

# FIELD SURVEYS FOR SMALL GRAIN AND OILSEED PESTS IN SOUTH-CENTRAL NORTH DAKOTA

Greg Endres

**During the 2003 growing season**, field surveys were conducted in North Dakota by the NDSU Extension Service to identify disease and insect presence in small grain and oilseed crops. Carrington Research Extension Center staff members Patrick Metzger, summer IPM crop scout, and Greg Endres, area extension specialist/cropping systems, conducted the surveys in the south-central portion of the state. Plant pathologists Drs. Marcia McMullen and Carl Bradley and entomologist Dr. Phil Glogoza coordinated the surveys. This data is used in grower and ag industry education, as support for labeling of crop protection products, and as a guide for research and extension programs.

The **small grain** survey was conducted from late May through July, primarily for leaf and head diseases in 12 south-central North Dakota counties (Burleigh, Dickey, Eddy, Emmons, Foster, Kidder, LaMoure, Logan, McIntosh, Sheridan, Stutsman, and Wells). The 260 surveyed fields included 199 wheat and 60 barley fields. Diseases included in the survey were bacterial leaf blight, barley yellow dwarf, black chaff, Cephalosporium stripe, dwarf bunt, ergot, rust (leaf, stem, and stripe), scab (*Fusarium* head blight), Septoria, smut (flag and loose), spot blotch, tan spot, and wheat streak mosaic. Leaf rust, Septoria, and tan spot were the prominent leaf diseases detected in wheat. *Fusarium* head blight was present at low levels, ranging from 0.1 to 5% field severity. The survey insect list included aphids, cereal leaf beetle, grasshoppers, and thrips (barley).

The **sunflower** survey was conducted in 42 fields during mid-June through July to inspect plants for downy mildew and sunflower beetle. Downy mildew was found in 8 of 12 counties with 1 to 5% plant incidence occurring in affected fields.

Forty-five **soybean** fields were surveyed during mid-summer for soybean aphid. Aphids were noted in Dickey, LaMoure and Foster counties.

The **canola** survey was conducted during the first half of August in 18 swathed fields in Stutsman, Foster, Eddy, Wells, and Sheridan counties. The fields were inspected for the presence of *Sclerotinia* stem rot (white mold), blackleg, aster yellows, and *Alternaria*. White mold was detected in 17 of 18 fields, but incidence was only 2 to 6%. Blackleg was found in 28% of the fields and those fields had 2 to 4% plant incidence. In addition, the fields were surveyed for flea beetles and grasshoppers.

The **flax** survey was conducted during the first half of August in 14 fields in Stutsman, Kidder, Foster, Eddy, Wells, and Sheridan counties for the presence of pasmo and *Fusarium* wilt. Pasm was found in all fields, with average field incidence ranging from 5 to 91%. Wilt was found in only 2 of 14 fields.

Maps displaying summaries of survey results by crop and pest are available at the following website: [www.ag.ndsu.nodak.edu/aginfo/ndipm/index.htm](http://www.ag.ndsu.nodak.edu/aginfo/ndipm/index.htm). Survey details may be obtained by contacting the Carrington Center.



**Patrick Metzger, IPM crop scout, recording notes during the canola field survey**