

Ways to Minimize Screen and Tip Plugging when Spraying Quadris® on Sugarbeets

There are several things growers can do to minimize nozzle and screen plugging when spraying Quadris® on Sugarbeets.

Almost all Michigan sugarbeet growers are applying Quadris® either T-band in-furrow and/or as a 6-8 leaf foliar application for control of Rhizoctonia root rot. Over the years the Michigan State University Extension Sugarbeet Advancement program has seen various issues that have caused screen and nozzle plugging during applications. Quadris® fungicide is only formulated as a flowable product which inherently makes it less friendly to mix compared to an emulsifiable concentrate. Flowable products need constant agitation or settling out will occur. Use low to moderate agitation during spraying. Vigorous agitation appears to often cause the Quadris® to form mini-balls which will plug screens.

Best mixing results occur when Quadris® is pre-slurried with water then added to water in the tank. Be sure Quadris® is fully dispersed in the tank water before adding any other tank mixtures including fertilizers and insecticides. Never add Quadris® directly to fertilizers or other products. Agitation is always required as separation and settling will occur. It is not recommended that Quadris® be allowed to sit in a tank overnight. It is difficult to get it re-suspended and may settle in the lines. Often screen/nozzle plugging is more evident. If possible flush spray lines and screens with fresh water. As specified on the label [Quadris label \(PDF\)](#), a 50 mesh screen or courser is recommended between pump and boom and/or at the nozzle. It is suggested that an extra set of screens be available to rotate as one set is being soaked and cleaned daily.

It appears when band spraying Quadris® fewer problems occur when at least 5 gallons of water per acre is used and the product is applied alone. Many growers are using an insecticide product as a tank mix partner such as Mustang Max™. From observations overtime, it appears that with this tank mix combination screens may need more cleaning from slime formation. Colder water temperatures may also aggravate these conditions. Sugarbeet Advancement highly recommends that planters have a way to monitor each spray row such as the Redball® system. Often screens and nozzles may become partially plugged and should be checked after each spray/fertilizer fill up.

Growers have reported more mixing and plugging problems from older Quadris® as compared to recently manufactured product (1 ½ year or less). If older product is to be used it would be suggested to use this as a foliar band spray with a higher water volume (6-8 gallons/acre). Some growers are using or have used compatibility agents in the mix. This appears to be helpful in many cases. If foliar applying Quadris® be certain to **not** add any oil based products or silicon adjuvants as severe leaf burning will occur. If issues develop contact your local supplier or Brian Devine Syngenta plant performance specialist at 989-388-2026.