

No wheat midge hot spots

WHEAT midge pressure is lower across North Dakota.

A soil survey conducted last fall found fewer numbers of overwintering wheat midge larvae than in previous seasons. There are no wheat midge hot spots in North Dakota this year.

"The 2009 forecast for wheat midge populations continues to be favorable for North Dakota wheat producers," says Janet Knodel, North Dakota State University Extension entomologist.

Wheat midge populations ranged from zero to 286 midge larvae per square meter, with most of the state having less than 200 midge larvae per square meter during 2008.

Approximately 60% of the soil samples were positive for wheat midge larvae, with an average of 70 larvae per square meter among the positive samples. In contrast, wheat midge populations ranged from zero to 678 midge larvae per square meter, with an average of 107 larvae per square meter, among the positive samples during 2007.

There are two small pockets of 201 to 500 midge larvae per square meter: northwestern Divide and central Ward counties. Areas with more than 200 midge larvae per square meter should be scouted to determine if an action-threshold population level exists, Knodel says. However, these areas are not considered high risk (more than 1,200 midge larvae per square meter).

Control strategies

"With a low forecast for wheat midge infestation statewide, an early planting date and planting before 200 accumulated degree days are an excellent way to mitigate wheat midge damage and to assist parasitism," Knodel says.

However, an early planting date is only suitable for hard red spring wheat. This method is not as effective with durum because most durum varieties are later-maturing. By planting early-maturing wheat varieties, a midge infestation is minimized because the crop is headed and flowered before peak adult populations occur, she says.

Planting early-maturing varieties will not help if planting is delayed and occurs during a time that causes the wheat crop to head as the midge is emerging. Degree days also are used to identify the high-risk planting window for hard red spring wheat. Wheat reaches the heading stage at 1,000 DD when using the same midge DD accumulations (threshold temperature of 40 degrees F).

The North Dakota Agricultural Weather Network can calculate the risk for wheat midge infestation based on planting date. Go to the "Web Exclusives" section at www.DakotaFarmer.com for an easy link to the NDDAWN wheat and wheat midge degree days.

Parasite trends

The number of parasitic wasps that help reduce the wheat midge population dropped by half, which is not unexpected, says Knodel. The number of parasites tends to follow the midge populations. The average parasitism

Key Points

- Wheat midges are present in North Dakota, but in low numbers.
- Early planting will help minimize exposure to the pest.
- Web site has data to help you monitor developments.

rate fell from 16% in 2007 to 9% in 2008. About 83 of the sites where soil samples were collected had zero parasitism.

The wheat midge survey is conducted by the NDSU Extension Service and supported by the North Dakota Wheat Commission.

Source: NDSU Extension Communications

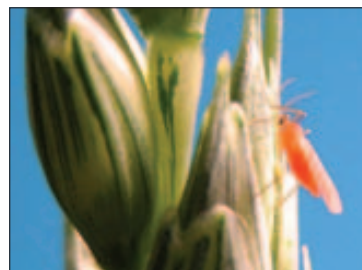


Photo: NDSU

MIDGE THREAT: A wheat midge feeds on a head of wheat.

BAD NEWS FOR WEEDS.

