SUGARBEET ROOT MAGGOT FORECAST FOR THE 2023 GROWING SEASON

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The 2023 risk map for sugarbeet root maggot (SBRM) fly activity in the Red River Valley appears in the figure below. Root maggot fly activity has been on an upward trend for the past five years and, in 2022, it was greater than that recorded in any of the past 16 growing seasons. The exceptionally high infestations in 2022 suggest that many areas within the valley are at high risk for damaging SBRM infestations in 2023.

Areas at highest risk of SBRM problems in 2023 include rural Auburn, Cashel, Cavalier, Crystal, Drayton, Glasston, Grand Forks, Hensel, Hoople, Oakwood, Reynolds, St. Thomas, Thompson, and Voss, ND, as well as Argyle, Climax, Crookston, Donaldson, East Grand Forks, Sabin, and Warren, MN. Moderate risk is expected in areas bordering high-risk zones, as well as fields near Ardoch, Bathgate, Bowesmont, Buxton, Hamilton, and Nash, ND, and Ada, Angus, Borup, Eldred, Euclid, Halma, Kennedy, Nielsville, Sherack, and Tabor, MN. The rest of the area is at lower risk.

Proximity to previous-year beet fields where populations were high and/or control was unsatisfactory can increase risk. Areas where high fly activity occurred in 2022 should be monitored closely in 2023. Growers in high-risk areas should use an aggressive form of at-plant insecticide treatment (granular insecticide) and expect the need for a postemergence rescue insecticide application.

Those in moderate-risk areas using insecticidal seed treatments for at-plant protection should monitor fly activity levels closely in their area and be ready to apply additive protection if justified. Pay close attention to fly activity levels in late May through June to determine the need for a postemergence insecticide application.

NDSU Entomology will continue to inform growers regarding SBRM activity levels and hot spots each year through radio reports, the NDSU "Crop and Pest Report" and notification of sugar cooperative agricultural staff when appropriate. Root maggot fly counts for the current growing season and those from previous years can be viewed at <u>https://tinyurl.com/SBRM-FlyCounts</u>.



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

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