**Partnership Matters**

**Research Brief — Evaluating fungicides for foliar disease management**

**What's new.** Corn and soybeans are susceptible to numerous fungal foliar pathogens that have the potential to cause economic yield losses. The use of foliar fungicide in seed corn production is routine. Decisions to use foliar fungicides in hybrid corn production are based on hybrid susceptibility, cultural and environmental conditions. Until Asian soybean rust showed up in the United States in November 2004, no one took much notice of soybean leaf diseases, and foliar fungicides were rarely used as a disease management tool in Iowa. But with the imminent threat of rust to Iowa’s soybean industry, fungicides may become part of standard production practices for the crop.

**ISU research.** This growing season, Alison Robertson, ISU Extension plant pathologist, evaluated registered fungicides and new products for their efficacy against certain foliar pathogens of seed and hybrid corn. Also this year, Robertson collaborated with X. B. Yang, ISU Extension plant pathologist, to evaluate numerous fungicide products on soybeans and conducted experiments with Matt O’Neal, ISU Extension entomologist, to investigate application of fungicides with foliar-applied insecticides. Although data on disease severity and yield response are still being collected and analyzed, some observations can be reported.

In the seed corn experiments, disease pressure in the plots was high and noticeable differences in disease severity were evident between unsprayed plots, those sprayed once, and those that received two applications of product.

In the soybean experiments, 17 products in more than 40 treatment combinations were tested for efficacy against foliar soybean diseases at the ISU research and demonstration farms at Crawfordsville and Nashua. Disease pressure was particularly low at Nashua.

**—continued**
Learn more. Information from the soybean canopy-weed suppression research will become available as results are collected and analyzed. As this information is generated, it will be published in the ICM Newsletter, on the ISU Agronomy Weed Science webpage and in reports with the ISU research and demonstration farms involved.

For questions or detailed information about this research, contact Bob Hartzler, ISU Extension weed scientist, at hartzler@iastate.edu, or call 515-294-1923.

Evaluating fungicides, continued—

spot and frogeye leaf spot were only present at very low levels in the experiment. At Crawfordsville, disease pressure was slightly higher. Brown spot, frogeye leaf spot and Cercospora leaf blight were observed. There were no obvious visual differences between the treatments in terms of overall foliar disease severity, but some phytotoxicity was observed at Crawfordsville with products containing tebuconazole.

What’s next. Fungicide efficacy trials on corn and soybean will continue in 2006. On soybeans, rates and time of application will be fine-tuned.

Learn more. Data will be presented at extension winter meetings and in the ICM Newsletter.

PARTNER PROFILE—

Angie Rieck-Hinz
Extension program specialist, Iowa State University, with Manure Applicator Certification Program and Iowa Manure Management Action Group (IMMAG)

Origin
A Benton County, Iowa, girl transplanted to a swine, cow-calf, diversified farm in southwestern Wisconsin

Training
▪ M.S., soil fertility, 1992, Iowa State University
▪ B.S., crop and soil science, 1988, University of Wisconsin–Platteville

At ISU
▪ Responsibilities include developing and delivering manure management extension programs
▪ Began coordinating Iowa Manure Management Action Group (IMMAG) and Manure Applicator Certification Program in 1998
▪ Worked as extension program specialist with ag drainage wells, 1993 to 1996

Notable Achievements
▪ Manage the IMMAG website, which annually averages more than 1 million hits
▪ Served as University of Arkansas ex-officio representative to then Governor Clinton’s Animal Waste Task Force, 1992
▪ Kiwanis Member of the Year, 2002

Personal
▪ Love to garden and tend flowers
▪ Adore my husband and my cat

Quotable Quote
“When my family moved to Wisconsin, I could not wait to return some day to Iowa. Since I first moved back in 1989, I have left Iowa twice for professional reasons and twice I have returned to ISU. There is no better place to work in agriculture, live in a farming community and pretend that I am again an Iowa farm girl. Every day my job offers new challenges and the opportunity to work with great people who love and respect Iowa agriculture.”