

## **Quadris Application Timing is Important to Protect Sugarbeets from Rhizoctonia**

**A well timed application of Quadris can significantly reduce Rhizoctonia root rot in Sugarbeets.**

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A well timed foliar application of Quadris can significantly reduce Rhizoctonia root rot in sugarbeets. A recent survey conducted in 2013 by Michigan State University Extension indicates that about 90% of the growers are using Quadris to control this important root disease. Almost half of the Michigan growers are using two applications which generally include an in-furrow followed by a foliar application. From the survey, growers felt on average the two application approach has increased yield by 2 ¼ tons per acre.

The popularity of the in-furrow application has increased substantially in the last three years for several reasons. First, many of our new high yielding/sugar varieties are very susceptible to this disease. Secondly, recent research from Michigan Sugar Company has shown that narrow T-band in-furrow applications of 3 ½ to 4 inches have been effective in control and reduced cost. Thirdly, by applying the T-band application at planting it takes the guess work out of timing the foliar application and also extends/improves overall disease control. Many growers in the heavy disease areas are utilizing Quadris both in-furrow and foliar along with incorporating varieties with Rhizoctonia resistance.

This spring, many growers may have been applying foliar Quadris earlier than the ideal timing. In the last three years, the most effective single foliar application has been at the 6-8 leaf stage. Applications applied at an earlier stage were not as effective and had reduced efficacy. Sugarbeet growers that have applied Quadris in-furrow should be protected at least up to the 6-8 leaf stage and possibly longer. Ideally we like to apply the fungicide just prior to an infection period. Ideal infection periods occur when average daily soil temperature at the 4 inch depth reaches 65 degrees or warmer. Also moisture is important for infections to occur. Applications just prior to rainfall under warm conditions have proven most beneficial in Sugarbeet Advancement field trials. The recent cool period has put 4 inch average soil temperatures in the high 50's and low 60's. Research trials have shown that when Quadris is applied earlier than ideal, Rhizoctonia root rot is still usually reduced by more than fifty percent.

Research has also indicated that Quadris foliar rates should not be reduced as a decrease in disease control can occur. Foliar applications should be applied in a 7 inch band over the crown of the plants. Broadcast applications are not recommended or as effective as concentrating the fungicide in a 7 inch band. Be careful to not mix Quadris with oil based materials as crop injury can occur. Manganese, boron and some insecticides (non-oil based) can be mixed and safely applied to sugarbeets.