

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA

CONVENCIÓN SOBRE EL COMERCIO INTERNACIONAL DE ESPECIES  
AMENAZADAS DE FAUNA Y FLORA SILVESTRES

CONVENTION SUR LE COMMERCE INTERNATIONAL DES ESPECES  
DE FAUNE ET DE FLORE SAUVAGES MENACEES D'EXTINCTION



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IFRA POSITION ON CITES RULES FOR GUAIAACWOOD AND ROSEWOOD

The attached information document has been submitted by the International Fragrance Association<sup>1</sup>.

El documento informativo adjunto ha sido presentado por *International Fragrance Association*<sup>2</sup>.

Le document d'information joint est soumis par *International Fragrance Association*<sup>3</sup>.

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## IFRA Position on CITES rules for Guaiacwood and Rosewood

### Information provided for the 19<sup>th</sup> meeting of the Plants Committee by the International Fragrance Association (IFRA).

This information is pertinent to item 1.d) in Notification to the parties 2010\027 concerning *Bulnesia sarmientoi* and *Aniba rosaeodora* and Decisions 15.90 (*A. rosaeodora*) and 15.96 (*B. sarmientoi*) and decision 14.148 (Rev.CoP15).

These topics are on the agenda of PC19 under items 11.5 (annotations), 16.4 & 16.5

#### 1. Introduction

Rosewood oil (*Aniba rosaeodora*), Guaiacwood oil (*Bulnesia sarmientoi*) and their derivatives are materials of importance for the fragrance industry, which on a global level is represented by IFRA, the International Fragrance Association ([www.ifraorg.org](http://www.ifraorg.org)).

IFRA fully supports the goals of CITES to protect endangered species from exploitation, that is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

So far the activities of CITES had only limited impact on the fragrance creating industry but the listing of *Bulnesia sarmientoi* (Guaiacwood) and *Aniba rosaeodora* (Rosewood) in Appendix II (following a decision taken at the 15<sup>th</sup> Conference of the Parties meeting of CITES) has triggered a number of questions within the fragrance trade and among those implementing the new decision, regarding the scope of the CITES measures and the resulting certificate requirements.

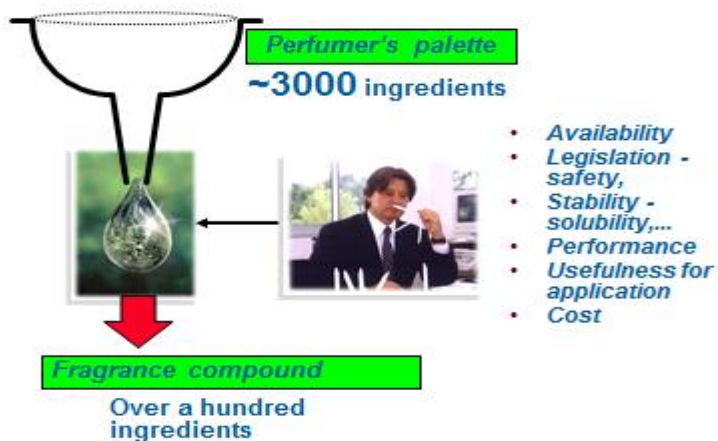
Main elements of concern are:

- Differences in the annotations (Appendices I,II, & III, annotation #11 & #12), once mentioning “essential oils” and once “extracts”
- Differences in the annotations regarding the exemption of finished products for the two materials listed above
- Status of fragrance compounds with regard to certification requirements
- Status of chemically derived materials from the essential oils, like Guaiol acetate, obtained from acetylation of Guaiol, the Guaiol being obtained via distillation from *B. sarmientoi* EO

#### 2. Background information on use of *A.rosaeodora* and *B.sarmientoi* in Perfumery

The palette of raw materials used by a perfumer contains around 3000 natural and synthetic materials. The creation of a perfume mixture (compound) can be regarded a piece of art and only after a training period of several years a perfumer will have sufficient raw material knowledge to become successful in perfume creation.

## Creation process for a fragrance compound



Guaiacwood oil and Rosewood oil are widely used as fragrance ingredients in fragrance compounds. In 2009, it amounts worldwide to around 25 000 fragrance and flavor compounds, which represents about 10% of all sold compounds. A typical formula is manufactured several times per year (up to 6 or 7 batches / year). In case import/export certificates would be required for fragrance compounds, this would lead to tens of thousands of certificates.

We regard 'extracts' as an umbrella term, including derivatives such as essential oils, oleoresins or any other type of distillation/extraction made directly from the source material. All of those should fall under the scope of the requirement of a CITES import/export certificate. This interpretation is in full compliance with the one of the European Federation of Essential oils (E.F.E.O).

Our understanding of extracts and essential oils follows that of the international ISO (**ISO 9235: 1997 (E/F)**) definitions:

### 3.1 Essential Oil

Product obtained by vegetable raw material

- either by distillation with water or steam, or
- from the epicarp of *Citrus* fruits by a mechanical process, or
- by dry distillation

In the case of both *Bulnesia sarmientoi* and *Aniba rosaeodora*, essential oil is obtained by steam distillation.

### 4.2 Extract

Product obtained by treating a natural raw material with a solvent then, after filtration, removal of the solvent by distillation, except in the case of use of non-volatile solvent.

The ISO norm ISO 9235: 1997 (E/F) is available:

On-line: [http://www.iso.org/iso/catalogue\\_detail.htm?csnumber=16866](http://www.iso.org/iso/catalogue_detail.htm?csnumber=16866)

or via the following address:

**International Organization for Standardization**

Case postale 56

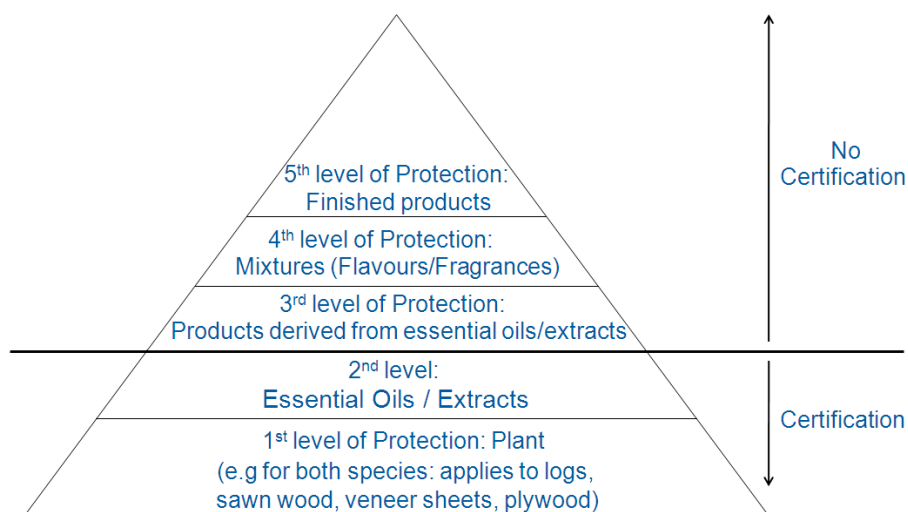
CH-1211 Genève 20

Switzerland

When it comes to the scope of the annotations, according to our understanding, everything (e.g: product, part of plant or extracts) that falls under the scope of the convention is outlined in the annotation. Regarding the exemptions, the principle is that anything that is not mentioned, is exempted. Therefore it seems that fragrance compounds like finished products should not be covered, because this would not add an additional level of protection of the plant but only be an additional administrative burden.

IFRA also feels that chemically derived materials should not require certifications, as they are produced from starting materials (essential oils or other extracts), which are already under the scope of the appendix II, hence requires import/export certificates. We see no need to have the resulting, physically and/or chemically derived materials, which are new fragrance/flavor ingredients and described by different names and CAS (Chemical Abstract Service) numbers, to fall under CITES requirements i.e. under the certification procedure.

We have tried to visualize this in the following pictogram, which describes the various steps of the supply chain falling or not in the appendix II of CITES, i.e. with and without certification.



Because reliable material identification is key in this approach, we have summarized the product identifiers for *Aniba rosaeodora* and *Bulnesia sarmientoi* oil and its derivatives below:

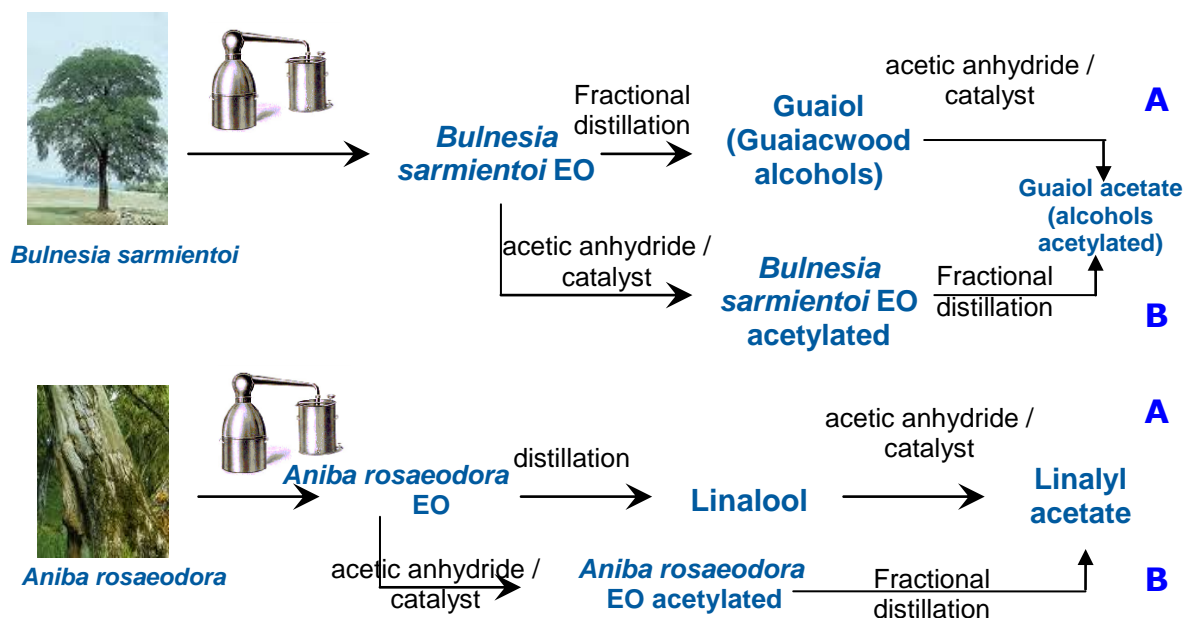
### **3. Information and nomenclature for products made from *A. rosaeodora* & *B. sarmientoi* essential oils**

The Chemical Abstracts Service is a division of the American Chemical Society. The [CAS Registry](http://www.cas.org) is the most authoritative collection of disclosed chemical substance information, containing more than 54 million organic and inorganic substances and 61 million sequences. It covers substances identified from the scientific literature from 1957 to the present, with additional substances going back to the early 1900s. Additionally, CAS Registry attributes Registry Numbers to natural complex substances (Essential Oils, extracts).

A CAS Registry Number itself has no inherent chemical significance but provides an important way to link a fragrance material and a numerical identifier to identify a chemical substance or molecular structure when there are many possible systematic, generic, proprietary, or trivial names (for more information about the CAS Registry, please see <http://www.cas.org/expertise/cascontent/registry/regsys.html>).

The following scheme shows which type of derivation could happen to the essential oil of *Bulnesia sarmientoi* and *Aniba rosaedora* in the fragrance industry.

## Chemical derivatives (examples)



### *Bulnesia sarmientoi*

*Bulnesia sarmientoi* EO (US CAS 8016-23-7, EU CAS 89958-10-1) is the starting point of the following derivatives:

- A. Fractional distillation of guaiacwood oil leads to guaiacwood alcohols which are a blend of isomers (guaiol and bulnesol) generally called commercially Guaiol. Commercially, Guaiacwood alcohols (also called Guaiol) can be found under different CAS numbers, the one of *Bulnesia sarmientoi* EO (CAS 89958-10-1) or under the one of the molecule “Guaiol” (CAS 489-86-1), the first one being more correct according to the CAS definition.

Guaiacwood alcohols (also called Guaiol) by acetylation leads to Guaiacwood alcohols acetylated also called Guaiol acetate (blend of isomers Guaiol acetate and bulnesol acetate) with CAS 94333-88-7 or 134-28-1, the first one being more correct according to the CAS definition.

- B. *Bulnesia sarmientoi* EO by chemical transformation (acetylation) can be transformed into *Bulnesia sarmientoi* oil acetylated (CAS 94333-88-7) which by fractional distillation leads to Guaiacwood alcohols acetylated also called commercially Guaiol acetate with CAS 94333-88-7 or 134-28-1, the first one being more correct according to the CAS definition.

### In Summary

Type of extract and derivatives	Name	CAS Registry Number (RN)	Process description
Essential oil (EO)	<i>Bulnesia sarmientoi</i> wood oil	8016-23-7 89958-10-1	Steam Distillation from <i>Bulnesia sarmientoi</i>
Alcohols from <i>Bulnesia sarmientoi</i>	Guaiol (fraction containing Guaiol and Bulnesol)	89958-10-1 489-86-1 (*)	Fractional Distillation of <i>Bulnesia sarmientoi</i> EO

Esters	<i>Bulnesia sarmientoi</i> extract acetate	94333-88-7	EO acetylated
	Guaiol acetate (Guaiacwood alcohols acetylated)	94333-88-7 134-28-1(**)	fractional Distillation of EO + Acetylation or Acetylation of the EO + fractional distillation

(\*) CAS usually used but the more correct is RN: 89958-10-1

(\*\*)CAS usually used but the more correct is RN: 94333-88-7

### ***Aniba rosaeodora***

*Aniba rosaeodora* EO (US CAS 8015-77-8, EU CAS 83863-32-5) is the starting point of the following derivatives:

- A. By fractional distillation leads to Linalool (CAS 78-70-6).  
By acetylation this Linalool can be transformed into Linalyl acetate (CAS 115-95-7).
- B. *Aniba rosaeodora* EO (CAS 8015-77-8 and CAS 83863-32-5) by acetylation leads to *Aniba rosaeodora* acetylated (Rosewood acetylated CAS 90622-72-3).  
*Aniba rosaeodora* acetylated (rosewood acetylated) by fractional distillation leads also to Linalyl acetate (CAS 115-95-7).

Type of extract and derivatives	Name	CAS Registry Number (NR)	Process description
Essential oil (EO)	Rosewood EO	8015-77-8 83863-32-5	Steam Distillation from <i>Aniba rosaeodora</i>
Linalool	Linalool ex <i>Aniba rosaeodora</i>	78-70-6(*)	Fractional Distillation of <i>Aniba rosaeodora</i> EO
Esters	Rosewood oil acetylated	90622-72-3	EO acetylated
	Linalyl acetate	115-95-7 (**)	fractional Distillation of EO + Acetylation or Acetylation of the EO + fractional distillation

(\*) Note that this RN is not specific to Linalool coming from Rosewood, but refers to any type of Linalool (natural or synthetic)

(\*\*) Note that this RN is not specific to Linalyl acetate coming from Rosewood, but refers to any type of Linalyl acetate (natural or synthetic).

### **4. Communications with CITES Secretariat**

IFRA shared this information concerning the use and processing of *A. rosaeodora* and *B. sarmientoi* essential oils with the CITES Secretariat and was happy to see it reflected in a Notification to the Parties (Notification 2010/036) published November 19, 2010 <http://www.cites.org/eng/notif/2010/E036.pdf>.

In summary with regards to products of relevance in the essential oil trade and the Fragrance industry, the CITES interpretation of the annotations for *Aniba rosaeodora* and *Bulnesia sarmientoi* is:

*Aniba rosaeodora* (Brazilian rosewood)

The Secretariat interprets the annotation to mean that products that consist of unaltered “logs, sawn wood, veneer sheets, plywood and essential oil” (e.g. construction materials and bottles of pure essential oil) are covered by the Convention. The Secretariat further interprets the annotation to mean that any unspecified part or derivative (i.e. other than “logs, sawn wood, veneer sheets, plywood and essential oil”) is not covered by the Convention. Accordingly, products that result from the alteration of logs, sawn wood, veneer sheets, plywood and essential oil (e.g. acetates or fragrance compounds that are mixtures of odoriferous or aromatic substances or contain traces of the extracts, perfumes, cosmetic products and furniture), whether or not packaged and ready for retail trade, are excluded from CITES controls.

*Bulnesia sarmientoi* (palo santo)

The Secretariat interprets the annotation to mean that any unspecified part or derivative (i.e. other than “logs, sawn wood, veneer sheets, plywood, powder and extracts”) is not covered by the Convention. Accordingly, products that result from the alteration of logs, sawn wood, veneer sheets, plywood, powder and extracts (e.g. acetates or fragrance compounds that are mixtures of odoriferous or aromatic substances or contain traces of the extracts, pills, perfumes, cosmetic products and furniture), whether or not packaged and ready for retail trade, are excluded from CITES controls.

## **5. Conclusion**

IFRA welcomes the opportunity to present this information to the Plants Committee and hopes that it will agree with the interpretation and recommendation of the CITES Secretariat for certificate requirements and propose common measures that help implementation and control bodies to be able to adequately identify materials that require certification and those that do not, thus fulfilling part of the requirements set out in decision 14.148 (Rev.CoP15).