



Use of Non-traditional Materials in Sugarbeet Production

Sugarbeet producers should be aware that substituting unproven non-traditional crop production materials for proven ones can be risky.

Every year new products come into the agriculture market place at a rate that makes it nearly impossible to keep track of all of them. Some of these products have great merit in improving the crop while many show little or no benefit. Many times claims are made to increase yields through more efficient nutrient utilization, improved disease resistance/control or even improved soil health. Often sales information is based on scientific sounding information and/or partial facts. Some of these products are field tested by Michigan State University Extension, Michigan Sugar Company or other unbiased researchers. Scientific data utilizes replications, randomization and statistics to analyze data. Normally, unbiased researchers do not recommend products that do not have a high degree of repeatability.

Sugarbeet producers should be aware that substituting unproven non-traditional crop materials for proven ones can be risky. In agriculture this can add substantial risk to an industry that already is risk burdened. This is particularly true for products claiming disease control since the risk is lost revenue from both product purchase and from reduced disease control. Of particular concern in the sugarbeet arena is control of *Cercospora* leaf spot and *Rhizoctonia* root rot. Currently, one of the biggest concerns would be to use an unproven product as the sole tank mix partner of a strobilurin fungicide due to *Cercospora* resistance to the strobilurin fungicides. Another potential concern would be to reduce the rate of a proven fungicide when adding an unproven product.

Non-conventional products have been in agriculture for a long time with only a few demonstrating an economical benefit. Remember, product literature is designed to sell products and may not include all the facts. Even well known, respected companies with proven products, occasionally market products that may not have been independently verified. Growers should be cautious when testimonials are the primary way of selling a product. If a product has merit, legitimate companies will pay to get the unbiased scientific research and endorsement. There is no substitution for good unbiased scientific research. Products are often promoted as being widely used in other growing areas, when in actuality they are not. At times, the name of a well-respected producer will be mentioned as using a product. When in reality the product may have been given to him just to try. Be wary of products that claim to do things that are difficult or un-measurable. This includes improved nutrient utilization, larger roots and increased stress tolerance. Other claims may be for improved drainage, plant vigor or improved microbial community. Be particularly wary of products that claim to do multiple things and seem too good to be true.

Whenever a new product is considered for use on the farm, introduce it on a limited acreage. It is recommended that replicated comparison strips be used for on farm evaluation. Simply splitting a field can be a poor way to judge the efficacy or yield improvement of a specific product. There is a significant chance that a single strip or half of a field will yield better than the comparison even when no treatment is involved. This is due to things like field soil variation, tile drainage or a different cropping history. Questions on new sugarbeet agronomic products should be directed to your Research Education Advisory Committee (REACH) team members. They are in direct contact with researchers throughout the sugarbeet growing areas in the United States.

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