

PPQ 2024 Annual Report

Pest Detection

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Introduction

The goal of programs funded by Pest Detection is to survey and evaluate the presence or absence of plant pests and diseases of significance in the United States. This information is the basis of PPQ's efforts that preserve economic opportunities for farmers (i.e., interstate commerce and international trade) and safeguard U.S. agricultural and natural resources from the risks associated with the entry, establishment, or spread of plant pests, diseases, pathogens, and noxious weeds. The programs collaborate with Federal agencies, State departments of agriculture, Tribes, academic institutions, and industry partners in all 50 States and several U.S. Territories to conduct activities.

Cooperative Agricultural Pest Survey

PPQ and its cooperators carry out plant pest surveys through programs funded by the pest detection line item, including the Cooperative Agricultural Pest Survey (CAPS) program. APHIS provides national coordination, develops policies and procedures for surveys, and provides funding to cooperators to conduct surveys through CAPS.

Programs funded by Pest Detection also coordinate development of survey tools for high-risk pests. In FY 2024, PPQ continued developing suitability maps to help State cooperators determine which high-risk pests to target for survey efforts. PPQ completed 9 maps during FY 2024 for pests of concern, bringing the total number of maps to 33. Overall, programs funded by Pest Detection enable PPQ and its cooperators to conduct surveys and collect data about pests, and use the resulting data to make decisions aimed at averting economic and environmental damage. While many entities are involved in protecting crops and resources, PPQ verifies that U.S. products for export do not pose risks to other countries.

In FY 2024, PPQ and cooperators in 50 States and 4 Territories conducted surveys targeting a total of 202 unique pests, including 95 out of the 103 pests PPQ's CAPS Committee identified as high risk. When combined with surveys funded by Plant Protection Act 7721, PPQ and cooperators targeted 102 out of the 103, or 99 percent, of identified high-risk plant pests. PPQ confirmed nine pests new to the United States based on the data collected during the FY 2024 surveys; however, none required Federal regulatory action. PPQ is evaluating and/or responding to approximately 45 pests detected in prior years.

Approach to Pest Detection

Evaluating these detections allows PPQ and State officials to determine whether regulatory or mitigation measures are necessary to manage the potential impacts of the pests or diseases. In consultation with stakeholders, PPQ determined 22 pests do not require regulatory measures and changed the regulatory pest status from quarantine to non-quarantine. In addition to providing data for determining when pest response activities are needed in the United States, PPQ uses the survey data to support U.S. farmers' access to export markets. In FY 2024, PPQ used the data in bilateral trade discussions, pest risks assessments supporting U.S. exports, and issuance of phytosanitary certificates.

Early pest detection is important to avert economic and environmental damage. In addition to lost farm revenues and damage to ecosystems, the mitigation costs can reach millions of dollars once a pest becomes established or spreads significantly. While many entities are involved in protecting crops and resources, PPQ verifies that U.S. products do not pose risks to other countries. Pest surveys conducted through the CAPS program demonstrate absence of a pest and are used in some cases to address importing countries' phytosanitary requirements and retain access to foreign markets.

Canine Detection and Surveillance

In FY 2024, PPQ continued developing canines for pest surveillance efforts, focusing on Asian longhorned beetle (ALB), box tree moth (BTM), Japanese beetle (JB), Oriental fruit fly (OFF), and spotted lanternfly (SLF). PPQ provided funding to Auburn University College of Veterinary Medicine's Canine Production Sciences program for the ALB, SLF, and JB projects. As a result, Auburn University will transfer two SLF- and three ALB-trained detector canines to PPQ in early FY 2025. Due to challenges securing JB training materials and field locations, Auburn continues training and testing the use of canines to detect JB larvae as part of an effort to prevent the pest from becoming established in western states. PPQ also supported the Pennsylvania Department of Agriculture to initiate a pilot project to cross-train SLF canines to detect BTM, and to develop a new SLF detector canine.

PPQ's National Detector Dog Training Center (NDDTC) cross-trained two existing Mexican fruit fly (Mexfly) canines to detect OFF. APHIS deployed the canines to assist with the fruit fly emergency programs in California (OFF) and Texas (Mexfly). The program continued to fund existing SLF detector canines in North Carolina and Pennsylvania and deployed three canine teams to Florida to assist with the cooperative APHIS and Florida Department of Agriculture and Consumer Sciences (FDACS) giant African snail eradication (GAS) program.

The program initiated two projects to develop canine training tools based on the odor profile of the target pest (GAS and fruit flies). In FY 2024, NDDTC also supported training and recertification for several stakeholders, including offering three agricultural detector canine handler trainings to the California Department of Food and Agriculture (CDFA), FDACS, and Guam Customs and Quarantine, and completed the annual recertification of canines for CDFA and FDACS.