



2014 Michigan Sugarbeet Production Practices

Survey results of Michigan sugarbeet growers attending winter agronomy meetings indicate they have quickly adopted new production practices.

A production survey was conducted at five educational agronomy programs held for the Michigan sugarbeet growers. Nearly 200 growers provided input. These programs present recent research information conducted by Michigan Sugar Agronomist/Researchers and Michigan State University Extension Sugarbeet Advancement. The research and educational content covers a variety of topics to improve quality, management and profitability of the sugarbeet crop. Each year this survey is conducted at the meetings to evaluate grower's adoption of management practices. Growers that responded to the survey represented 54,200 acres or about one third of the sugarbeet acres in Michigan.

A significant amount of research and education has been focused on controlling *Rhizoctonia* root rot. This disease has been a chronic disease that not only reduces tonnage but also sugar content. Research has shown that timely Quadris applications are very effective in controlling the disease. The survey indicated that 94% of the growers are using Quadris for controlling *Rhizoctonia*. About 51% are applying two applications, in a T-band in-furrow plus 6-8 leaf stage. Research has shown that a narrow in furrow T-band (3-5 inch) and reduced rate is as effective as the full rate in furrow with a 7 inch band. The survey indicated that 86% of the growers are using the narrow T-bands.

Nitrogen management is extremely important for optimum sugarbeet growth and quality. Too much nitrogen will reduce quality and too little will reduce tonnage. The survey has indicated that nitrogen use rates have increase from the previous year. Research has shown N-rates should be about 160 lbs./acre) following high residue crops such as corn. Growers reported that 43% are applying 126-150 lbs./acre and 32% are applying 151-171lbs./acre. When following a low residue crop rates should be about 125 lbs./acre. The survey indicated that 30% of the growers are applying about 100-125 lbs./acre and 41% are applying 126-150 lbs./acre. The majority of growers are in the recommended nitrogen range.

If left unchecked, *Cercospora* leaf spot will greatly reduce yield and sugar content in sugarbeets. The survey indicated that 84% of the growers are using BEETcast to help time fungicide applications. To help minimize fungicide resistance, tank mixing different modes of action is recommended. The survey indicated that 59% of growers are always tank mixing and additionally 19% are mixing more than half the time. Only 7% of the growers where not tank mixing at all. The survey had indicated the largest deterrent to tank mixing was poor mixability of added products.

To improve resistance management growers need to incorporate a new mode of action in their spray program. The survey also indicated that about 27% of the growers used Super Tin in 2014 and

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another 16% are planning to use it in 2015. Use of Tin products has increased in the last 3 years. Overall, leaf spot was held in check in 2014 with 60% spraying 3 times and 13% with 4 or more applications.

Growers also reported that 72% of them are always practicing Glyphosate weed resistance management (utilizing traditional herbicides) when growing corn and soybeans. Another 17% of them are using this management practice more than halftime. Only 7% said they use glyphosate alone. Weed herbicide resistance is a growing concern in the Michigan sugarbeet industry.

Michigan Sugar Cooperative has put a strong emphasis and invested heavily in agronomic research and education. This has paid good dividends to the Michigan industry with an average yield increase of 0.5 tons per year since 1997. We also have the highest quality beets of any production area in the USA. Attending educational programs regularly allows the Michigan/Ontario growers to be extremely competitive with other growing areas. Growers that attended last year's programs indicated that 93% intended to incorporate information from the meetings into their beet production practices. A total of 92% felt that attending the educational programs would have a positive economic impact on their farming operation.

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