Introduction

While global trade brings tremendous benefits, it also brings risk. Potentially harmful plant and animal pests and diseases can hitchhike on or in the plants, fruits, vegetables, and other products we trade. To help the world move billions of dollars in commodities without spreading invasive pests and diseases, PPQ works with countries around the globe to promote a safe, fair, and predictable trade system. This system, built on internationally and regionally harmonized, science-based plant health measures, not only reduces pest risks, but also helps to create a level playing field for U.S. products abroad.
Creating a Safe, Smoothly Functioning Trade System

PPQ sits at the negotiating tables of two of the world’s renowned plant health standard-setting organizations: The International Plant Protection Convention (IPPC) and the North American Plant Protection Organization (NAPPO). Through these forums, PPQ maintains and builds important international and regional relationships that help the United States advance plant health protection standards and harmonized regulatory approaches for safely expanding global agricultural trade.

Promoting Safe Trade Through Effective International Collaboration

Strategic international relationships are critical to achieving a safe, fair, and predictable trade system. These relationships create a stronger basis for addressing trade-related pest and disease threats, resolving plant-health trade problems, establishing science-based trade standards, and advancing mutually beneficial trade goals. Despite the pandemic, PPQ successfully worked with the IPPC’s other 183 contracting parties to continue progress on the organization’s current work program to protect the world’s plant resources against invasive pests and promote safe trade. We collaborated closely with our partners to ensure IPPC action and forward momentum on various subjects, including draft standards. PPQ also actively advanced and influenced the IPPC work program through its ongoing membership in the IPPC Bureau and leadership on important strategic committees. International discussions moved forward a new, 10-year IPPC draft strategic framework and the development of long-term funding mechanisms. PPQ also positioned key U.S. experts on various technical committees, particularly those related to standards setting.

At the regional level, PPQ worked effectively with Canada and Mexico through the North American Plant Protection Organization (NAPPO) to advance key regional standard-setting and implementation
initiatives. Our goal is to strengthen the North American perimeter against foreign pests and facilitate safe agricultural trade. PPQ, in collaboration with our partners, successfully advanced NAPPO’s 2021 work program, which focused on seeds and diagnostics, in-transit consignments, forestry, plants for planting, biological control, electronic phytosanitary certificates, the regional pest alert system, and lab accreditation. PPQ also actively influenced the NAPPO work program through its robust participation in strategic NAPPO governance committees and expert groups, using new approaches for effectively conducting business virtually. In addition, PPQ successfully positioned U.S. experts in key NAPPO expert groups. During 2021, more than 50 Agency and U.S. Government, State, academic, and industry experts served in over 17 active NAPPO initiatives, ensuring strong U.S. stakeholder involvement in standard-setting activities.

In March 2020, as a matter of priority, NAPPO launched an expert group including representatives from the NAPPO member nations, academia, and industry to develop a pilot project that would harmonize diagnostic protocols for the tomato brown rugose fruit virus, which can cause major fruit loss in tomatoes and peppers. The expert group has continued to make progress through virtual meetings necessitated by the pandemic. The pilot project could serve as a model for future regional harmonization on seed diagnostics.

PPQ also continued to actively support NAPPO’s Expert Group on International Year of Plant Health (IYPH) outreach and education efforts at the North American regional level by regularly publishing articles on NAPPO’s safeguarding and trade facilitation work. Through NAPPO, PPQ strengthened strategic and technical dialogue, as well as collaboration, with key international counterparts and regional plant protection organizations—particularly the European and Mediterranean Plant Protection Organization and the Inter-American Coordinating Group for Plant Protection.
Outside the IPPC and NAPPO, PPQ continued building influential relationships with important foreign colleagues to advance shared goals. For 30 years, PPQ has met regularly with the chief plant protection officers of Australia, Canada, and New Zealand. This strategic coalition, known as the Plant Health Quadrilaterals (or Quads), promotes safe trade concepts and influences the global plant health policy agenda. This year, the four Quad members agreed to coordinate strategies for advancing key issues. Some examples include influencing the global approach for managing pest risks associated with e-commerce and sea containers; climate change and plant health, and the IPPC’s potential future role in this area; implementing the new IPPC strategic framework; and introducing new concepts for monitoring emerging pest threats at the global level promoting updated risk management approaches that will ensure phytosanitary measures are based on and proportional to actual pest risks.

**Advancing the Global Use of Modern Technologies**

Internationally, PPQ has been instrumental in building the world’s first global electronic phytosanitary (ePhyto) system, which began operating in 2018 and is steadily being embraced worldwide.

Phytosanitary certificates are important documents attesting that a country’s plant or plant product exports meet the importing country’s plant health requirements. The ePhyto system makes their exchange fast, efficient, and fraud resistant.

This year, the adoption of ePhyto accelerated as more countries realized how the safe, fraud-resistant exchange of electronic certificates can facilitate the clearance of shipments at ports of entry, especially during the pandemic. In FY 2021, PPQ sent electronic export certificates to 54 countries, adding 16 trading partners. The United States sent 280,246 ePhytos to 50 trading partners, received 178,359
ePhytos from 21 trading partners, and assisted 32 trading partners on ePhyto providing training and technical assistance.

Helping the World Address High-Risk Pest Pathways

PPQ helps the global community cope with high-risk pest pathways such as sea containers and international seed trade. PPQ continues to help the global community tackle the high-risk pest pathway of sea containers. Sea containers, which travel the world, are a shared risk, which means they are a shared responsibility for us all. PPQ participated in the IPPC Sea Container Task Force, which completed its work in December 2021. The IPPC’s Secretariat has posted the report before the upcoming meeting of the Commission on Phytosanitary Measures.

NAPPO is participating in the North American Sea Container Initiative to reduce the plant-health risk posed by the sea container pathway. Its goal is to develop a joint, collaborative, and voluntary program for reducing the pest risks from this pathway. The initiative is also focusing on outreach and education globally, by reaching out to the NPPOs of the Americas and Asia, as well as international industry groups. PPQ strongly believes that tackling the problem at the regional level will be a solid first step toward a global solution.

We also hold monthly virtual meetings with a Sea Container group that includes Canada, Australia, New Zealand, and the United States. The group is putting together a work plan that will identify common risk areas among the four countries. We have been hosting multiple webinars with major international shipping and cargo organizations. In addition, we coordinated with industry and Australia and New Zealand to hold several webinars for international regulatory groups. Through these events, we are
gathering information from organizations across the container supply chain about how they can help clean up this critical pathway.

Regarding seed health, PPQ has been working to create a holistic systems approach to reduce pest risks associated with seed trade. By putting safeguards in place throughout the seed production system, we can keep seed clean and healthy from start to finish. This will not only prevent the spread of seedborne pathogens, but also facilitate seed trade by reducing potential phytosanitary obstacles. The IPPC created International Standard for Phytosanitary Management 38, “International movement of seeds,” to address this risk. That is also why, 5 five years ago, PPQ took the first steps toward creating a holistic systems approach to reduce pest risks associated with seed trade.

The approach is called the Regulatory Framework for Seed Health (or ReFreSH). It is based on the internationally recognized hazard analysis and critical control point system for reducing the risk of food safety hazards. ReFreSH leverages industry best practices for managing pest risk, making international seed movement safer. It will offer a more efficient and effective alternative to the consignment-by-consignment certification process we have now. We have worked with the American Seed Trade Association (or ASTA), other seed industry stakeholders, and trading partners to advance this important initiative. Taking their input into consideration, we prepared foundational documents outlining the standards and guidelines for participating in ReFreSH and solicited feedback from stakeholders on the participant manual and the accreditation standard.

We also began working with Chile’s national plant protection organization (NPPO), its national seed association, as well as ASTA and several seed companies on a pilot project. It will develop a systems approach for trade of small lots of seeds used for research and plant breeding programs. We received
documents from participating seed companies outlining their proposed systems approaches and have scheduled a meeting with the Chilean NPPO in early April 2020.

**Securing Economic Opportunities Abroad for U.S. Products**

U.S. agricultural exports bring significant value to our economy. In FY 2021, international sales of U.S. agricultural products totaled $172 billion. These exports created a trade surplus of about $9 billion, helping to energize our economy and support more than 1 million American jobs. PPQ’s work to negotiate science-based phytosanitary requirements with foreign trading partners and remove plant health-related trade barriers is essential to helping America’s farmers reach new customers and ensuring that U.S. products are treated fairly in the global marketplace.

**Sustaining and Expanding Key Export Markets**

Each year, PPQ conducts technical negotiations with countries around the world to open, expand, or maintain export markets for U.S. commodities. In addition, we provide technical expertise to the Office of the U.S. Trade Representative (USTR) and USDA’s Foreign Agricultural Service (FAS) as they pursue other diplomatic channels, such as the World Trade Organization, to help resolve trade barriers for U.S. exporters.

In our technical negotiations, we use science, data, and international guidelines to remove plant health-related barriers to American products. In FY 2021, PPQ completed approximately 278 risk analyses associated with imports, exports, invasive pest threats, and other programmatic requirements. This total includes 44 analyses to open, expand, or maintain export markets for U.S. producers and 50 risk assessments for import requests from foreign countries.
In FY 2021, we completed 23 bilateral and 30 technical meetings to establish practical, science-based phytosanitary requirements for the safe trade of live plants and fresh fruits and vegetables. Through these meetings, we helped the United States realize significant trade opportunities, opening new export markets and expanding current markets for the U.S. industry, total estimated value $129 million.

Certifying the Health of U.S. Exports

U.S. exporters rely on PPQ and its State and county partners to inspect and certify plants and plant products being shipped to markets overseas. These export certificates attest that the United States is presenting products that meet the importing countries’ requirements. Thanks to PPQ’s electronic certification system, the process of issuing phytosanitary certificates is now fast, efficient, and fraud-resistant. PPQ also maintains a database of foreign countries’ plant and plant product import requirements. With these tools, PPQ export certification specialists and authorized State and county cooperators issued more than 703,800 certificates to facilitate the export of U.S. plants and plant products to over 209 international destinations in FY 2021.