



## *Sugarbeet Cercospora Fungicide Resistance Management*

*Successful management of Cercospora leaf spot fungicide resistance must involve everyone.*

A Cercospora leaf spot survey was taken in the fall of 2012 by Michigan Sugar Company. The results were analyzed by Michigan State University Extension plant pathologist Dr. Willie Kirk. The results indicate that strobilurin resistance is wide spread throughout the Great Lakes growing region at some level. This is extremely concerning because it will be the second fungicide (Topsin was first) that has lost efficacy and not performed well in Michigan Sugar Company research trials. The loss of these two materials will increase the possibility for resistance build-up to other leaf spot fungicides. The greatest pressure will be put on the triazole fungicides (Eminent, Enable, Inspire, Proline, Topguard). This is currently our most effective class of fungicide materials and we cannot afford to lose them.

Successful leaf spot resistance management involves the cooperation of everyone utilizing or recommending fungicide spray programs. The whole sugarbeet industry must acknowledge that science has proven that strobilurin fungicide resistance exists. It must also be recognized that all producers in the Great Lakes beet growing area are being or will be affected. New registered Cercospora fungicide chemistries are currently not available. A loss of another fungicide type (triazoles) and the resulting reduction of leaf spot control could spell a significant economic hardship to the Michigan Sugar Cooperative and supply chain that supports the industry.

Strategies for Cercospora leaf spot resistance management must be implemented for every spray application to protect our current fungicides. Follow the guidelines published by the Research and Education Advisory Council (REACH) and posted on the Michigan Sugar website. Growers will need to consult with their Agriculturist and use BEETcast (<http://www.michiganbeets.com>) to help in timing your fungicide spray applications. All fungicides must be tank mixed with two different modes of action. The most common tank mix partners are the EBDC and copper fungicides. There have been no resistance issues documented with these products.

One fungicide that is widely used in other beet growing areas and has very good efficacy are the TIN type products. **This fungicide type currently is underutilized in the Michigan growing region.** Super Tin/Agritin fungicides are our most effective contact materials and introduce a completely different mode of action for Cercospora leaf spot control. This mode of action will be important to help prevent resistance from developing to our triazoles and for us to maintain excellent leaf spot control. The product can be applied safely if you read and follow labeled directions.

### **REACH Research Contacts**

*Jim Stewart, MSC Director of Research, (989) 225-6720*

*Steve Poindexter, MSU Senior Extension Education, (989) 798-5848*

*Greg Clark, MSC Agronomist, (989) 891-6785*

*Lee Hubbell, MSC Research Agronomist, (989) 225-6708*

	<p><b>Research &amp; Education Advisory Council (REACH)</b> c/o MICHIGAN SUGAR COMPANY 2600 South Euclid Avenue Bay City, Michigan 48706 (989) 686-0161</p>
---	---