

National Plant Diagnostic Network

2K5

Federal Initiative Accomplishments

Purpose:

To help prevent and detect agricultural bioterrorism, a potential threat to the U.S. food and fiber industry, and to minimize the potentially devastating effect of newly introduced pathogens on this industry. To reduce the time required to detect, diagnose and respond to new threats against U.S. agricultural systems through a distributed network of experienced diagnosticians with regulatory agencies and trained field agents.

Accomplishments/Impacts:

- Provided outreach and training to agricultural clientele throughout the Great Plains States through field day presentations, grower meetings and contact with individual growers.
- Identified a student and initiated a graduate training program in plant disease diagnostics. Training has included work in the Plant Disease Diagnostic Lab and introduction to molecular techniques as tools for disease diagnosis.
- Developed remote sensing techniques for detection and quantification of specific plant virus diseases at a regional level.
- Initiated a project to improve detection and quantification of Karnal Bunt through the use of molecular techniques. The TAES diagnostic lab is the only SAES laboratory in the United States with permits that allow work on *Tilletia indica*.
- Diagnostic services to individual growers and agricultural industry personnel increased in 2005, and over 200 wheat and sugar beet samples were processed for virus infection.



Lead Agency:

U.S. Department of Agriculture-
Agricultural Research Service

Partners:

Land-grant universities



Texas Agricultural Experiment Station
THE TEXAS A&M UNIVERSITY SYSTEM