Impacts of the National Plant Diagnostic Network

The NPDN protects plant resources, food and fiber production by supporting Plant Inspectors

- The NPDN First Detector Program supports Customs and Border Patrol (CBP) and phytosanitary inspections by training:
  - 72 APHIS-PPQ port inspectors, 302 state department of agriculture inspectors in 14 states and territories.
  - 134 APHIS, state department of agriculture, or university pest survey specialists in 36 states.
  - 193 other state department of agriculture employees.
- The NPDN First Detector Program supports the CBP by training 16,103 other agriculture professionals and volunteers for the early and rapid identification of invasive pests and diseases.
- The NPDN First Detector program supported pest identification screening by mailing upon request:
  - 200 copies of the 2008 publication entitled “Mealybugs and Mealybug Look-Alikes of the Southeastern U.S.” and 150 copies of “Pest Thrips of the United States: Field Identification Guide” to regulatory and CBP personnel throughout the southeast U.S.
- Members of the NPDN mentor graduate students who are also employed by CBP. The presence of the NPDN has resulted in enhanced educational opportunities for CBP employees.
- The NPDN supported disease diagnostic training in 35 sessions with 524 individual contacts. The NPDN organized specialized insect identification training for 42 APHIS identifiers including 11 APHIS port identifiers, thus authorizing them to identify high consequence pests, diseases and weeds such as citrus greening, sudden oak death, plum pox, fruit flies, European grapevine moth and light brown apple moth.
- The NPDN provides science-based, peer-reviewed standard operating procedures and laboratory quality standards in plant diagnostics for rapid confirmation.
- The NPDN fosters interagency communications among scientists at universities, state departments of agriculture, and USDA/APHIS, thereby focusing critical expertise on new and emerging plant pests and diseases.

NPDN Record of Achievement

Prior to the NPDN:
- Information on new pests and diseases was often scattered.
- Communications on new outbreaks were poorly coordinated and inadequate.
- Funding and infrastructure supporting plant diagnostics in the country had degraded to a point that many state and university laboratories were understaffed, ill-equipped and, in some cases, threatened with closure.

NPDN Accomplishments
- National Repository established for records of endemic and emerging pests and diseases.
- Secure communications protocols established among NPDN labs and regulatory agencies.
- Diagnostic infrastructure supporting plant diagnostics in the U.S. is greatly enhanced for both capability and capacity. Diagnosticians are well trained in modern diagnostic technologies and molecular protocols.
- NPDN labs routinely support national, state, and local response to disease and pest outbreaks, providing surge capacity for over 1,000,000 high consequence samples.
- The NPDN has trained and registered 11,480 First Detectors nationwide.
- NPDN has protected jobs in agriculture by verifying that traded ag products are free of quarantine pests and diseases, thus ensuring that export and domestic markets remain open.
- Agriculture exports support 1 million jobs, 75 % of the agriculture exports are plant-based.