

PPQ 2022 Annual Report

Strengthening Pest Exclusion Abroad

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Agricultural Quarantine Inspection

The U.S. Department of Agriculture's Plant Protection and Quarantine (PPQ) program and the Department of Homeland Security's Customs and Border Protection (CBP) safeguard U.S. agricultural and natural resources from the introduction of invasive pests and diseases through the Agricultural Quarantine Inspection (AQI) program. PPQ assesses the risks associated with international trade and specific imported agricultural products and develops import regulations to exclude foreign pests and diseases and protect U.S. agriculture.

In addition, the Agency conducts off-shore pest risk reduction activities, including foreign commodity pre-clearance programs; trains agricultural inspectors and detector dog teams to work at U.S. ports of entry; inspects and takes action as necessary on imported plant propagative materials; monitors the fumigation of arriving containers and cargo to mitigate pest risks; conducts trade compliance activities to detect violations of PPQ' import regulations and prevent smuggling; and provides the scientific

support necessary to carry out these activities and those carried out by CBP, including, among other things, the authoritative and timely identification of pests necessary to determine whether regulatory actions on imported products are required.

PPQ collects AQI user fees under the authority of The Food, Agriculture, Conservation, and Trade Act of 1990, to recover costs for services provided by APHIS and CBP associated with preclearance inspections of passengers and the port-of-entry arrival of commercial vessels, trucks, loaded railroad cars, aircraft, and passengers entering the United States from a foreign destination. In FY 2022, AQI user fee collections increased over the previous year as travel restrictions and requirements associated with COVID-19 were lifted or eased in many countries, including the United States. However, collections were still approximately 25 percent lower than in FY 2019, the last full fiscal year prior to the pandemic. To ensure that the program could continue operations to prevent the entry of foreign pests and diseases, the FY 2022 Appropriations Act, Consolidated, provided \$250 million for the AQI program.

PPQ inspectors oversee the preclearance of certain commodities by inspecting shipments for export in the country of origin, monitoring treatments where required, or by monitoring systems approaches for pest mitigation (a combination of integrated pest management practices used in the field and after harvest). In most cases, exporters of the pre-cleared commodity cover the costs of this PPQ service through trust funds established for this purpose.

PPQ also receives appropriated funding for pre-departure inspections of passengers and cargo traveling from Hawaii and Puerto Rico to the continental United States to prevent the introduction of non-native agricultural pests and diseases into the continental United States while facilitating the movement of travelers and agricultural goods. PPQ inspects all passenger baggage leaving these islands because of the risks associated with pests of fruits and vegetables grown in these areas. When inspectors identify an item that poses a specific risk, they take immediate action to prevent the entry of materials that could harbor the pest or disease in question. This action prevents damage to the country's agricultural industry and negates the need for cost control and eradication programs. PPQ also partners with industry groups and State and Commonwealth counterparts to facilitate the safe movement of cargo. In Hawaii, the State Department of Agriculture conducts nursery inspections and certifies nursery stock on APHIS' behalf for shipment to the continental United States.

Pre-Clearance and Offshore Risk Reduction

One of the most effective ways to facilitate the safe movement of commodities into the United States is to address pest threats where they originate. In FY 2022, PPQ precleared 2.82 billion pounds of 74 different fresh fruits and vegetables from 19 countries before they arrived in the United States. Additionally, PPQ inspected 2.04 billion pounds of avocados in Mexico as a part of a systems approach to facilitate safe trade. PPQ has overseen this program since 1997, and the program accounts for about 87 percent of avocado imports to the United States. PPQ also precleared 2.2 million pounds of cut flowers, bulbs, and perennials from Chile and 1.1 billion bulbs and perennials from the Netherlands, United Kingdom, Belgium, and South Africa. This offshore work, which importers fully fund, allows inspected and precleared perishable products to enter through the U.S. ports of entry without delay.

PPQ conducts certain inspections and certifications overseas to verify that treatment or production facilities meet our standards and regulatory requirements to help protect U.S. plant health from pests that could move into the United States with high-demand, large-volume commodity imports. In FY 2022, APHIS certified a total of 15 new treatment facilities—2 new irradiation facilities (India, Vietnam), 5 new hot water treatment facilities (Peru, Chile, Ecuador), and 8 new fumigation treatment facilities (Chile)—and certified upgrades to 6 previously certified hot water treatment facilities. In total, APHIS monitored 282 treatment facilities in 17 countries, including 7 irradiation, 3 cold treatment, 127 fumigation, 141 hot water treatment, 2 Niger seed facilities, and 2 soapy water and wax facilities. The majority of these treatment facilities are part of the preclearance programs.

Through audit-based monitoring programs, APHIS oversees almost 90 commodity programs that mitigate pests before they reach U.S. ports. Of these, 12 programs require annual audits of all or a portion of their facilities. PPQ completed 50 audits and recertifications, including 16 *Ralstonia* exclusion program facilities for annual geraniums, 7 offshore greenhouse certification program facilities, and 16 clean stock program facilities for *Dracaena* (a genus that includes many popular houseplants). These three programs alone allowed for the safe import of 702 million propagative plant units with a wholesale worth of \$188 million.

To help the U.S. military prevent the spread of foreign animal diseases and plant pests, PPQ worked with the U.S. Department of Defense to inspect 39,216 shipments of personal goods (17,994 household goods, 8,817 unaccompanied baggage, and 12,405 vehicles) and 1,273,286 pieces of cargo from 18 countries before they returned stateside. APHIS completed annual evaluations and recertifications of 115 military preclearance programs in 18 countries in Europe and Africa, ensuring that these programs meet all administrative, programmatic, and safeguarding requirements. APHIS trained 109 military service members to manage these programs locally in Europe and Africa.

Defoliating moth species from Asia, or the flighted spongy moth (FSM) species complex made up of five *Lymantria* species, present an existential threat to U.S. forests. These moths can lay their eggs on the superstructure of maritime vessels, posing a threat of spreading the pest into new territories. In

partnership with CBP, PPQ coordinated the inspection in FY 2022 of approximately 4,900 vessels that had visited high-risk ports within the last 24 months. Vessels can request a predeparture FSM inspection certificate from 28 national plant protection organization (NPPO)-accredited certification bodies in highrisk countries, including Russia, China, Korea, or Japan. APHIS coordinates on the standard for these inspections with its counterparts in Canada, Australia, New Zealand, and Chile. CBP reports at least 3,832 (79 percent) of inspected vessels presented these certificates at U.S. ports of entry. Around 4 percent of ships without a predeparture FSM inspection certificate had suspect FSM compared with 0.4 percent for ships with certificates.

PPQ also helps keep plant pests and diseases offshore with cooperative programs like the Greater Caribbean Safeguarding Initiative (GCSI), the Don't Pack a Pest Program (DPAP), and the PestLens website and early warning system. The GCSI is a cooperative framework of 42 NPPOs in the Caribbean region that funded 9 safeguarding projects to mitigate pest risk near U.S. borders in FY 2022. The DPAP provides traveler education materials in participating countries to stop the introduction of pests and diseases in personal baggage. PPQ added a tenth DPAP program this year and continues to work with 17 NPPO partners to develop programs in their countries. Finally, in cooperation with North Carolina State University, PPQ provided 39 pest alert notifications to more than 3,000 registered users of PestLens, including 150 new pest-related articles, and added 119 new pests to the Global Pest and Disease Database. These systems serve as a resource for PPQ and other plant health regulatory officials that conduct plant health risk assessments and develop inspection policies for imported goods, among other things.

Risk Analysis and Methods Development for Pest Exclusion

PPQ develops pest risk analyses and epidemiological approaches to support and improve pest exclusion programs and decision making. In FY 2022, PPQ's Plant Pest Risk Analysis (PPRA) unit completed approximately 278 risk analyses associated with imports, exports, invasive pest threats, and other programmatic requirements. This total includes 33 analyses to open, expand, or maintain export markets for U.S. producers and 48 risk assessments for import requests from foreign countries. PPRA's work also included evaluations of 10 newly detected pests by the New Pest Advisory Group, 9 pathway analyses and spread models, 2 economic analyses supporting operational and policy decisions, and 8 New Pest Response Guidelines to proactively prepare for emergency responses. These products identify potentially harmful plant pests and diseases and help PPQ decide what mitigating actions to take in order to prevent their entry into or limit their spread or economic impact within the United States.

APHIS' Plant Pathogen Confirmatory Diagnostics Laboratory (PPCDL) develops, adapts, validates, and utilizes diagnostic methods for the detection of regulated plant pathogens. In FY 2022, PPCDL supported the development and implementation of innovative molecular diagnostic tools at ports of entry for *Ralstonia*, a pathogen that cannot be detected visually.