Growing Round-Up-Ready Sugar Beets vs. Conventional Sugar Beets



By Steven Snyder



Introduction

Sugar Beets are very important in both the United States agriculture and Wyoming's agriculture.

Fifth leading cash crop in Wyoming

Why it is important to research new technologies



Introduction

Why GMO crops? Why look at Round-Up-Ready sugar beets?





Background

Who is interested in growing Round-Up-Ready sugar beets?
Who does it affect?
California, Colorado, Idaho, Missouri, Minnesota, Montana, North Dakota, Oregon, Texas, Wisconsin, and Wyoming.

Background

Previous interest in Round-Up-Ready sugar beets.
History of Round-Up-Ready sugar beets.
Why Wyoming Sugar Company was able to experiment with Round-Up-Ready.



Problems with Round-Up-Ready

Government approval
Marketing
Price of new technologies
Possible yield declines
Chemical differences



Advancements Round-Up-Ready Creates

- Weed Control
- New tillage methods
- Fuel savings
- Less farm & migrant labor
- More acreage
- Protecting environment



Fuel savings per acre for Round-Up-Ready Sugar Beets (fuel priced at \$4.00)

Conventional Fuel cost		Round	Round-Up Fuel cost	
1.) Plow	\$7.50	1.) Strip Till	\$8.50	
2.) Rollo-harrow	\$3.00	2.) Plant	\$1.50	
3.) Rollo-harrow	\$3.00			
4.) Level	\$2.50		8	
5.) Telone	\$6.00	$\widehat{\mathbb{A}}$		
6.) Level	\$2.50			
7.) Apply Fertilizer	\$1.30			
8.) Rollo-harrow	\$3.00			
	\$1.50			
9.) Ridge	٥٢.١¢			
10.) Plant	\$1.50			
	¢1.00			
Total Fuel Cost	\$31.80	Total Fuel Cost	\$10	

Budget

Sugar beet budget

	Conventional costs per acre	T	Round-Up-Ready costs per acre
Fuel	\$31.80	Fuel	\$10.00
Labor	\$10.00	Labor	\$5.00
Beet labor	\$40.00	Beet labor	\$0.00
Equipment maintenance	\$2.00	Equipment maintenance	\$1.00
Tractor maintenance	\$3.00	Tractor maintenance	\$1.50
Chemicals	\$35.00	Chemicals	\$40.00
Fertilizer	\$60.00	Fertilizer	\$30.00
Telon	\$40.00	Telon	\$20.00
New equipment	\$0.00	New equipment	\$10.00
Total costs	\$221.80	Total costs	117.5
Average income per acre	\$1,200	Average income per acre	\$1,200

Sugar and Yield Comparison

2007 Round-Up

29.3 Tons per acre16 Percent sugar

2007 Conventional

30.1 Tons per acre

16 Percent sugar

2008 Round-Up

31.1 Tons per acre17.5 Percent sugar

2008 Conventional

30.3 Tons per acre

17.5 Percent sugar

GMO Crops

Increase Yield
Herbicide Resistance
Disease Resistance



Conclusion

Round-Up-Ready Pros

- Weed control
- New Technologies
- Fuel savings
- Labor, Time, Machinery savings
- Environmentally safe

Conventional Pros
Reliability
Known
No new investments



Conclusion

- Round-Up-Ready Cons
- Law suit
- Price of technologies
- Some unknown



Recommendation



Incorporate a portion of your crop to ensure it is right for you. Eventually go to Round-Up-Ready!

Questions?







