

## SUGARBEET ROOT MAGGOT POPULATION FORECAST FOR 2011

Mark A. Boetel, Associate Professor  
Robert J. Dregseth and Allen J. Schroeder, Research Specialists

Department of Entomology, North Dakota State University, Fargo, ND

The 2011 forecast map for anticipated sugarbeet root maggot (SBRM) fly activity in the Red River Valley is shown in Figure 1. Areas at high risk of damaging SBRM infestations include rural Auburn, Conway, Glasston, Grafton, and St. Thomas, ND. Moderate risk is expected near Cavalier, Grand Forks, Minto, Nash, Reynolds, and Thompson, ND, as well as near Ada, Borup, Climax, Crookston, and Euclid, MN. The remainder of the Valley will be at low risk. Despite high fly activity occurring at many monitoring sites in 2010, several incurred low levels of SBRM feeding injury. Low injury levels may not be representative of maggot survival in all cases because the exceptional growing conditions for root development could have masked the true extent of feeding injury in some sites. Fields in areas where high fly activity occurred in 2010 should be closely monitored in 2011. Populations can increase rapidly from year to year, especially if they are not effectively managed.

Proximity to previous-year beet fields, especially where root maggot control was unsatisfactory the previous year, increases risk for damaging infestations. Weather can affect the precision of this forecast, and infestations can vary significantly among fields. Growers in areas of risk should continue using insecticides at planting time and pay close attention to fly activity levels during late May and the first few weeks of June to decide whether a postemergence insecticide is needed. Producers are also encouraged to review research findings published in recent volumes of “Research and Extension Reports” and to use the Sugarbeet Production Guide to design effective pest management programs to fit their production systems. NDSU Entomology will continue to inform growers regarding SBRM activity levels and hot spots each year through radio reports, the NDSU “Crop & Pest Report”, and notification of sugar cooperative agricultural staff when appropriate.

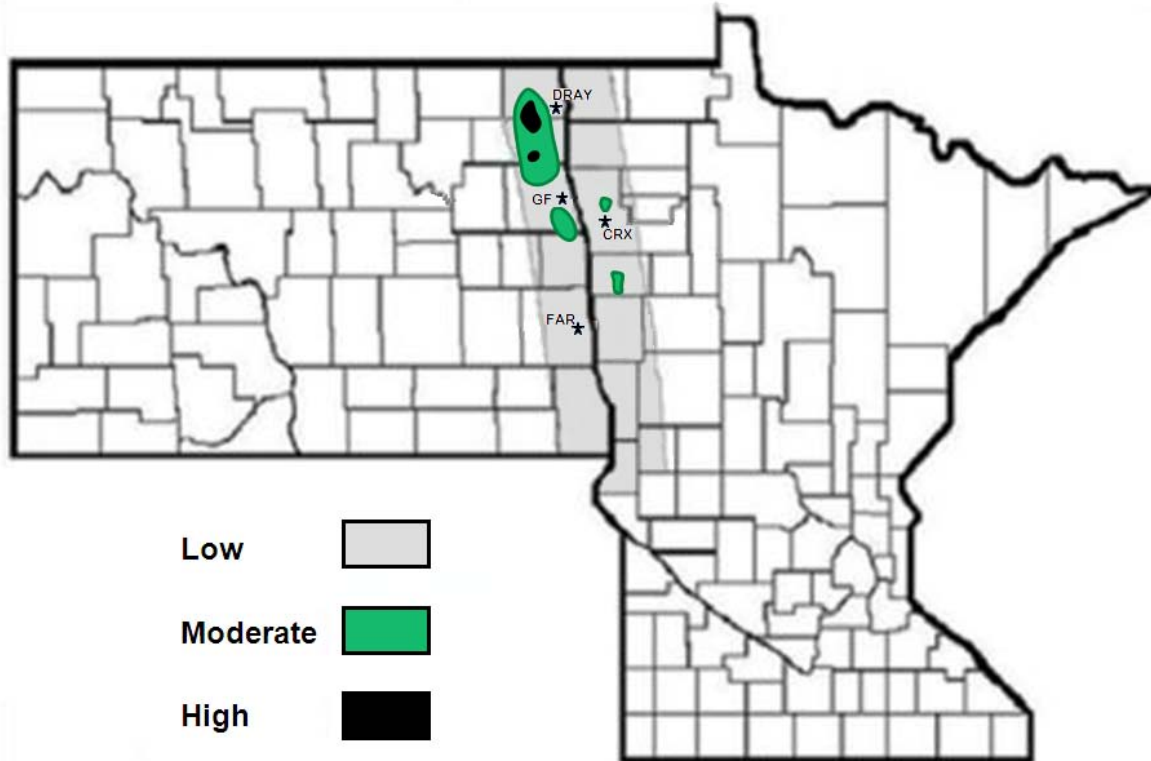


Fig. 1. Anticipated SBRM population levels for the Red River Valley.