United States Department of Agriculture

Animal and Plant Health Inspection Service

Plant Protection Act Section 7721 Funding: Strengthening Our Nation’s Ability To Safeguard U.S. Specialty Crops, Agriculture, and Natural Resources

Under the Plant Protection Act’s Section 7721 (PPA 7721), USDA’s Animal and Plant Health Inspection Service offers funding for projects that enhance our ability to safeguard agriculture and facilitate safe agricultural trade. Cooperators nationwide use this funding to strengthen our pest exclusion system, optimize our domestic pest management and eradication programs, keep commodities moving in commerce without spreading pests and diseases, and expand market opportunities abroad for U.S. products. This work is critical to the USDA mission on many fronts, helping American agriculture thrive—across the country and around the world.
Strategic Goal Area Project Highlights

**Enhance plant pest and disease survey**
- National surveys guide research on improving honey bee health and supporting bee populations.
  - With PPA 7721 funds, the University of Maryland, USDA's Agricultural Research Service, and apiculture specialists in 37 States and territories launched the National Survey of Honey Bee Pests and Diseases. Honey bees are vital for agriculture, but their populations are declining. This comprehensive, coast-to-coast survey for honey bee pests supplies baseline data needed to gauge colony health, quickly detect exotic pest introductions, and minimize their spread.

**Target domestic inspection**
- With their keen sense of smell, dogs can detect hidden agricultural products at an accuracy rate of more than 90 percent.
  - Every day, tens of thousands of parcels are shipped to the United States. Some of these parcels contain plant material that could harbor invasive pests. The California and Florida Agricultural Detector Dog Teams sniff out packages that contain illegal agricultural products, helping to stop invasive pests from coming into our country through the mail. Their inspections protect agriculture from harmful pests that might otherwise go undetected.

**Safeguard nursery production**
- Nursery certification ensures cleaner plants and easier interstate commerce.
  - Through the Systems Approach to Nursery Certification (SANC) pilot program, the National Plant Board and nursery industry groups promote a harmonized approach to nursery and greenhouse certification. This audit-based program improves sanitation processes at nurseries and unifies standards for the interstate movement of nursery stock. Long-term benefits include reduced pest risk, improved cost efficiencies, and more direct interaction between nurseries and regulators.

**Enhance mitigation and rapid response capabilities**
- Swift, coordinated response to a pest threat protects grapes, apples, and stone fruits and more than 70 types of ornamental and woody trees.
  - Funds are enhancing how USDA and our partners contain and suppress the spotted lanternfly, an invasive pest that feeds on a wide range of fruit, ornamental, and woody trees. Together, Federal, State, and extension partners have identified pest management tools crucial for long-term spotted lanternfly mitigation. PPA 7721 funds support research aimed at developing better detection tools, testing additional control measures, and exploring potential biological control options.

**Conduct targeted outreach and education**
- Clean plant programs protect U.S. specialty crops from harmful plant pests and diseases and ensure the global competitiveness of U.S. producers.
  - Florida’s Bureau of Citrus Budwood Registration produces disease-free trees for growers and nurseries. These trees are vital to Florida’s citrus industry because they provide the clean stock needed to produce large volumes of healthy new trees for groves. Although the Bureau’s close proximity to citrus production in central Florida is convenient for serving nurseries, it is challenging to operate in an area of high pest and disease pressure. The Bureau uses PPA 7721 funds to upgrade and equip its nurseries and provide a safer, more secure facility that allows for a more rapid response.

**National Clean Plant Network**
- Build interconnections and partnerships to enhance clean plant center capacity and therapy.
  - Start clean, stay clean.
  - The model informs decisions in plant protection programs and helps keep harmful pests out of the United States.
  - Funds helped USDA’s Agricultural Research Service develop a model to identify higher risk points of entry for invasive pests and prevent their introduction. This model uses U.S. census and foreign travel data to better understand exotic pest movement, improves surveys for early detection, and supports proactive resource planning for risk mitigation. USDA has applied the model successfully to citrus programs in Florida and expanded its use to California and Texas.

**New diagnostic tools help frontline field personnel accurately identify harmful plant pests, allowing for a more rapid response.**
- USDA and Colorado State University developed a droplet digital polymerase chain reaction (ddPCR) assay that provides an efficient, rapid, reproducible, and scalable method for processing Old World bollworm survey trap samples. While not established in the United States, this pest costs other countries millions of dollars annually to control. In the future, USDA can apply this technology to rapidly identify other invasive species as well.

**Public schools are using the Citizen Scientist program curricula as part of State middle school science standards.**
- The Department of Plant Industry at Clemson University used funding to build a citizen scientist network by creating the Junior Invasive Website. This initiative teaches middle school youth how to conduct surveys for invasive forest pests. Students learn the identification and biology of trees and insects as well as the importance of invasive biology. Citizen scientists are rewarded for continued survey work and pest reporting on the Junior Invasive Website.

**Gather and analyze available data**
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**End goal**
- **Harmonize clean plant standards**
- **Minimize spread of detected plant pests**
- **Develop pest management tools**
- **Mitigate pest and disease risk to promote safe trade**

**Use science to make informed decisions**
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**Raise awareness about high-risk pathways and pest control efforts**
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**Health, quickly detect exotic pest introductions, and minimize their spread.**
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Safeguard nursery production

- Develop management strategies
- Harmonize clean plant standards
- Mitigate pests and pathogens in nurseries

Target domestic inspection

- Inspect cargo for pests in interstate trade
- Efficiently move products and commodities
- Enhance inspections using dog teams

Conduct targeted outreach and education

- Increase understanding of plant pest management
- Raise awareness about high-risk pathways and pest control efforts
- Educate the public on preventing the spread of pests in nurseries

National Clean Plant Network

- Build interconnections and partnerships to enhance clean plant center capacity
- Conduct plant pathogen diagnostics and therapy
- Establish foundations of clean source plants

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The Department of Plant Industry at Clemson University used funding to build a citizen scientist network by creating the Junior Invasive Inspectors Program. This initiative teaches middle school youth how to conduct surveys for invasive forest pests. Students learn the identification and biology of trees and insects as well as the importance of invasive biology. Citizen scientists are rewarded for continued survey work and pest reporting on the Junior Invasive Website.

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Conduct targeted outreach

- Gather and analyze available data
- Develop risk-based models for decisionmaking
- Support rapid response

- Use science to make informed decisions
- Develop risk-based models for decisionmaking
- Gather and analyze available data

Enhance and strengthen pest identification and technology

- Deploy survey procedures and tools
- Accurately identify new pest threats faster
- Support rapid response

With their keen sense of smell, dogs can detect hidden agricultural products at an accuracy rate of more than 90 percent.

Every day, tens of thousands of parcels are shipped to the United States. Some of these parcels contain plant material that could harbor invasive pests. The California and Florida Agricultural Detector Dog Teams sniff out packages that contain illegal agricultural products, helping to stop invasive pests from coming into our country through the mail. Their inspections protect agriculture from harmful pests that might otherwise go undetected.

Nurseries in states like Colorado and Texas have used PPA 7721 funds to purchase dog teams and upgrade and equip their greenhouses and facilities. These teams are able to quickly and efficiently inspect thousands of truckloads of plant material from the West Coast and move them throughout the United States.

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This publication supersedes Program Aid No. 2180, “2014 Farm Bill Section 10007: Strengthening Our Nation’s Ability To Safeguard U.S. Specialty Crops, Agriculture, and Natural Resources,” which was published in September 2015.

United States Department of Agriculture

Plant Pest and Disease Management and Disaster Prevention Program
Under this program, funding is available for cooperators in all U.S. States and territories. This includes State and Federal agencies, Tribal nations, universities, nongovernmental organizations, and private entities. Funded projects are organized around specific goal areas that represent critical needs and opportunities to strengthen, prevent, detect, and mitigate invasive pests and diseases.

National Clean Plant Network
Each year, at least $5 million of the PPA 7721 funding goes to the NCPN. Network funding supports established university and government clean plant centers to develop, maintain, and provide foundation stock of select specialty crops. Industry and others use the stock material to start or regrow clean plant orchards, vineyards, groves, and other commercial plantings.

Project Funding
The U.S. Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service (APHIS) provides funding through the Plant Pest and Disease Management and Disaster Prevention Program and the National Clean Plant Network (NCPN) programs under the authority of the Plant Protection Act’s Section 7721.