

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

Greg Endres

During the 2002 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, IPM crop scout, and Greg Endres, area extension specialist/cropping systems conducted the surveys in the south-central portion of the state coordinated by Drs. Marcia McMullen and Carl Bradley, plant pathologists; Dr. Art Lamey, emeritus plant pathologist; and Dr. Phil Glogoza, entomologist. Use of the survey data includes grower education, support for labeling of crop protection products, and supporting research and extension programs.

The small grain survey was conducted during early June to early August primarily for leaf and head disease in 16 south-central and east-central North Dakota counties. The majority of the 265 surveyed fields were hard red spring wheat, but the survey also included several winter wheat, durum, and barley fields. Diseases included in the survey were bacterial leaf blight, barley yellow dwarf, black chaff, Cephalosporum stripe, dwarf bunt, ergot, rust (leaf and stem), scab (*Fusarium* head blight), Septoria, smut (flag and loose), spot blotch, tan spot, and wheat streak mosaic. Tan spot was the prominent leaf disease detected in wheat. *Fusarium* head blight was present at reduced levels compared to recent years. The survey pest list also included aphids, cereal leaf beetle, grasshoppers, and thrips (barley).

Oilseed crops surveyed included sunflower, canola, soybean, and flax.

The sunflower survey was conducted in mid-June to early July to inspect plants for downy mildew and sunflower beetle. Also, during pre-bloom and bloom period, red seed weevil were monitored. Downy mildew was difficult to find due to generally dry early season conditions. However, the insects generally were found throughout the region.

The canola survey was conducted during June for flea beetle. In August, 29 swathed canola fields were surveyed in Stutsman, Foster, Eddy, Wells, and Sheridan counties. The fields were inspected for the presence of blackleg, *Sclerotinia* stem rot (white mold), aster yellows, and *Alternaria* black spot. White mold was detected in 76 percent of the fields, but only 10 percent of the fields had incidence of 20 percent or more. In addition, grasshoppers and flea beetles were surveyed.

Soybean fields were surveyed during mid-summer for soybean aphid.

The flax survey included grasshoppers, *Fusarium* wilt, and pasmo. Fourteen fields in Stutsman, Foster, Eddy, Wells, and Sheridan counties were surveyed. Pasmo was found in about 80 percent of the fields, with plant incidence ranging from 1 to 28 percent.

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. Survey details may be obtained by contacting the Carrington Research Extension Center or the survey coordinators.