Variety Selection is one of ten key components to improve sugarbeet quality.

Steven Poindexter, Senior Sugarbeet Extension Educator, MSU Extension
Poindex2@msu.edu; Cell 989-798-5848

Variety selection should be field specific and encompass multiple considerations including disease/pest resistance, tonnage and sugarbeet quality. In the last few years the Research Education Advisory Committee (REACH) team has strongly emphasized the importance of selecting the correct varieties and placing them in the appropriate fields. Variety selection has a major influence on sugar content, tonnage, and disease/pest resistance. In the Michigan Sugar Official Variety Trials, a total of 18 varieties were offered for sale for planting of the 2012 crop. It is easy to see the difference in quality as measured by percent sugar and recoverable sugar per ton (RWST). In comparing two varieties with similar tonnage, there was a difference of up to 1.5% sugar and 28 pounds of RWST. Quality is important when selecting new varieties, but that benefit can be lost if growers put that variety in a field that has serious problems from nematodes or uncontrolled Rhizoctonia and Cercospora.

Overall in 2012, growers have done an excellent job of matching varieties to individual field condition. One good example of this is the nematode tolerant varieties. Seed sales would indicate approximately 22 percent of the Michigan acres are being planted to these varieties. That corresponds fairly well to a 2007 nematode survey indicating about 25 percent of the acres have detectable levels of sugarbeet cyst nematodes.

Growers are also doing a good job in utilizing Rhizoctonia tolerant varieties in fields with a history of the disease. This year the Michigan State University Extension Sugarbeet Advancement variety trials had one location that had a moderate to heavy Rhizoctonia level. A susceptible high sugar variety that performed very well in other trials placed last in Recoverable White Sugar per Acre (RWSA). This sugar content of this variety was reduced to below trial average at the same time tonnage was lowered to last place. The Rhizoctonia resistant varieties performed very well and showed over $300 difference in revenue between the top and bottom variety.

Matching varieties and traits to specific fields pays good dividends.