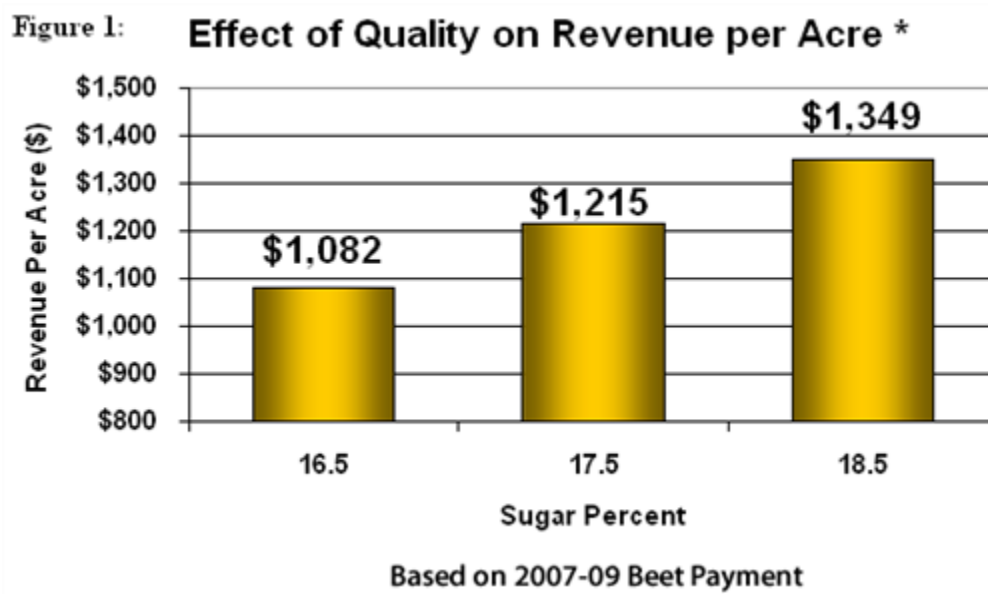




543 - Greater Profit with Quality Beets

September 09, 2010

American Crystal Sugar Company growers have set remarkable yield records in the last five years. Yields topped 25 T/A in 2006 and 2008 and 2010 yields look to set another record. A downside to this production success is the necessary reduction in planted acres due to factory processing and marketing allocation limitations. However there is still opportunity for more profit per acre with a better quality crop. The value of increased crop quality is shown in Figure 1.



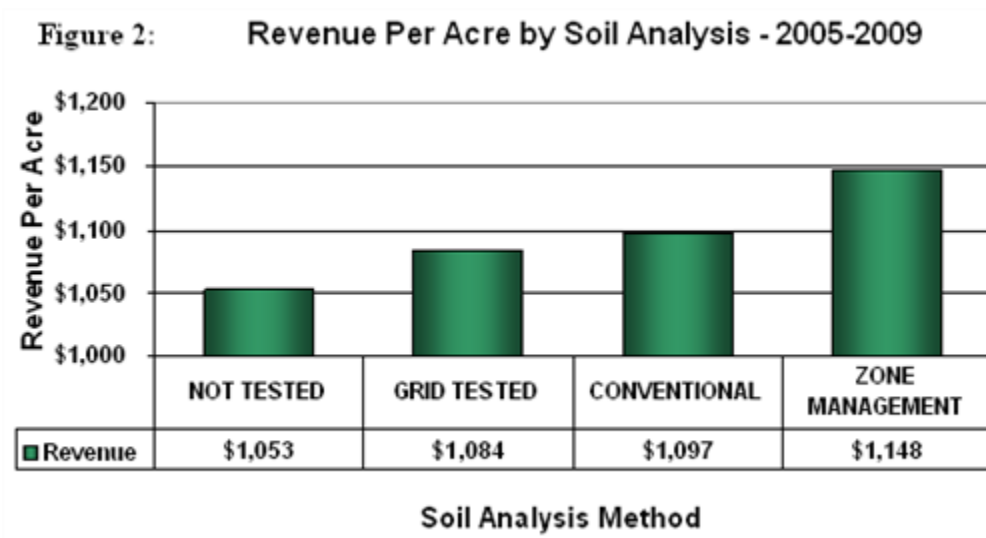
Production Practices to Maximize Quality

- Use correct N application rate
- Choose varieties carefully
- Plant early
- Establish optimum stands

- Control Cercospora
- Control root diseases
- Proper defoliation practices
- Proper harvest practices
- Harvest whole fields with high sugar during prepile
- Emphasize high sugar production in high freight cost areas.
- No headlands

Zone Management Benefit \$51/Acre

About 45% of all planted acreage in 2010 was managed by zone soil sampling and variable rate fertilizer application. See the Conventional vs. Zone Management comparison on Figure 2.



Strategies to Maximize Prepile Revenue

- Plant early
- Maintain high plant populations
- Reduce N application 10-30 lb/acre
- Use zone fertility management
- Select high sugar content varieties
- Use no headlands

- Don't plant along tree belts
- Control Cercospora
- Control root rot
- Use satellite imagery and early August sampling for sugar to guide decisions
- Past production history
- Consider scalping vs. flailing

Effect of Whole Field Pre-Pile Quality on Revenue Per Acre *

Days Prior to Harvest	NSP (\$)	Yield (T/A)	Sugar (%)	SLM (%)	Rev/A (\$)
45	.29	20	13	1.2	1210
45	.29	20	15	1.2	1803
45	.29	20	17	1.2	2396
22	.29	20	13	1.2	765
22	.29	20	15	1.2	1141
22	.29	20	17	1.2	1517

* Payment based on average increase in sugar content over the past 3 years during the prepile period.

Fall Planning

Start Planning this fall to impact crop quality in 2011. Contact your agriculturist for assistance.