



Mark Your Calendars: International Symposium for Risk-Based Sampling

Contents

International Symposium on Risk-Based Sampling	1
“ReFreSH”: A Partnership Between the Seed Industry and Government	2
Raising Plant Protection Awareness Through the International Year of Plant Health	3
Year of Plant Health Steering Committee Meeting	3
28th Technical Consultation Among Regional Plant Protection Organizations	4
Technical Panel for the Glossary Meeting	5
Forum for Regional and International Agricultural Health Organizations on the Status of Risk Assessment in the Americas	6
NAPPO Expert Group Face-to-Face Meeting	6
Putting Sterile Insect Technique into the Modern IPM Toolbox	7
New NAPPO Expert Group Members	8

Confirmed Symposium dates are June 26-30, 2017!

The purpose of the International Symposium is to bring together government agencies, researchers and analysts, industries and international organizations to collaborate in the development and implementation of Risk-Based Sampling (RBS) methods for phytosanitary inspection. NAPPO and its key partners recognize the need for phytosanitary measures to be technically justified and based on phytosanitary considerations. Risk-Based Sampling provides a method for countries to implement International Standards for Phytosanitary Measures (ISPMs) developed under the International Plant Protection Convention (IPPC) and with obligations according to the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

NAPPO and its key partners are pleased to announce that the International Symposium for RBS will be held in **Baltimore, Maryland**, at the **Hilton Baltimore Inner Harbor**.



Registration for the Symposium will open in late March 2017. Look for more information on the Agenda and venue details by visiting the NAPPO website at NAPPO.org.

“ReFreSH”: A Partnership Between the Seed Industry and Government

The U.S. seed industry is working closely with the U.S. National Plant Protection Organization [USDA-APHIS Plant Protection and Quarantine (PPQ)] to establish a partnership aimed at managing potential phytosanitary risks associated with the international movement of seed. The program, “Regulatory Framework for Seed Health” or “ReFreSH,” is an initiative that will focus on regulating seed via recognition of seed quality management practices that reduce or manage phytosanitary risk rather than regulating each consignment or shipment.

The foundation of the ReFreSH program will be accreditation of seed companies based on their seed quality management practices. The program was created to address the continuing growth of seed trade around the world, and the complexity of seed production practices.

Along with the increase in seed movement around the world, there is more concern about seed as a pathway for the introduction of quarantine pests. National plant protection organizations (NPPOs) have developed disparate solutions to address this issue, ranging from specific requirements for testing, treatments or other management practices.

The difficulty of having to meet disparate requirements of different countries has led to greater interest in developing broad accreditation systems that can be recognized by different NPPOs. PPQ considered various alternative systems that have been used for other types of agricultural products. The philosophy behind programs that incorporate systems approaches is a “start clean, stay clean” approach. This would include requirements for documentation systems, testing to verify system integrity and accounting for complicated movement patterns. The program leverages industry best practices currently used in seed production.

Participating companies would be issued a “clean seed document.” As the program is developed, PPQ is working with other NPPOs to gain acceptance of this model. Ultimately, the goal is to streamline requirements for seed companies to promote safe international movement of seed while reducing the regulatory burden on the industry.

If your company would like to learn more about ReFreSH, contact Ric Dunkle, American Seed Trade Association (rdunkle@betterseed.org, 703-226-9275).



2016 NAPPO Annual Meeting presentations are now available on the [NAPPO website](#).

Raising Public Awareness & Support for Plant Protection Through the International Year of Plant Health

In March 2016, the International Plant Protection Convention (IPPC), including plant protection officials from 182 member governments, reached agreement to seek a United Nations (UN) proclamation for an International Year of Plant Health (IYPH) in 2020. The purpose of an IYPH is to raise public awareness and support for plant protection going into the next decade. An IYPH will improve the public's understanding of the importance and impacts of plant health in addressing issues of global importance, including food security, threats to the environment, safe international trade and economic development.

The approval process for the IYPH in 2020 is currently underway at the UN Food and Agriculture

Organization (FAO). The UN FAO will vote in July 2017 whether to move this forward to the UN General Assembly, formally requesting proclamation of the IYPH 2020. Many of you have asked about what you can do to support this important initiative. You can write a letter of support to your country's official representative or delegate to the FAO before the FAO Conference meeting in July 2017.

Contact Stephanie Dubon (USDA-APHIS-PPQ) at stephanie.m.dubon@aphis.usda.gov or Stephanie Bloem (NAPPO Executive Director) at stephanie.bloem@nappo.org if you have any questions about the International Year of Plant Health in 2020.

NAPPO Attends 1st Meeting of the International Year of Plant Health Steering Committee

From November 9-11, 2016, the 1st meeting of the International Year of Plant Health Steering Committee (IYPH StC) was held at the Food and Agriculture Organization (FAO) headquarters in Rome, Italy. The IYPH StC brought together representatives from the seven FAO regions (Africa, Asia, Europe, Latin America and Caribbean, Near East, Southwest Pacific and North America), the Regional Plant Protection Organizations (RPPOs) and the IPPC Secretariat. The goal of the meeting was to expand the list of outputs outlined for the IYPH StC at the 11th Commission of Phytosanitary Measures (CPM-11) in 2016 and develop a plan detailing the logistics to implement them. The NAPPO Technical Director, Alonso Suazo, represented the RPPO for North America.

The IYPH StC generated a list of measurable



outcomes for each objective outlined at CPM-11 that will gain support for and serve to monitor and evaluate the IYPH initiative. They established sub-committees that will pursue extra budgetary funding and focus on educational and promotional materials to raise awareness for this initiative. The next STC meeting will take place in mid-April.

NAPPO Attends 28th Technical Consultation Among Regional Plant Protection Organizations

The 28th Technical Consultation Among Regional Plant Protection Organizations (TC RPPO) was held from November 14-18, 2016, at the Hotel Golden Tulip Farah in Rabat, Morocco. All nine RPPOs were represented (see below), alongside a representative from the Caribbean Agricultural Health and Food Safety Agency (CAHFSA).

- Asia and Pacific Plant Protection Commission (APPPC),
- Comunidad Andina (CAN),
- Comité Regional de Sanidad Vegetal del Cono Sur (COSAVE),
- European and Mediterranean Plant Protection Organization (EPPO),
- Inter-African Phytosanitary Council (IAPSC),
- North American Plant Protection Organization (NAPPO),
- Organismo Internacional Regional de Sanidad Agropecuaria (OIRSA),
- Pacific Plant Protection Organization (PPPO), and
- Near East Plant Protection Organization (NEPPO), our host for the meeting.

Mr. Jinguang Xia, Secretary of the International Plant Protection Convention (IPPC) opened the meeting and emphasized the important role played by RPPOs in phytosanitary matters around the world. The meeting was facilitated by Mr. Orlando Sosa and Ms. Sarah Brunel, also from the IPPC Secretariat. Mr. Mekki Chouibani, NEPPO Executive Director, chaired the meeting.

Each RPPO presented an update on their organization's structure and activities including technical and capacity development projects, emerging pests, and proposals for further collaboration. The RPPOs discussed working together on pest issues common to their regions including development of guidance on contingency plans and approaches to deal with huanglongbing, *Xylella fastidiosa*, *Fusarium oxysporum* f. sp. *cubense*, and Tephritid fruit flies. The RPPOs also finalized the revision of the RPPO roles and functions document that will be presented to CPM-12 for adoption. The RPPOs reaffirmed their support for the FAO-IPPC International Year of Plant Health initiative and some announced specific actions to promote this initiative in their regions.



NAPPO Attends the IPPC's Technical Panel for the Glossary

The 2016 Technical Panel for the Glossary (TPG) meeting was held December 12-15, 2016 in Rome, Italy. The meeting was attended by all eight TPG members representing the six official FAO languages. Stephanie Bloem, the NAPPO Executive Director and a TPG member since 2014, represents English, alongside John Hedley from New Zealand and Ebbe Nordbo from Denmark.

The TPG works on the development and revision of phytosanitary terms in the Glossary of Phytosanitary Terms (ISPM 5). The TPG reviewed two draft International Standards for Phytosanitary Measures (ISPMs), responded to comments from the first consultation on the 2016 Draft Amendments to the Glossary and revised their General Recommendations on consistency of terms. The TPG also discussed a number of other Glossary terms, some of which will be compiled for the 2017 Draft Amendments to the Glossary.

The meeting was enriched through the discussions with the representative of the ePhyto Steering

Group. The discussions centered on product names and descriptions used in phytosanitary certificates (PCs) and the fact that they are not fully aligned with ISPM 5 terminology. Electronic PCs need to be issued through a computerized system, and standardized product descriptions for commodities traded worldwide are essential. Standardization will also facilitate harmonization of the issuance of paper PCs. The TPG felt that practical terms for products and their descriptions should prevail over the Glossary terminology, and that it was essential to link product descriptions to the intended use of the commodity. The interaction between the ePhyto Steering Group and the TPG was an excellent example of cross-thematic collaboration under the IPPC framework. The discussions and recommendations will be shared with the ePhyto Steering Group and with the Standards Committee at their May 2017 meeting.



NAPPO Participates in Forum for Regional and International Agricultural Health Organizations on the Status of Risk Assessment in the Americas

On December 12, 2016, NAPPO participated in the Forum for Regional and International Agricultural Health Organizations on the Status of Risk Assessment in the Americas virtual event organized and sponsored by the Inter-American Institute for Cooperation on Agriculture (IICA). The forum's objective was to share regional information in order to improve capacities for sanitary and phytosanitary risk assessment in the Americas. Participants included representatives of the Southern Agricultural Council (CAS), the Caribbean Community (CARICOM), the Plant Health Committee of the Southern Cone (COSAVE), the

International Regional Organization for Plant and Animal Health (OIRSA), the Standing Veterinary Committee of the Southern Cone (CVP), and NAPPO. The NAPPO Technical Director briefly explained the structure and function of NAPPO and provided details on the resources devoted to plant health risk assessment in each NAPPO member country. Other organizations pointed to the importance of risk analysis in their regions and the need to overcome limitations including lack of training and insufficient resources, particularly access to information. The forum was conducted via Webex.

Extremely Productive NAPPO Expert Group Face-to-Face Meeting

On January 24-25, 2017, ten members of the NAPPO Forestry Systems Approach Expert Group (EG) met at APHIS-PPQ headquarters in Riverdale, MD. The objective was to finalize the draft RSPM draft on "Use of systems approaches for managing pest risks associated with the movement of forest products." Meeting participants including industry, non-government organizations and EG members from all NAPPO countries. Some EG members

joined by teleconference. Additional APHIS-PPQ experts provided guidance and perspective on terminology, international standards and other issues. The meeting, chaired by Dr. Eric Allen, resulted in the completion of the draft RSPM to be submitted for country consultation in 2017. In addition, progress was made on drafting the companion guidance document to this RSPM.



Putting Sterile Insect Technique into the Modern IPM Toolbox: Over 20 years of successful area-wide integrated pest management in Canadian pome fruit

The sterile insect technique (SIT) has been successfully used for decades to control or eradicate numerous pests in a diversity of crop and habitats across the globe. Despite this proven success, SIT is often considered a curiosity rather than an effective, environmentally friendly technology that dovetails into many modern integrated pest management (IPM) programs.

The Okanagan-Kootenay Sterile Insect Release (OKSIR) Program has conducted a successful area-wide IPM program in southern British Columbia, Canada for over 20 years. Here, SIT is the primary tool that controls the key pest of pome fruits in the region, the codling moth (*Cydia pomonella*). Chemical, cultural, and biological techniques that complement SIT are also used as needed. This program is supported by close monitoring of codling moth populations in orchards and adjacent urban properties; enforcing suppression of codling moth infestations in urban areas; removal of derelict orchards, wild host trees, and poorly managed host trees in urban areas; and increased public awareness and education.

The Program results are impressive. Successful collaboration between the OKSIR Program, the pome fruit industry, area residents, and various government organizations have reduced codling moth populations by 94% and codling moth damage to <0.2% of fruit damaged in >90% of the orchards in the program area. Local pesticides sales data estimate a 96% reduction in amount of active ingredient used against the codling moth since 1991. The OKSIR Program exemplifies the effectiveness of SIT in a modern, area-wide IPM program. Given the advantages of the area-wide approach of OKSIR, the current cost of the program to control the pest is a fraction of the cost of alternative solutions. A 2014 benefit-cost analysis of the Program determined that for every \$1 spent on the Program, there is \$2.50 in benefit for the producers and the region's communities. The SIR Program won the International Integrated Pest Management (IPM) Award of Excellence in 2015.

As globalization makes relative distances between regions smaller, opportunities to leverage existing SIT infrastructure increase. The codling moth rearing facility in Osoyoos, BC, Canada has the capacity to produce 780 million sterile codling moths annually, only a part of which is used seasonally to treat 3,400 hectares of pome fruit made up of small orchards intermixed with residential areas in the Okanagan Valley. The OKSIR Program is exploring opportunities to diversify its business model to provide added value to local stakeholders by taking advantage of the unique governance structure of this community-based area-wide IPM approach. Today, destructive insect pests are migrating to new habitat throughout the world as a result of climate change and global trade. These new threats must be managed in ways that protect both the agri-food industries, and the natural environments in which



SIR staff release sterile codling moths by driving ATVs throughout an orchard block.

the industries operate. The OKSIR Program stands out as a highly effective and easily transferrable model to meet these challenges. Indeed, OKSIR is one of the very few IPM programs in the world that is able to combat infestations across multiple jurisdictions, using environmentally-friendly, cost-effective methods that are based on proven technology.

For more information on the OKSIR Program, visit oksir.org.

*Cara Nelson
General Manager and Director of Business
Development OKSIR Program*

Picture of the Osoyoos region, showing lakes and urban/rural properties.



Welcome to New NAPPO Expert Group Members

Ingrid Asmundsson earned a BA from the University of Colorado at Boulder, with a double major in Biochemistry and Environmental, Population and Organism Biology. She received a Ph.D. from the University of New Mexico for work on the collection, identification and phylogenetic relationships of Eimeriid parasites of Guatemalan reptiles and amphibians. Ingrid did post-doctoral work with USDA-ARS in Beltsville, MD, before taking a position as a Visiting Professor at the

University of Maine teaching genetics and zoology. Subsequently, Ingrid joined the APHIS-PPQ Molecular Diagnostics Laboratory in Beltsville, MD as a Molecular Biologist. From there she transferred to the Pest Permitting Branch where she evaluated containment facilities for arthropod permits. She joined the Preclearance and Offshore programs staff in 2017. Ingrid is a new member of the NAPPO Expert Group on Asian Gypsy Moth. Welcome, Ingrid!

Walter Gutiérrez was born in Lima, Peru. He received his BSc in Agronomy from National Agrarian University La Molina in Lima. After graduation, he worked as plant breeder in the Small Grains Program at La Molina. He joined the Plant Pathology Department in 1984 teaching and doing research on ornamental plants, small grains and native cereals in the Andean region of his country.

Walter moved to Raleigh, NC in Dec. 1991. From 1992-1994 he worked at the North Carolina State University Plant Disease and Insect Clinic Laboratory. He earned a Ph.D. in Plant Pathology

from NCSU in 1997. Walter joined the Tobacco Extension Program as post doc and later senior researcher. During that time, he was responsible for development of control strategies for the management of different diseases that affect production of tobacco transplants in greenhouses and in the field.

Walter joined the APHIS-PPQ Plant Epidemiology and Risk Analysis Laboratory (PERAL) in 2007. He has authored many risk analyses that have resulted in the publication of proposed and final rules and the opening of export markets. Walter has received

several awards from the APHIS administrator for his analytical contributions. He has participated in many cross-functional working groups. Currently, Walter is Assistant Director of PERAL responsible for the Exports and harmonization group. Walter has been invited to participate as a subject matter expert in bilateral trade discussions and several trade dispute delegations.

When not at work, Walter enjoys gardening and growing orchids. Walter is a new member of the NAPPO Expert Group on Diversion from Intended Use. Welcome, amigo!



Richard N. Johnson is a native of the state of Delaware and completed his undergraduate degree in Entomology and Applied Ecology at the University of Delaware, followed by M.Sc. and Ph.D. in Entomology at the University of Florida. After graduation, he was commissioned as a U.S. Army officer and over the course of the next 29 years held a number of assignments as a military entomologist, eventually as the Director of Pest Management for the Department of Defense. He served in several overseas assignments. He came to USDA-APHIS Plant Protection and Quarantine (PPQ) in 2014 where he is a National Policy Manager managing various domestic pest regulatory programs. Richard is an Adjunct Faculty Member of the Uniformed Services University for the Health Sciences.



Richard is also Board Certified in both Medical-Veterinary and Regulatory Entomology. He is married and has four children.

Angela McMellen Brannigan is a National Policy Manager on the Pest Management Staff for APHIS-Plant Protection and Quarantine where she is responsible for the Seed Health and Citrus Health Programs. She holds a M.Sc. in Zoology from Michigan State University and a Ph.D. in Forest Resources/Wildlife Ecology from the University of Georgia. Angela worked for APHIS-PPQ as a Trade Director for a number of years dealing mostly with Asian trade issues. Angela has also worked in academia, for state government, and in the private sector. Angela is a member of the NAPPO Expert Group on Seeds. Welcome, Angela!

