

## Texas High Plains Plant Pathology Project: Partner in the Great Plains Diagnostic Network (GPDN)

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### BACKGROUND

The Great Plains Diagnostic Network (GPDN) is a consortium of nine states including, Colorado, Kansas, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, Texas and Wyoming. The GPDN is one of five regional diagnostic centers within the National Plant Diagnostic Network (NPDN). The NPDN was created in 2002 to serve and protect the nation's agricultural interests. The overall mission of the network is to enhance national security and have the ability to quickly identify introduced, or naturally occurring, plant pests. The mission of the GPDN includes coordinated diagnostics, secure communications, and training of first detectors. First detectors serve as initial diagnostic aids by submitting diseased plant samples and providing necessary information to diagnostic laboratories. The GPDN laboratory located at the Texas Agricultural Experiment Station in Amarillo is a cooperative initiative with Texas Tech University in Lubbock and is funded through a National Homeland Security grant.



**Left:**  
Molecular training  
hosted by the  
Amarillo

**Right:**  
Common smut on an  
ear of corn.  
lab in 2004.



### OBJECTIVES

- Serve the growers of the Texas Panhandle, by supplying timely diagnoses of disease on important agricultural crops.
- Train county Extension agents, and Master Gardeners to serve as “first detectors” and aid the diagnostic lab in providing good diseased plant samples for correct diagnoses.
- Increase awareness in the community of potential high risk disease threats and help growers make sound management decisions.

### BENEFITS

One of the major benefits of the GPDN is the sharing of information between diagnostic laboratories. With today's technology, sharing across the internet or televised training sessions can allow each laboratory to become involved in important information resources. A greater level of information transfer can allow the GPDN to remain informed when it comes to possible disease threats in areas that neighbor the Texas Panhandle. Annual training sessions also aid diagnosticians in learning new techniques to aid in disease diagnoses.