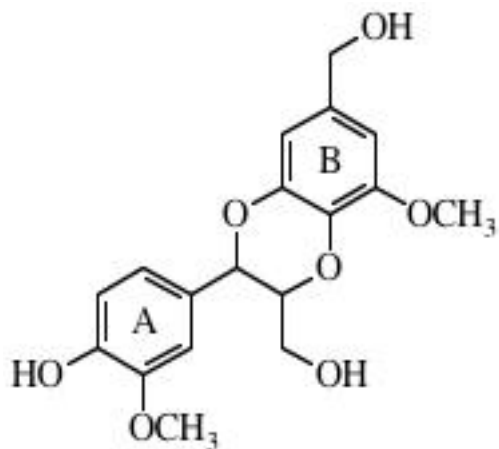
**Notes:**

FLj 144

As this dimer contains a plane of symmetry the CS's are reported for one unit.

Compound Number 3043

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe			56.26	98		
A3 OMe			56.32	105		
γ			61.83	53		
Bα			64.61	63		
α			76.97	93		
β			79.30	91		
B2			104.10	84		
B6			108.55	97		
A2			111.90	89		
A5			115.70	52		
A6			121.49	98		
A1			129.50	54		
B4			133.24	25		
B1			135.46	40		
B5			145.19	39		
A4			147.92	26		
A3			148.44	24		
B3			149.84	49		

<sup>1</sup>H (acetone)

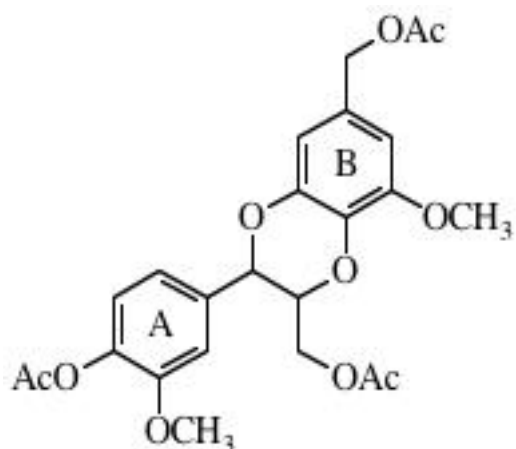
Atom	H Shifts	Mult	J
γ1	3.47	m	
γ2	3.76	m	
B3 OMe	3.81	s	
A3 OMe	3.85	s	
β	3.99	ddd	7.9, 3.9, 2.5
Bα	4.49	m	
α	4.95	d	7.9
B6	6.53	ddd	1.8, 0.75, 0.75
B2	6.60	d	1.8
A5	6.86	d	8.1
A6	6.94	ddd	8.1, 1.9, 0.5
A2	7.09	d	1.9
A4 OH	7.80	s	

**Notes:**

F. Lu  
flm11

Compound Number 3044

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me			20.45	18		
γ Ac Me			20.49	18		
Bα Ac Me			20.81	12		
A3 OMe			56.36	18		
B3 OMe			56.44	18		
γ			63.36	14		
Bα			66.36	17		
β			75.97	16		
α			77.01	16		
B2			106.08	14		
B6			110.41	15		
A2			112.77	15		
A6			120.75	16		
A5			123.88	16		
B1			129.92	9		
B4			133.65	8		
A1			136.00	10		
A4			141.45	7		
B5			144.92	9		
B3			149.98	8		
A3			152.57	9		
A4 Ac C=O			168.86	9		
γ Ac C=O			170.62	8		
Bα Ac C=O			170.83	5		

<sup>1</sup>H (acetone)

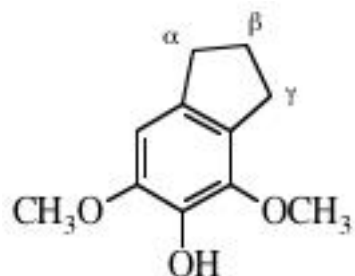
Atom	H Shifts	Mult	J
Bα Ac Me	1.99	s	
γ Ac Me	2.03	s	
A4 Ac Me	2.24	s	
B3 OMe	3.83	s	
A3 OMe	3.84	s	
γ1	4.02	dd	12.4, 4.3
γ2	4.28	dd	12.4, 3.4
β	4.40	ddd	7.7, 4.3, 3.4
Bα	4.98	s	
α	5.04	d	7.7
B6	6.61	d	1.9
B2	6.66	d	1.9
A6	7.08	dd	8.1, 1.7
A5	7.11	d	8.1
A2	7.26	d	1.7

**Notes:**

F. Lu  
flm11Ac

Compound Number 3045

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			26.11			
γ			30.33			
α			33.51			
5 OMe			56.73			
3 OMe			59.83			
6			104.24			
2			128.60			
1			134.89			
4			138.17			
3			144.71			
5			148.47			

<sup>1</sup>H (acetone)

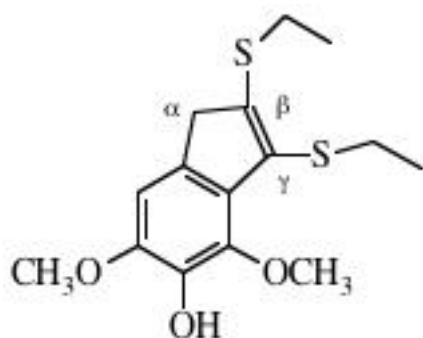
Atom	H Shifts	Mult	J
β	1.98	quint	7.2
α	2.78	br t	7.2
γ	2.83	br t	7.2
5 OMe	3.77	s	
3 OMe	3.79	s	
6	6.58	s	
<u>Benzene</u>			
β	1.86	quin	7.37
α	2.71	td	7.37, 0.66
γ	2.86	t	7.37
5 OMe	3.28	s	
3 OMe	3.75	s	
6	6.32	s	

**Notes:**

HKE-11  
Raney nickel reaction of hke5.5

Compound Number 3046

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ S-CH3			15.11			
β S-CH3			15.41			
β S-CH2			26.33			
γ S-CH2			29.12			
α			41.68			
5 OMe			56.91			
3 OMe			62.30			
6			105.00			
γ			126.93			
2			131.50			
1			133.78			
3			104.04			
4			141.58			
5			147.06			
β			148.43			

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ S-CH3	1.15	t	7.37
β S-CH3	1.30	t	7.37
γ S-CH2	2.89	q	7.37
β S-CH2	2.95	q	7.37
α	3.58	d	0.92
5 OMe	3.82	s	
3 OMe	3.85	s	
6	6.87	br t	0.92

**Notes:**

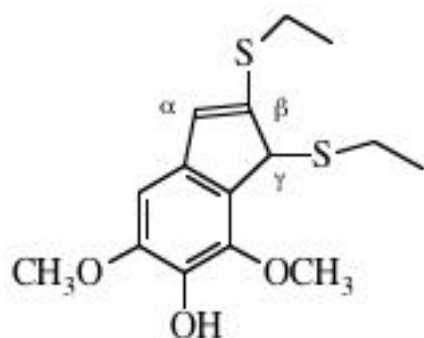
hke 5.4.1

Thioacidolysis product of β-O-4 (S-G) aldehyde dimer



Compound Number 3047

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ S-CH3			14.39			
β S-CH3			14.45			
γ S-CH2			22.23			
β S-CH2			26.80			
γ			52.56			
5 OMe			56.71			
3 OMe			60.09			
6			100.11			
α			124.89			
2			128.89			
1			135.82			
4			137.70			
β			145.14			
3			145.23			
5			149.46			

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ S-CH3	1.00	t	7.5
β S-CH3	1.33	t	7.37
γ S-CH2	2.22, 2.04	dq, dq	12.1, 7.5
β S-CH2	2.94	q	7.37
5 OMe	3.82	s	
3 OMe	3.96	s	
γ	4.39	d	1.18
α	6.38	d	1.18
6	6.63	s	

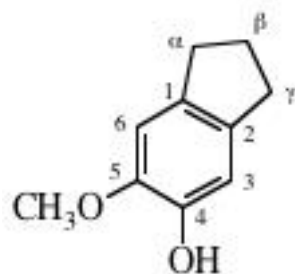
**Notes:**

hke 5.5

Thioacidolysis product of γ-O-4 (S-G) aldehyde dimer

Compound Number 3048

<sup>13</sup>C



6-methoxy-indan-5-ol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
β	1.99	quint	7.63
α	2.74	t	7.63
γ	2.76	t	7.63
OMe	3.79	s	
3	6.66	s	
6	6.78	s	

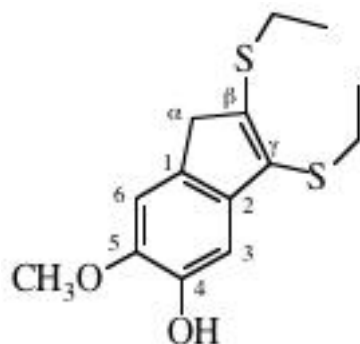
**Notes:**

hke87  
Desulfurized (Raney-nickel Rxn)  
thioacidolysis product of β-O-4 (G-S) aldehyde model compound

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			26.45			
α			33.13			
γ			33.25			
OMe			56.48			
6			108.74			
3			111.56			
1			135.00			
2			136.73			
4			146.11			
5			147.01			

Compound Number 3049

<sup>13</sup>C



2,3-bis-ethylsulfanyl-6-methoxy-1H-inden-5-ol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ S CH3	1.67	t	7.37
β S CH3	1.31	t	7.37
γ S CH2	2.81	q	7.37
β S CH2	2.99	q	7.37
α	3.58	d	0.79
OMe	3.83	s	
3	6.87	s	
6	7.06	br t	0.79

**Notes:**

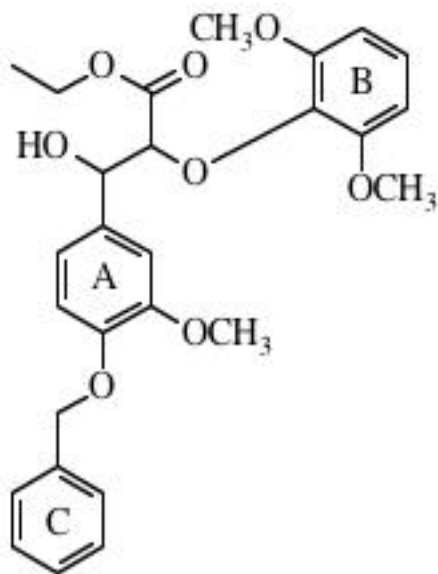
hke83.3

Thioacidolysis product of β-O-4 (G-S) aldehyde dimer model.

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β S CH3			15.47			
γ S CH3			15.74			
β S CH2			23.65			
γ S CH2			27.70			
α			41.57			
OMe			56.83			
4			106.37			
6			109.01			
γ			128.64			
1			133.31			
2			140.13			
5			146.09			
4			146.91			
β			148.16			

Compound Number 3050

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.41			
A OMe			56.13			
B OMe			56.44			
B OMe			56.44			
CH2			60.69			
C α			71.37			
α			74.31			
β			86.14			
B2			106.37			
B6			106.37			
A2			112.31			
A5			114.41			
A6			120.34			
B1			124.73			
C2			128.31			
C6			128.31			
C4			128.41			
C3			129.09			
C5			129.09			
A1			134.57			
B4			137.19			
C1			138.62			
A4			148.71			
A3			150.33			
B3			153.64			
B5			153.64			
γ			169.44			

<sup>1</sup>H (acetone)

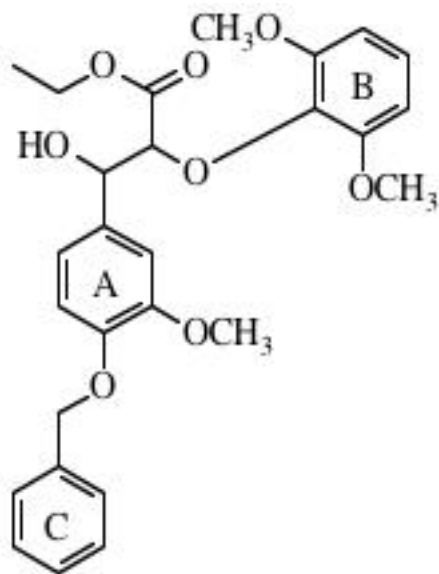
Atom	H Shifts	Mult	J
CH3	1.09	t	7.10
B OMe	3.75	s	
A OMe	3.82	s	
CH2	4.04	m	
β	4.68	d	5.39
α	4.96	d	5.39
C α	5.09	s	
B 2,6	6.64	d	8.16
A6	6.92	dd	8.29, 1.71
A5	6.96	d	8.29
B1	6.99	t	8.16
A2	7.17	d	1.71
C 3,4,5	7.27-7.40	m	
C 2,6	7.37	br d	7.37

**Notes:**

hkd79.2C  
possibly erythro

Compound Number 3051

<sup>13</sup>C



<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
CH3	0.99	t	7.23
A OMe	3.79	s	
B OMe	3.82	s	
CH2	3.95	m	
β	4.02	d	8.42
α	4.84	d	8.42
C α	5.09	s	
B 2,6	6.71	d	8.5
A6	6.81	dd	8.29, 1.97
A5	6.94	d	8.29
A2	6.99	d	1.97
B1	7.05	t	8.55
C 3,4,5	7.29-7.39	m	
C 2,6	7.46	br d	7.37

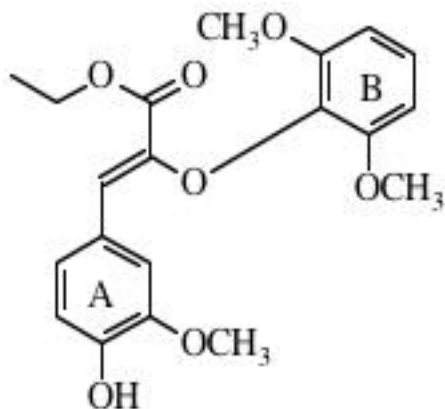
**Notes:**

hkd79.2Ex  
possibly threo

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.30			
A OMe			56.15			
B OMe			56.42			
B OMe			56.42			
CH2			60.68			
C α			71.38			
α			76.04			
β			90.35			
B2			106.26			
B6			106.26			
A2			112.09			
A5			114.61			
A6			120.46			
B1			125.18			
C2			128.33			
C6			128.33			
C4			128.44			
C3			129.11			
C5			129.11			
A1			132.51			
B4			138.07			
C1			138.56			
A4			149.17			
A3			150.62			
B3			153.39			
B5			153.39			
γ			169.49			

Compound Number 3052

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.35			
A OMe			56.09			
B OMe			56.79			
B OMe			56.79			
CH2			61.05			
B2			107.08			
B6			107.08			
A2			114.38			
A5			115.74			
α			119.07			
B1			123.37			
A6			125.09			
A1			126.76			
B4			136.27			
β			143.08			
A3			148.01			
A4			148.10			
B3			152.01			
B5			152.01			
γ			163.74			

<sup>1</sup>H (acetone)

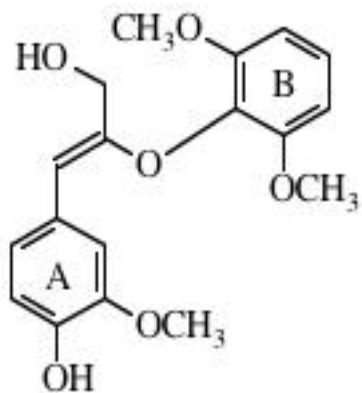
Atom	H Shifts	Mult	J
CH3	1.11	t	7.10
B OMe	3.74	s	
A OMe	3.76	s	
CH2	4.06	q	7.10
B 2,6	6.67	d	8.68
α	6.79	s	
A5	6.82	d	8.29
B1	6.94	t	8.68
A6	7.29	dd	8.29, 1.84
A2	7.52	d	1.84

Notes:

hkd 17.2.1.3

Compound Number 3053

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
1H data only						

<sup>1</sup>H (acetone)

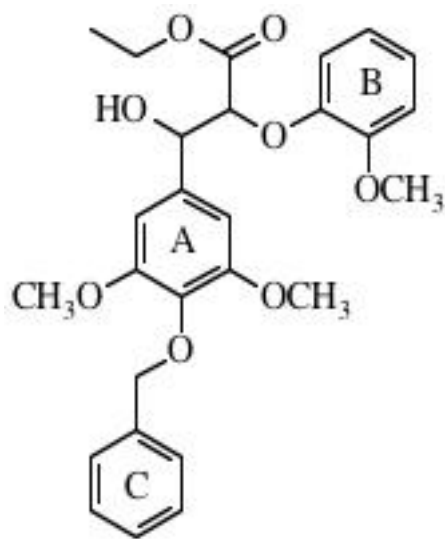
Atom	H Shifts	Mult	J
A OMe	3.76	s	
B OMe	3.77	s	
γ	3.97	br s	
α	5.75	br s	
B 2,6	6.68	d	8.42
A 5	6.79	d	8.29
B 1	7.07	t	8.42
A 6	7.18	dd	8.29, 1.84
A 2	7.46	d	1.84

Notes:

hkd87

Compound Number 3054

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.35			
B OMe			56.36			
A OMe			56.44			
A OMe			56.44			
CH2			61.29			
C α			75.06			
α			75.59			
β			84.38			
A2			105.44			
A6			105.44			
B2			113.87			
B5			117.25			
B6			121.61			
B1			123.44			
C4			128.31			
C3			128.76			
C5			128.76			
C2			128.82			
C6			128.82			
A1			136.70			
A4			137.61			
C1			139.47			
B4			148.70			
B3			151.03			
A3			154.17			
A5			154.17			
γ			169.85			

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
CH3	1.08	t	7.1
B OMe	3.80	s	
A OMe	3.82	s	
CH2	4.04	m	7.1
β	4.72	d	5.52
Cα	4.93	s	
α	5.08	d	5.52
A 2,6	6.83	s	
B 5,6	6.77-6.85	m	
B 1,2	6.90-7.00	m	
C 3,4,5	7.24-7.38	m	
C 2,6	7.50	br d	7.37

**Notes:**

hkd35.2.1.2

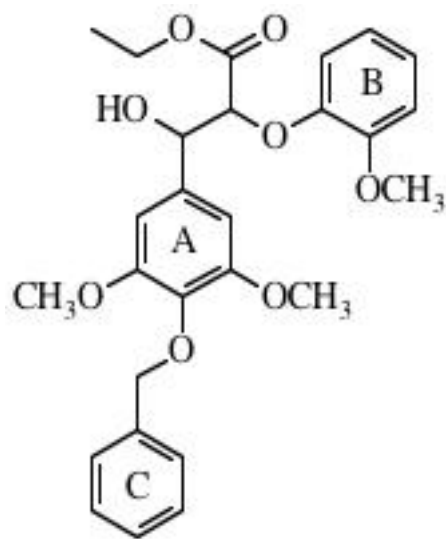
possibly erythro (see 3055)

separated by cyclohexane:EtOAc:Acetic Acid (100:50:1)



Compound Number 3055

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.16			
B OMe			56.28			
A OMe			56.40			
A OMe			56.40			
CH2			61.28			
α			74.84			
C α			75.04			
β			83.40			
A2			105.51			
A6			105.51			
B2			113.77			
B5			116.96			
B6			121.52			
B1			123.43			
C4			128.28			
C3			128.73			
C5			128.73			
C2			128.80			
C6			128.80			
A4			137.51			
A1			137.79			
C1			139.50			
B4			148.35			
B3			151.08			
A3			154.04			
A5			154.04			
γ			170.25			

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
CH3	1.19	t	7.10
B OMe	3.77	s	
A OMe	3.83	s	
CH2	4.16	q	7.10
β	4.70	d	6.71
C α	4.94	s	
α	5.07	d	6.71
B 5,6	6.79	m	
A 2,6	6.90	s	
B 1,2	6.90-6.97	m	
C 3,4,5	7.24-7.37	m	
C 2,6	7.5	br d	7.37

**Notes:**

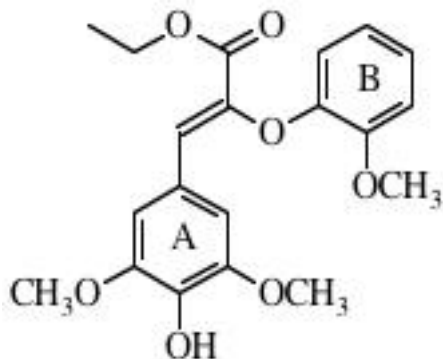
hkd35.2.1.1

Possible threo (see 3054)

separated by cyclohexane:EtOAc:Acetic Acid (100:50:1)

Compound Number 3056

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.19			
B OMe			56.30			
A OMe			56.37			
A OMe			56.37			
CH2			61.58			
A2			109.09			
A6			109.09			
B2			113.72			
B5			114.15			
B6			121.49			
B1			123.24			
A1			124.12			
α			127.99			
β			138.78			
A4			138.94			
B4			146.94			
A3			148.50			
A5			148.50			
B3			149.87			
γ			164.06			

<sup>1</sup>H (acetone)

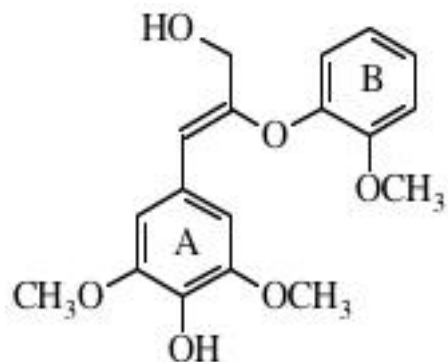
Atom	H Shifts	Mult	J
CH3	1.21	t	7.10
A OMe	3.73	s	
B OMe	3.90	s	
CH2	4.20	q	7.10
B5	6.72	dd	8.02, 1.58
B6	6.79	ddd	8.02, 7.37, 1.58
B1	6.94	ddd	8.02, 7.37, 1.58
B2	7.06	dd	8.02, 1.58
A 2,6	7.16	s	
α	7.33	s	

Notes:

hkd91.1.2

Compound Number 3057

<sup>13</sup>C



<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A OMe	3.67	s	
B OMe	3.90	s	
γ	4.15	br s	
α	6.21	br s	
A 2,6	6.90	s	
B 1,2,5,6	6.75-7.05	m	
A4 OH	8.00	s	

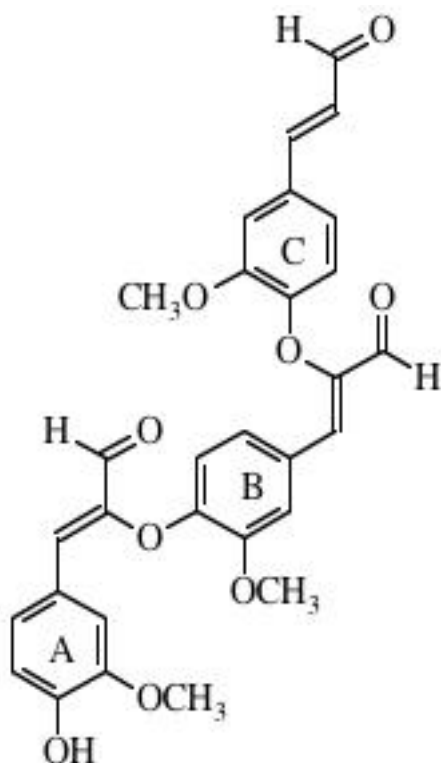
**Notes:**

hkd57.4  
1H Data only

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
1H data only						

Compound Number 3058

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A OMe			55.93			
B OMe			56.14			
C OMe			56.50			
C2			112.55			
A2			113.95			
B2			114.87			
B5			115.18			
C5			115.42			
A5			116.26			
C6			123.59			
A1			125.21			
B6			125.59			
A6			126.78			
B1			128.03			
Cβ			128.38			
C1			130.35			
Bα			137.15			
Aα			138.31			
Aβ			147.52			
A3			148.46			
B4			148.47			
Bβ			148.51			
C4			148.72			
B3			149.91			
C3			150.35			
A4			150.58			
Cα			153.13			
Aγ			187.43			
Bγ			187.65			
Cγ			193.91			

<sup>1</sup>H (acetone)

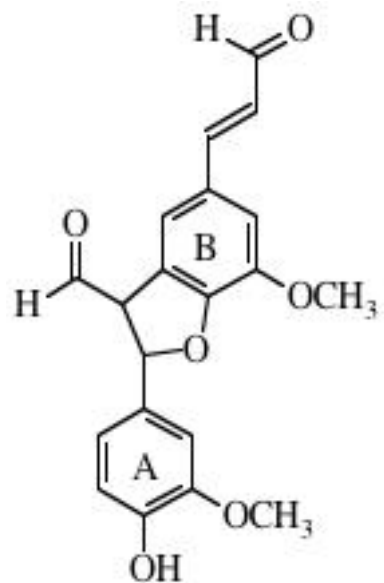
Atom	H Shifts	Mult	J
A OMe	3.69	s	
B OMe	3.83	s	
C OMe	3.98	s	
C β	6.70	dd	15.92, 7.65
B5	6.79	d	8.29
C5	6.82	d	8.29
A5	6.85	d	8.29
C6	7.15	dd	8.29, 1.97
B6	7.28	dd	8.29, 1.97
A6	7.30	dd	8.29, 1.97
A α	7.30	s	
B α	7.33	s	
C2	7.48	d	1.97
A2	7.52	d	1.97
C α	7.58	d	15.92
B2	7.67	d	1.97
A OH	8.37	bs	
Aγ	9.48	s	
Bγ	9.53	s	
Cγ	9.65	d	7.65

**Notes:**

hkc43.4.1

Compound Number 3059

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A OMe			56.31			
B OMe			56.54			
β			62.91			
α			85.24			
A2			110.66			
B2			114.27			
A5			115.93			
B6			119.49			
A6			119.81			
B5			125.79			
Bβ			127.69			
B1			129.66			
A1			132.18			
B3			146.01			
A3			147.91			
A4			148.57			
B4			151.77			
Bα			153.45			
Bγ			193.83			
γ			197.57			

<sup>1</sup>H (acetone)

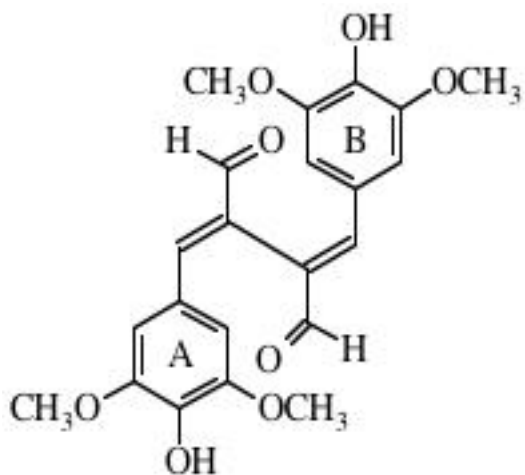
Atom	H Shifts	Mult	J
A OMe	3.82	s	
B OMe	3.92	s	
β	4.50	d	6.5
α	6.20	d	6.5
B β	6.70	dd	15.78, 7.76
A5	6.84	d	8.16
A6	6.90	dd	8.16, 1.84
A2	7.06	d	1.84
B2	7.38	s	
B6	7.43	s	
B α	7.61	d	15.78
A OH	8.29	s	
B γ	9.64	d	7.76
A γ	9.94	s	

**Notes:**

hkf69.2.2  
F1173.12

Compound Number 3060

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.54			
2			109.07			
6			109.07			
1			126.05			
β			134.78			
4			140.10			
3			148.71			
5			148.71			
α			152.98			
γ			192.70			

<sup>1</sup>H (acetone)

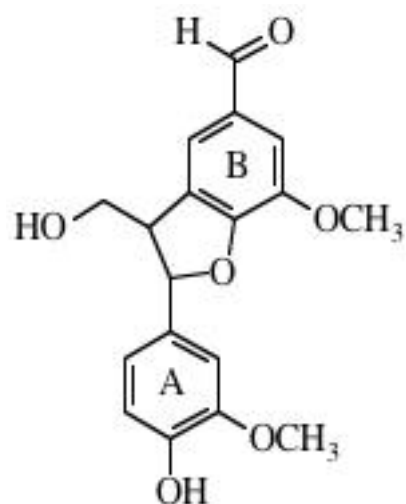
Atom	H Shifts	Mult	J
OMe	3.72	s	
2,6	7.02	s	
α	7.79	s	
OH	7.94	bs	
γ	9.67	s	

**Notes:**

hkf7-1  
This compound has a plane of symmetry and so the signals are reported for only one half.

Compound Number 3061

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			53.84			
A OMe			56.30			
B OMe			56.37			
γ			64.22			
α			89.87			
A2			110.65			
B2			113.44			
A5			115.79			
A6			119.82			
B6			121.43			
B5			131.19			
B1			132.40			
A1			133.42			
B3			145.81			
A4			147.67			
A3			148.49			
B4			154.87			
B α			190.90			

<sup>1</sup>H (acetone)

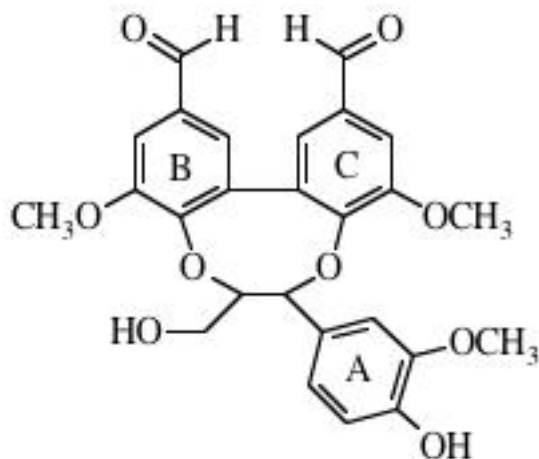
Atom	H Shifts	Mult	J
β	3.67	bq	
A OMe	3.82	s	
B OMe	3.92	s	
γ	3.92	m	
α	5.69	d	6.84
A5	6.81	d	8.16
A6	6.88	dd	8.16, 1.97
A2	7.05	d	1.97
B2	7.42	d	1.45
B6	7.53	dd	1.45, 0.92
A OH	7.65	bs	
B α	9.82	s	

Notes:

hkf75.322

Compound Number 3062

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
C OMe			56.32			
A OMe			56.37			
B OMe			56.62			
γ			62.29			
α			85.11			
β			87.48			
B2			111.71			
C2			111.88			
A2			112.08			
A5			115.64			
A6			121.57			
C6			125.15			
B6			125.32			
A1			130.25			
B5			133.27			
C5			133.72			
B1			134.42			
C1			134.56			
A4			147.73			
A3			148.23			
B4			152.46			
C4			152.81			
B3			154.23			
C3			154.39			
Cα			191.66			
Bα			191.71			

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
γ1	3.48	m	
γ2	3.95	m	
A OMe	3.82	s	
C OMe	3.91	s	
B OMe	4.03	s	
β	4.18	m	
α	5.05	d	10.14
A5	6.84	d	8.16
A6	6.93	dd	8.16, 1.97
A2	7.05	d	1.97
C2	7.56	d	1.84
B2	7.65	d	1.84
C6	7.70	d	1.84
B6	7.74	d	1.84
C α	10.02	s	
B α	10.06	s	

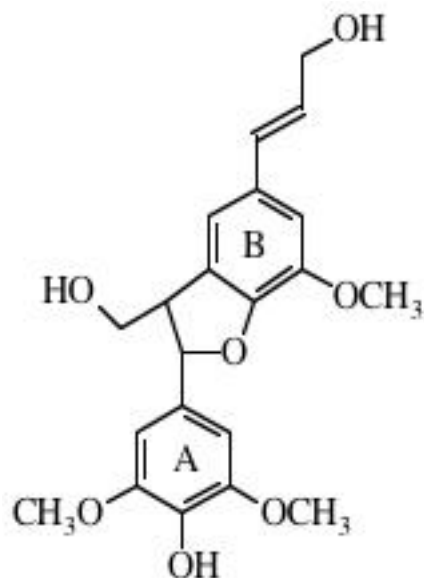
**Notes:**

hkf83.2.1 (6 mg)



Compound Number 3063

<sup>13</sup>C



Simulanol, S-(8-5)-G

4-[3-hydroxy-5-(3-hydroxy-propenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-2,6-dimethoxy-phenol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A OMe	3.79	s	
B OMe	3.86	s	
Aβ	3.54	m	
Bγ	4.19	td	J = 5.52, 1.58
Aα	5.54	d	J = 6.71
Bβ	6.23	dt	J = 15.92, 5.52
Bα	6.52	dt	J = 15.92, 1.58
A 2,6	6.74	s	
B2	6.84	s	
B6	6.97	s	
A4-OH	7.19	s	

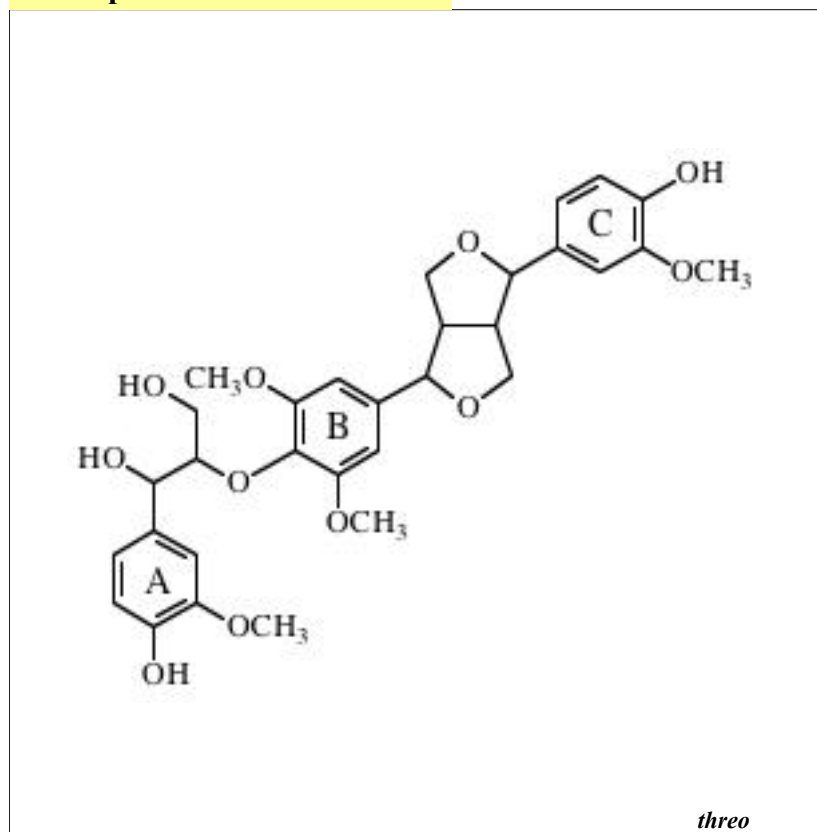
**Notes:**

hkh 99.14 Morreel #6  
 Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W. Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. November 2004, Vol.136, pp.3537-3549

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Aβ			54.78			
B OMe			56.44			
B OMe			56.44			
A OMe			56.67			
Bγ			63.39			
Aγ			64.52			
Aα			88.74			
A2			104.55			
A6			104.55			
B2			111.80			
B6			116.07			
Bβ			128.38			
B5			130.47			
Bα			130.52			
B1			131.95			
A1			133.30			
A4			136.68			
B3			145.16			
A3			148.74			
A5			148.74			
B4			148.95			

Compound Number 3064

<sup>13</sup>C



buddlenol E, G-(8-O-4)-S-(8-8)-G

1-(4-hydroxy-3-methoxy-phenyl)-2-{4-[4-(4-hydroxy-3-methoxy-phenyl)-tetrahydro-furo[3,4c]furan-1-yl]-2,6-dimethoxy-phenoxy}-

<sup>1</sup>H (acetone)

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Cβ			55.15			
Bβ			55.46			
OMe			56.24			
B OMe			56.59			
B OMe			56.59			
OMe			56.70			
Aγ			60.98			
Cγ			72.30			
Bγ			72.54			
Aα			73.38			
Bα			86.57			
Cα			86.60			
Aβ			87.86			
B2			104.12			
B6			104.12			
C2			110.62			
A2			110.92			
A5			115.20			
C5			115.54			
C6			119.60			
A6			120.04			
C1			133.77			
B1			133.80			
A1			134.10			
C4			135.72			
B4			139.10			
A3			146.47			
C3			146.90			
A4			147.98			
B3			154.20			
B5			154.20			

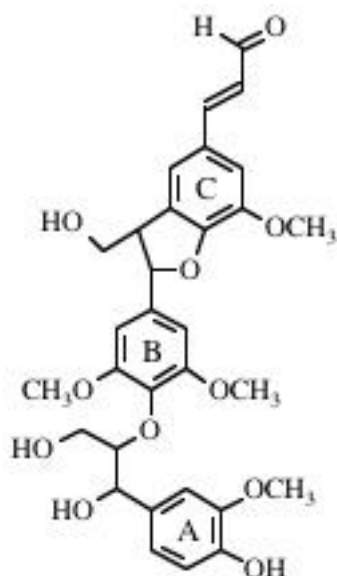
Atom	H Shifts	Mult	J
Cβ + Bβ	3.10	m	
Aγ1	3.43	m	
Aγ2	3.84	m	
Cγ2 + Bγ2	3.86	m	
Aβ	4.15	m	
Cγ1 + Bγ1	4.24	m	
Cα	4.68	d	J = 4.34
Bα	4.73	d	J = 4.34
Aα	4.97	m	
B 2,6	6.76	s	
C2	6.98	d	J = 1.84
A2	7.03	d	J = 1.84
A4-OH	7.37	s	
C4-OH	7.49	s	

**Notes:**

hkh 99.6 Morreel #22  
 Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W. Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. November 2004, Vol.136, pp.3537-3549

Compound Number 3065

<sup>13</sup>C



*threo*

**buddlenol A, G-(t8-O-4)-S-(8-5)-G'**

**3-(2-{4-[2-hydroxy-3-methoxy-phenyl]1-hydroxymethyl-ethoxy}-3,5-dimethoxy-phenyl)-3-hydroxymethyl-7-methoxy-2,3-**

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
OMe	3.82	s	
B OMe	3.84	s	
OMe	3.94	s	
A $\alpha$	4.97	t	J = 4.47
B $\alpha$	5.70	d	J = 6.45
C $\beta$	6.66	dd	J = 15.78, 7.63
A5	6.76	d	J = 8.02
A6	6.83	dd	J = 8.02, 1.84
B 2,6	6.83	s	
A2	7.03	d	J = 1.84
C $\alpha$	7.59	d	J = 15.78
C $\gamma$	9.64	d	J = 7.63

**Notes:**

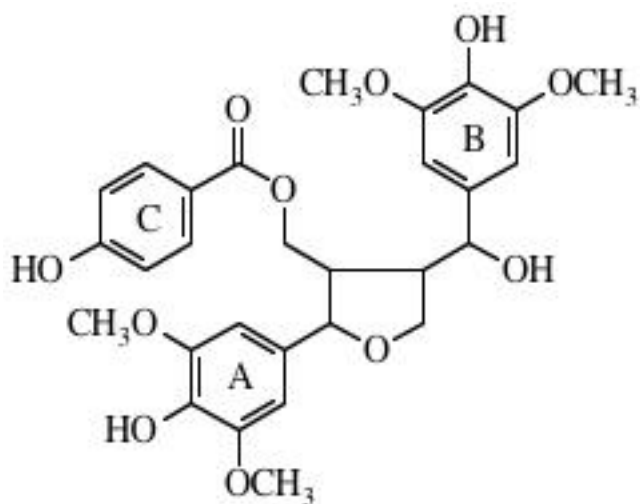
hkh 19.1t Morreel #23

Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W. Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. November 2004, Vol.136, pp.3537-3549

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
PROTON data only						

Compound Number 3066

<sup>13</sup>C



SP-(8,8)-S

tetrahydro- $\alpha$ 4,2-bis-(4-hydroxy-3,5-dimethoxyphenyl)  $\alpha$ -3O-(4-hydroxybenzoyl)-3,4-furandimethanol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
A $\beta$	2.55	m	
OMe	3.74	s	
OMe	3.78	s	
B $\beta$	3.99	m	
B $\gamma$	4.14	m	
A $\gamma$ 1	4.41	m	
A $\gamma$ 2	4.68	m	
A $\alpha$	4.90	d	J = 6.3
B $\alpha$	4.96	d	J = 5.0
A2,6	6.66	s	
B2,6	6.72	s	
C3,5	6.87	m	
C2,6	7.77	m	

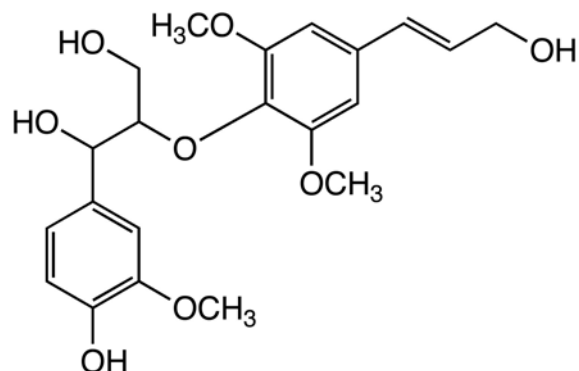
**Notes:**

Fln 117 Morreel #19  
 Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. November 2004, Vol.136, pp.3537-3549

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B $\beta$			48.37			
A $\beta$			49.80			
OMe			56.50			
OMe			56.50			
OMe			56.50			
OMe			56.50			
A $\gamma$			63.99			
B $\gamma$			69.95			
B $\alpha$			72.59			
A $\alpha$			85.34			
A2			104.45			
A6			104.45			
B2			104.53			
B6			104.53			
C3			115.98			
C5			115.98			
C1			122.40			
C2			132.45			
C6			132.45			
A1			134.49			
B1			134.91			
A4			136.01			
B4			136.01			
A3			148.54			
A5			148.54			
B3			148.54			
B5			148.54			
C4			162.56			
C $\alpha$			166.43			

Compound Number 3067

<sup>13</sup>C



*threo*

G-(8-O-4)-S

*threo*-1-(4-hydroxy-3-methoxy-phenyl)-2-[2,6 dimethoxy-phenoxy-4-(3-

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Aγ	3.39	m	-
A3 OMe	3.83	s	
B3 OMe	3.87	s	
Bγ	4.21	m	-
Aα-OH	4.33	d	J = 3.8
Aα	4.96	dd	J = 6.8, 8.4
Bβ	6.37	dt	J = 15.8, 5.1
Bα	6.54	d	J = 15.8
A5	6.76	d	J = 8.2
B2/6	6.79	s	
A6	6.82	dd	J = 8.2, 1.3
A2	7.03	d	J = 1.3
A4-OH	7.33	br s	

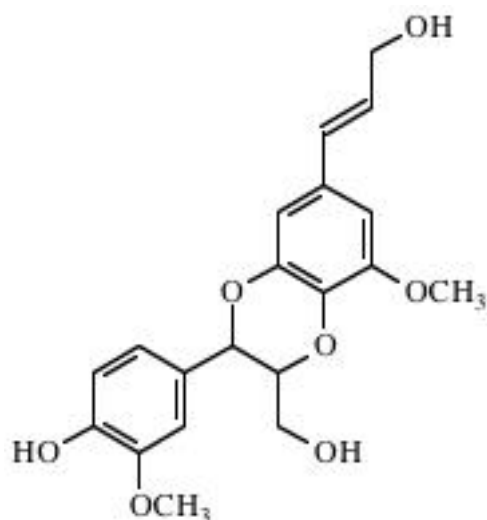
**Notes:**

HKh83.5, FL1112 Compound #8, Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W. Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. November 2004, Vol.136, pp.3537-3549 See compound #118 for peracetate

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
PROTON data only						

Compound Number 3068

<sup>13</sup>C



*trans*

G-(8-O-4)-5H [nocomtol]

4-[3-hydroxymethyl-7-(E)-(3-hydroxypropenyl)-5-methoxy-2,3-dihydro-benzo[1,4]dioxin-2-yl]-2-methoxyphenol

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Aγ1	3.50	m	-
Aγ2	3.76	m	-
B3 OMe	3.85	s	
A3 OMe	3.85	s	
Aβ	4.05	m	-
Bγ	4.20	dd	J = 5.4, 1.6
Aα	4.96	d	J = 7.9
Bα	6.26	dt	J = 15.9, 5.4
Bβ	6.47	dt	J = 15.9, 1.6
B6	6.68	d	J = 1.8
A5	6.87	d	J = 8.1
A6	6.95	dd	J = 8.1, 1.8
A2	7.10	d	J = 1.8

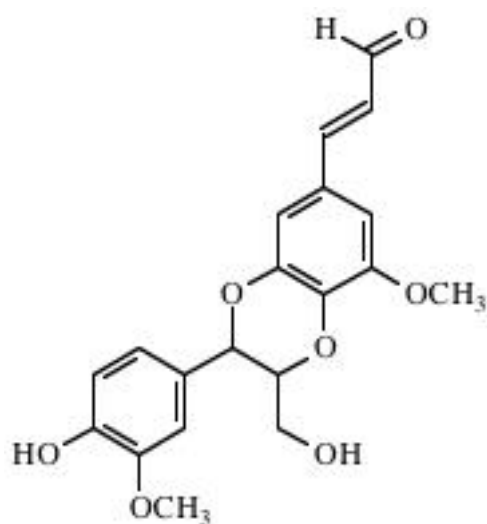
**Notes:**

FLm08 Cmpd 1a: Phenolic profiling of caffeic acid O-methyltransferase-deficient poplar reveals novel benzodioxane oligolignols. K. Morreel, J. Ralph, F. Lu, G. Goeminne, R. Busson, P. Herdewijn, J.L. Goeman, J. Van der Eycken, W. Boerjan and E. Messens. *Plant Physiology*, 136(4), 4023-4036 (2004).

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3-OMe			56.2			
A3-OMe			56.2			
Aγ			61.9			
Bγ			63.6			
Aα			76.7			
Aβ			79.3			
B2			103.2			
B6			108.5			
A2			111.7			
A5			115.7			
A6			121.4			
Bβ			129.0			
A1			129.1			
Bα			130.1			
B1			130.3			
B4			133.7			
B5			145.2			
A4			147.8			
A3			148.3			
B3			149.8			

Compound Number 3069

<sup>13</sup>C



*trans*

G-(8-O-4)-5H' [nocomtal]

(2E)-3-[3-(4-hydroxy-3-methoxy-phenyl)-2-(hydroxymethyl)-8-methoxy-2,3-dihydro-1,4-benzodioxin-6-yl]acrylaldehyde

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Aγ1	3.53	m	-
Aγ2	3.82	m	-
A3 OMe	3.86	s	
B3 OMe	3.91	s	
Aβ	4.14	ddd	J = 8.0, 3.8, 2.6
Aα	5.01	d	J = 8.0
Bβ	6.67	dd	J = 15.8, 7.6
A5	6.88	d	J = 8.0
B6	6.92	dd	J = 2.0, 0.4
A6	6.97	ddd	J = 8.0, 2.0, 0.4
B2	7.02	d	J = 2.0
A2	7.12	d	J = 2.0
Bα	7.53	d	J = 15.8
A4-OH	7.59	bs	-
Bγ	9.64	d	7.6

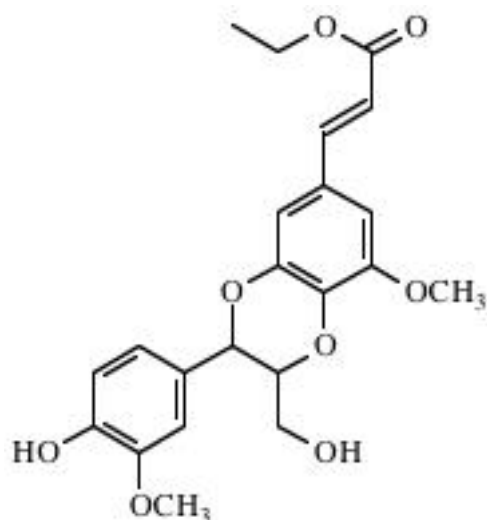
**Notes:**

FLn55 Cmpd 3: Phenolic profiling of caffeic acid O-methyltransferase-deficient poplar reveals novel benzodioxane oligolignols. K. Morreel, J. Ralph, F. Lu, G. Goeminne, R. Busson, P. Herdewijn, J.L. Goeman, J. Van der Eycken, W. Boerjan and E. Messens. *Plant Physiology*, 136(4), 4023-4036 (2004).

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3-OMe			56.4			
B3-OMe			56.5			
Aγ			61.6			
Aα			77.0			
Aβ			79.8			
B2			105.5			
B6			111.9			
A2			112.0			
A5			115.8			
A6			121.6			
B1			127.5			
Bβ			128.0			
A1			128.9			
Bα			137.4			
B5			145.6			
A3			148.1			
A4			148.5			
B3			150.4			
B4			153.7			
Bγ			193.8			

Compound Number 3070

<sup>13</sup>C



*trans*

G-(8-O-4)-5H''

3-[3-(4-hydroxy-4-methoxyphenyl)-2-hydroxymethyl-8-methoxy-2,3-dihydrobenzo[1,4] dioxin-6-yl]-acrylic acid ethyl ester

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Me	1.25	t	J = 7.1
Aγ1	3.50	m	-
Aγ2	3.83	m	-
B3 OMe	3.85	s	
A3 OMe	3.92	s	
Aβ	4.09	m	-
CH2	4.17	q	J = 7.1
Aα	4.98	d	J = 8.0
Bβ	6.40	d	J = 15.9
B6	6.85	d	J = 1.5
A5	6.88	d	J = 8.1
B2	6.95	d	J = 1.5
A6	6.96	dd	J = 8.1, 1.8
A2	7.10	d	J = 1.8
Bα	7.54	d	J = 15.9

**Notes:**

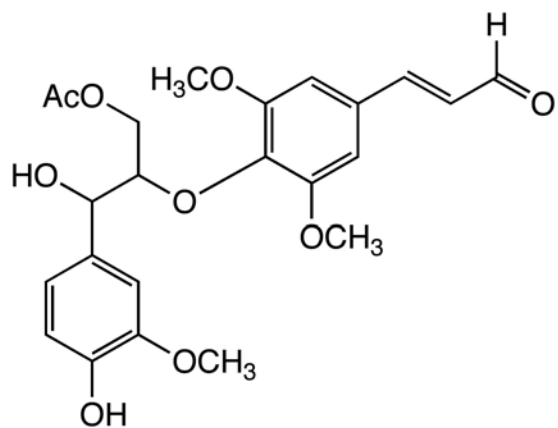
FL1111 Cmpd c: Phenolic profiling of caffeic acid O-methyltransferase-deficient poplar reveals novel benzodioxane oligolignols. K. Morreel, J. Ralph, F. Lu, G. Goeminne, R. Busson, P. Herdewijn, J.L. Goeman, J. Van der Eycken, W. Boerjan and E. Messens. *Plant Physiology*, 136(4), 4023-4036 (2004).

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Me			14.6			
B3-OMe			56.2			
A3-OMe			56.3			
Aγ			61.6			
CH2			61.6			
Aα			76.9			
Aβ			79.5			
B2			104.7			
B6			111.1			
A2			111.7			
A5			115.7			
Bβ			117.0			
A6			121.4			
B1			127.4			
A1			128.8			
B4			136.4			
Bα			145.2			
B5			145.3			
A4			147.8			
B3			148.3			
A3			150.1			
Bγ			167.2			



Compound Number 3071

<sup>13</sup>C



Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me			20.66			
A3 OMe			56.62			
B3 OMe			56.73			
γ			63.59			
α			73.31			
β			84.56			
A2/6			104.65			
B2/6			106.94			
Bβ			129.11			
B1			131.09			
A1			131.65			
A4			136.04			
B4			139.26			
A3/5			148.51			
Bα			153.45			
B3/5			154.57			
γ Ac C=O			167.76			
Bγ			193.90			

<sup>1</sup>H (acetone)

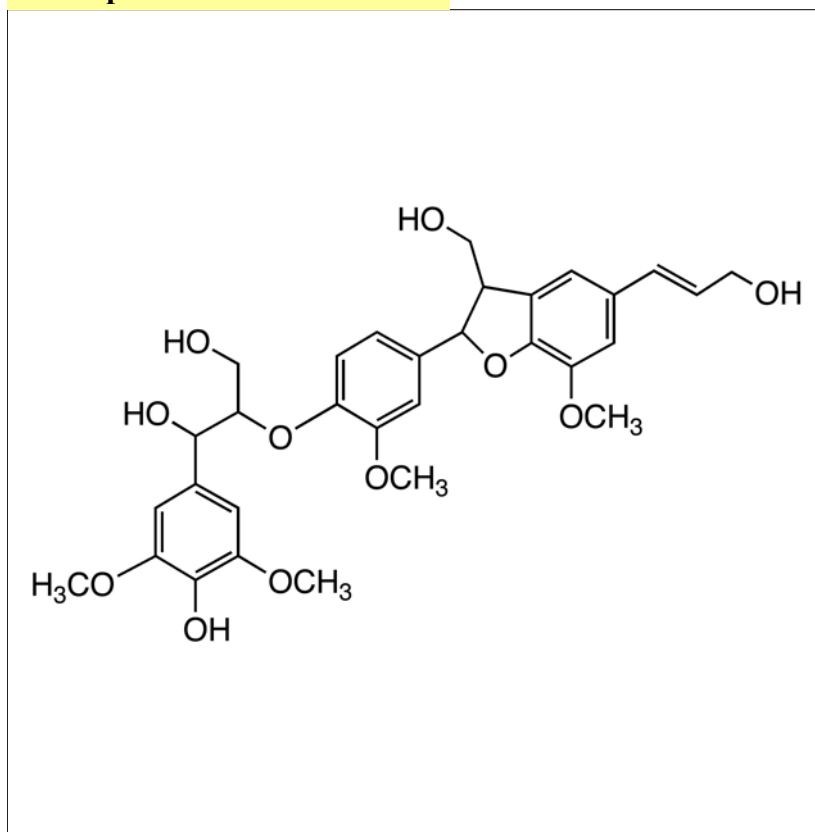
Atom	H Shifts	Mult	J
γ Ac Me	1.84	s	-
A3/5 OMe	3.80	s	-
B3/5 OMe	3.94	s	-
γ1	4.12	dd	J = 11.9, 3.2
γ2	4.39	dd	J - 11.9, 7.4
β	4.62	m	-
α	4.94	dd	J = 6.7, 4.0
A2/6	6.70	s	-
Bβ	6.77	dd	J = 15.8, 7.6
B2/6	7.12	s	-
Bα	7.61	d	J = 15.8
Bγ	9.67	d	J = 7.6

**Notes:**

HKj51T6.7 Cmpd #9, Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W. Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. November 2004, Vol.136, pp.3537-3549 Note the single γ-acetate!

Compound Number 3072

<sup>13</sup>C



S-(8-O-4)-G-(8-5)-G

Atom	CDCl <sub>3</sub>		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bβ			54.8			
OMe			56.35			
OMe			56.39			
OMe			56.58			
Aγ			61.86			
Cγ			63.26			
Bγ			64.58			
Aα			73.84			
Aβe			86.32			
Aβt			88.03			
Bα			88.24			
A2/6			105.36			
C2/6			111.14			
B2/5/6			119.33			
Cβ			128.42			
Cα			130.48			

<sup>1</sup>H (acetone)

Atom	H Shifts	Mult	J
Bβ	3.51	m	
Aγ1	3.51	m	
Aγ2	3.71	m	
Bγ	3.85	m	
OMε	3.77	s	
OMε	3.86	s	
OMε	3.94	s	
Cγ	4.19	dd	J = 5.5, 1.3
Aβt	4.24	m	
Aβe	4.32	m	
Aα	4.86	d	J = 5.9
Bα	5.59	d	J = 6.5
Cβ	6.23	dt	J = 15.9, 5.5
Cα	6.51	d	J = 15.9
A 2,6	6.76	s	

**Notes:**

HKf145, mixture of isomers Morreel #39 Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W. Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. November 2004, Vol.136, pp.3537-3549