SUGARBEET ROOT MAGGOT FORECAST FOR THE 2016 GROWING SEASON

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The 2016 sugarbeet root maggot (SBRM) forecast map for the Red River Valley is shown in Figure 1. Areas at high risk include rural Auburn, Grafton, Grand Forks, Nash, and St. Thomas, ND, and Ada and Borup, MN. Moderate risk is expected near Cavalier, Crystal, Oakwood, Reynolds, and Thompson, ND, and Euclid and Fisher, MN. The rest of the area is at low risk. Fields should be monitored closely this year because extremely high fly activity was observed at many sites in 2015. Despite the high fly activity, follow-up root injury ratings indicated that some of those fields incurred low levels of SBRM feeding injury. This could indicate that control efforts in those areas were successful; however, other fields in those areas could still be at high risk this year. SBRM populations can increase rapidly from year to year. Proximity to previous-year beet fields where high populations and/or poor control occurred during the previous year increases risk. Sugarbeet fields near those where high fly activity occurred in 2015 should be closely monitored in 2016. Growers in high-risk areas should use an aggressive form of at-plant insecticide treatment (i.e., granular insecticide) and a postemergence rescue insecticide (i.e., banded granules or peak-fly spray). Those in moderate-risk areas using insecticidal seed treatments for at-plant protection should monitor fly activity levels in their area, and be ready to apply additive protection if needed. All growers in known SBRM areas should pay close attention to fly activity levels in late-May through June to decide if postemergence treatment is needed. 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. Root maggot fly count information for the current season and from previous years can be viewed at: http://www.ndsu.edu/entomology/people/faculty/boetel/flycounts/.

Fig. 1. Anticipated risk of SBRM fly activity and damaging larval infestations in the Red River Valley.