

GROWING & MARKETING SPECIALTY SOYBEANS

What you need to know to
increase profits





1. Who are we?

2. Why grow non-gmo/specialty IP soybeans?

3. What does it take?

Diversified with Nebraska ties

Zeeland Farm Services, Inc.

A family-owned and operated business
with 65 years of service to the
agricultural and transportation industries.

20 years experience contracting & marketing
non-gmo and IP soybeans, meal and oil
domestically and internationally.



ZEELAND, MI. HEADQUARTERS

- Zeeland, Michigan
- Soy processing plant – built 1996
- Produces GMO and non-GMO soybean meal, oil and hulls
- Non-GMO products are FoodChain/Cert ID Certified and Non-GMO Project Verified to 99.1% EU standard



CAMBRIDGE, NEBRASKA

- Nebraska Corn Processing
- 45 MGY ethanol producer
- Co-products include wet distillers grains, corn oil and CO₂



Nebraska Corn Processing, LLC®



CAMBRIDGE, NEBRASKA & BORCULO, MI

- Anew Travel Centers
- Travel center and convenience store
- Selling ethanol and diesel blends



CLEARFIELD, PENNSYLVANIA

- Pennsylvania Grain Processing
- 115 MGY ethanol producer
- Co-products include dry distillers grains, corn oil and CO₂.



Pennsylvania Grain Processing, LLC®



CRESTON, IOWA

- Soy processing facility –
GMO and non-GMO
- Produces soy flour, soy
flakes, soy grits, soybean
meal and soybean oil
- Will be FoodChain ID/
Cert-ID Certified & Non-
GMO Project Verified



ITHACA, MICHIGAN

- ZFS Ithaca, LLC
- Michigan's second soy processing facility
- 40 million bushel per year capacity



WHY GROW NON-GMO OR OTHER SPECIALTY IP SOYBEANS

A few reasons:

- Weed control - rotation
- Want to grow non-gmo/IP to meet consumer demand
- “Extra profit potential”



WEED CONTROL

- Rotation between GMO and Non-GMO can slow progress of RoundUp resistant weeds.



WEED CONTROL

Generally the more you can change up your modes of action the more you keep the weeds “guessing.” Non-GMO spray programs can still develop resistance to over-used chemistries, so it is important to also look at your active ingredients in those spray programs as well.

Looking at the whole production of soybeans, GMO or non-GMO, a good pre is important and if you are already doing a pre, why not think about doing non-GMO for a premium?



WANT TO GROW BECAUSE...

- Growing customer demand
- Personal preference
- Transitioning to organic
 - Three years to sell as non-GMO – helps with transition costs



EXTRA PROFIT POTENTIAL

- Lower seed costs
- Premiums per bushel

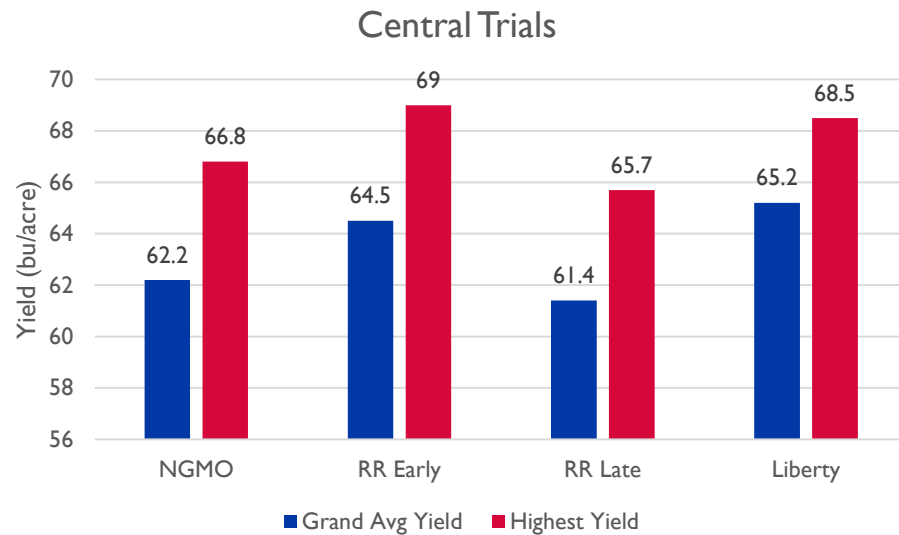


Concerns

- Yield drag
- Weeds
- More work/management
 - More record keeping
 - IP (Identity Preserved)
Procedures



Yield Drag Concerns



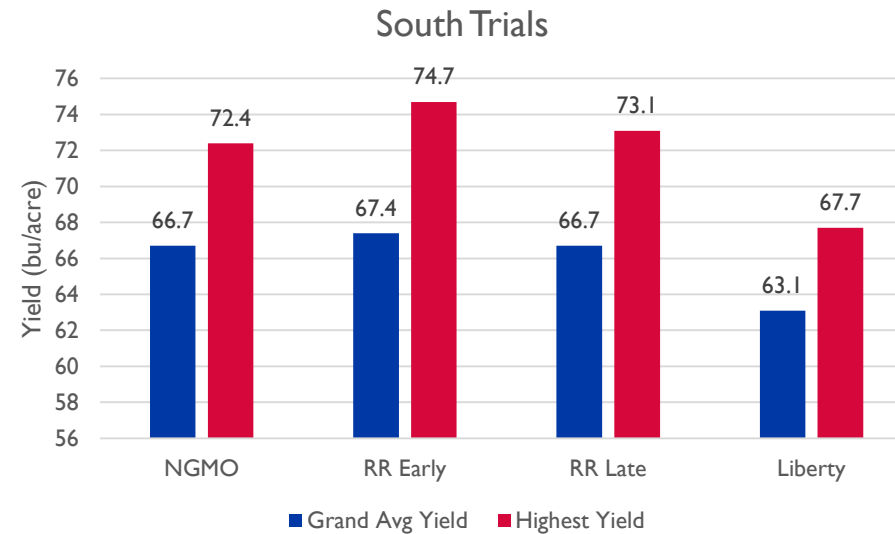
Avg Yields				
Location	NGMO	RR Early	RR Late	Liberty
Allegan	57.2	68.9	59.6	61.1
Clinton	66.7	63.7	67	71.5
Saginaw	60.9	58.4	57.6	65.5
Sanilac	62.3	66.9	62.9	62.6
Grand Avg Yield	62.2	64.5	61.4	65.2
Highest Yield	66.8	69	65.7	68.5
Protein	36	35.4	35.7	35.7
Oil	17.5	18.2	17.8	17.8

2017 Michigan Data



Yield Drag Concerns

Avg Yields				
Location	NGMO	RR Early	RR Late	Liberty
Hillsdale	56.4	60.6	61.5	61.7
Clinton	68	68.5	62.2	61.9
Lenawee	66.3	64.2	64.4	67.3
St. Joseph	76	76.2	78.9	0
Grand Avg Yield	66.7	67.4	66.7	63.1
Highest Yield	72.4	74.7	73.1	67.7
Protein	35.9	35.7	36.5	35.8
Oil	17.6	17.9	17.3	18



2017 Michigan Data



Weed Concerns

It will take more management to control weeds growing non-gmo vs. GMO soybeans.

- Some growers are not cut out to grow non-GMO. Growing non-gmo soybeans will separate the good managers from the not-so-good managers.
- We have rejected some non-gmo soybeans because of too many weed seeds/FM.



More Work/Management IP Procedures

Purchases

_____ Purchased Non-GMO tested seed, variety _____

_____ ***I will retain seed tags and receipts to verify the above purchases.***

_____ Maintain records identifying the uses during the growing season of all neighboring fields including genetic status of the crop within the relevant isolation distance.

_____ Field records shall include type and variety of crop grown, lot number of seed used, and the dates of planting and harvesting.

_____ **I understand and acknowledge that ZFS must be provided with a copy of proof of seed purchase for verification of acres planted and that Soybeans will NOT be accepted as Non-GMO until proof of purchase is on file at ZFS.**



Planting

- _____ Keep seeds separate from GMOs in closed containers until used.
- _____ Clean planter/drill boxes. Run to get seeds out of flutes. Sweep/blown clean and visually inspect to be free of contaminants before use.
- _____ No Night Shade, Pokeberry, Ground Cherry, or Horse Nettle.
- _____ Fields where Non-GMO seeds were planted were physically separated from other varieties
- _____ GMO variety soybeans will not be planted in the same field as Non-GMO variety soybeans
- _____ All GMO varieties shall be kept at a reasonable distance from fields containing Non-GMO varieties, and in no event closer than 6 feet from Non-GMO variety fields.
- _____ Flags, marker posts, plot signs, or some other method were used to delineate Non-GMO Fields
- _____ A record of previous crop on contract fields will be retained. However, previous crop cannot be GMO soybeans.
- _____ Are ANY GMOs going to be planted on your operation this coming season? [] Yes; [] No
If yes, what crop(s)? _____



Harvest

- _____ Combine will be blown or swept clean and visually verified to be free of other varieties.
Blow bin and rotor off with leaf blower.
- _____ Flush run will be used to assure equipment is free of contaminants including cereal grains.
- _____ Combine once around the outside of field, dump and send to market as regular beans.
- _____ Use leaf blower to clean trucks and wagons.
- _____ Beans must be 18% moisture or less at harvest.
- _____ Beans should be 10% – 15% moisture at delivery after harvest, with loads over 13% moisture subject to shrink and discount charges.
- _____ Loads with greater than 5% foreign material are subject to rejection with loss of premium.
Loads between 1% to 5% FM will be docked for the percentage of FM over 1%



Storage

- _____ All fill and unload equipment should be flushed and cleaned free of other commodities.
- _____ Clean the fill device: The bottom of the leg or the auger: run non-GMO beans through leg/auger and send to market if previous use is GMO beans.
- _____ Clean unload/load-out auger with water and visually inspect to see that all beans have been removed.
- _____ All bins used to store Non-GMO grain will be swept and blown clean with a leaf blower and visually verified to be free of other varieties and sealed after filling.
- _____ All bins used to store Non-GMO grain will be labeled with Identity Preserved stickers or with a sign attached to the bin in plain sight.
- _____ Block off spout to bin.
- _____ Last grain type stored in bin(s) - GMO Soybeans Non-GMO Soybeans Corn Wheat No Bin for Storage
- Other _____



Transportation

_____ All trucks used to transport Non-GMO grain will be clean and visually verified to be free of other varieties.

_____ All trucks used to transport Non-GMO grain will be labeled with a sign identifying “Identity Preserved” product.

_____ Drivers will be clearly instructed as to the identity preserved nature of the shipment.

Note: These procedures also apply when using ZFS Freight Services

(initial) Field Maps

_____ **I acknowledge and understand that field maps must be on file with ZFS as a condition to receiving payment from ZFS under the Agreement.**



When to grow Non-GMO/IP Soybeans

1. Marketing program
2. Financially makes sense
3. Fits with the rest of your operation



Marketing Programs

1. Gavilon/ZFS Creston, IA
Dean Michaelson – 515-697-4410
2. Gavilon Hastings/Grand Island, NE
Mason Nicklaus – 402-463-8162



Thank you for what you do!

Questions

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Seed Work sheet

	Roundup Soybean Seed	Specialty Non-GMO
Cost/Bag	\$ 57.95	\$ 39.00
Bags/Acre	1	1.2
Total Seed Cost/Acre	\$ 57.95	\$ 46.80
Fertilizer - Starter	\$ 42.80	\$ 42.80
Potash		
Nitrogen		
Fertilizer Cost/Acre	\$ 42.80	\$ 42.80
Chemicals (Name)	Pre + Post	Pre + Post
Chemical Cost/Acre	\$ 35.00	\$ 60.00
Fuel Cost/Pass/Acre		
Extra Passes		
Total Extra Fuel Cost/Acre		
Drying Costs/Acre		
Total Extra Costs/Acre		
Price/Bushels	\$ 9.59	\$ 9.59
Plus or minus basis	\$ (0.80)	\$ (0.80)
Net price/bushel	\$ 8.79	\$ 8.79
Bushels/Acre	45	43
Regular Income /Acre	\$ 395.55	\$ 377.97
Premium/Bu	\$ -	\$ 1.25
Bushels/Acre	45	43
Total Premium Per Acre	\$ -	\$ 53.75
Total Revenue	\$ 395.55	\$ 431.72
Net Added Return/Acre	\$ 395.55	\$ 431.72

Advantage Non-GMO to Roundup/Acre \$ 36.17