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COMMISSION ON PHYTOSANITARY MEASURES

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Special Topics Session: Sea Containers - Programme
Agenda item 14
Prepared by the IPPC Secretariat with summaries provided by speakers
English only

CPM-11 (2016) Special Topics Session: Sea Containers

Thursday 7 April 2016, 15:00-18:00, Plenary hall, FAO headquarters, Rome, Italy

Programme

(Updated 10 March 2016)

This document is providing information on the programme for the Special Topics Session on Sea Containers to be held during the eleventh session of the Commission on Phytosanitary Measures (CPM-11 (2016)), in supplement to the background information given in document CPM 2016/13. These two documents will help contracting parties prepare better for the Special Topics Session.

Contracting parties are reminded that they were invited to submit their views in advance to the IPPC Secretariat (ippc@fao.org) so they can be posted on the IPP as information documents (INF). The deadline to submit such papers has been extended to 18 March 2016.

The programme for the Special Topics Session is detailed as follows and short summaries of the presentations to be given during the Session are available in Attachment 1.

1. **Introduction:** history and background information (refer also to document CPM 2016/13), by the IPPC Secretariat.
2. **Risks associated with the movement of sea containers:** role of sea containers in unintentional movement of invasive contaminating pests, and opportunities for mitigation measures, by Mr Eckehard G. Brockerhoff (Scion, New Zealand Forest Research Institute Institute).
3. **Logistics of movement of sea containers and the *Code of Practice for Packing of Cargo Transport Units (CTU Code)***¹
 - 3.1. Logistics of sea containers, by Mr Michael Patrick Downes (Container Owners Association).
 - 3.2. The *CTU Code* and other tools that could be developed, by Mr Bill Brassington (ETS Consulting).
 - 3.3. Remarks from Mr Loukas Kontogiannis (Maritime Safety Division, International Maritime Organization).
4. **Experiences from national plant protection organizations on checking or inspection of sea containers**
 - 4.1. Inspection of sea containers in the United States, by Ms Wendy Beltz (Animal Plant Health Inspection Service, United States Department of Agriculture).
 - 4.2. Experiences from the Chinese national plant protection organization on checking or inspection of sea containers, by Ms Guanghao Gu (Guangming Office of China Inspection and Quarantine –Shenzhen).
5. **Summary remarks** from Mr John Hedley (Steward for the draft International Standard for Phytosanitary Measures on *Minimizing pest movement by sea containers* (2008-001), New Zealand).
6. **Plenary questions and discussion.**
7. **Conclusions and decisions of the CPM on a way forward.**

¹ Revised in 2014 by the International Maritime Organization, the International Labour Organization and the United Nations Economic Commission for Europe, available at: <http://www.unece.org/trans/wp24/guidelinespackingctus/intro.html>

Attachment 1: Summaries of presentations

Section 2. Risks associated with the movement of sea containers: role of sea containers in unintentional movement of invasive contaminating pests, and opportunities for mitigation measures

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The volume of international trade is at unprecedented levels, and much of this is moved with intermodal containers ("sea containers"). An unwanted by-product is the transport of contaminants, including "contaminating pests", on the external or internal surfaces of sea containers, which may become invasive species. Contaminating pests found on sea containers, such as gypsy moth (*Lymantria dispar*), giant African snail (*Achatina fulica*), Argentine ant (*Linepithema humile*), and brown marmorated stink bug (*Halyomorpha halys*), threaten agriculture, forests and urban environments, and they cause substantial economic and environmental damage in many countries. Soil contamination of sea containers may contain seeds of invasive plants, nematodes and plant pathogens. We summarize records from sea container inspections carried out by quarantine officers as well as previous analyses of this pathway and evaluate the potential benefits of mitigation measures that would reduce infestations of sea containers with contaminating pests and soil contamination. There is a plethora of records of interception of contaminating pests with sea containers. Inspection records from the USA, Australia, China and New Zealand indicate that thousands of organisms from a wide range of taxa are being moved unintentionally with sea containers. Most data sources do not allow estimation of arrival rates of contaminating pests. However, inspection records of 116,701 consignments of empty sea containers arriving in New Zealand between 2010 and 2015 indicated a 9.7% exterior contamination rate and 5.0% interior contamination. A sea container hygiene system has been implemented in New Zealand for sea containers coming from several Pacific Island countries since 2006. The system involves sea container inspection, cleaning, verification, training, and prevention of contamination, and it resulted in considerably reduced infestation rates and overall cost savings. We assessed the potential benefits and costs of a proposed (draft) International Standard for Phytosanitary Measures 'Minimizing Pest Movement by Sea Containers'; this is likely to provide economic net benefits as a result of avoided 'damages', direct and indirect, caused by invasive species that are moved as contaminating pests and other contaminants associated with sea containers.

Section 3.1. Logistics of sea containers

Mr Michael Patrick Downes, Container Owners Association (COA), Senior Equipment Technical Expert, Centre Operations, Maersk Line, Invited expert on the IPPC Expert Working Group on Minimizing pest movement by sea containers (2008-001).

Container flows are complex and may involve multiple border crossings, handover of control and transport modes. There are many actors involved and the shipping company has little direct control or access to containers with the exception of repair depots, which are not always part of every trip. It is only at repair depots that containers can be inspected and cleaned as required.

If cleaning is carried it is possible for the cleaning event to be recorded in Shipping Company systems and thus be available as import information in the so-called BAPLIE file. However it must be noted that not every container passes through a repair depot before or after a trip, and before being dispatched for the next cargo. Likewise the recorded event date for any cleaning could be quite remote from the date of packing or subsequent import as containers are often in storage in depots for extended periods of time.

The most likely point at which contamination could occur is the pack point over which shipping companies have no control. The shipper exerts such control, either directly or via contractual agreement with the packer. The *Code of Practice for Packing of Cargo Transport Units (CTU Code)*¹ revised in 2014 by the International Maritime Organization, the International Labour Organization and the United Nations Economic Commission for Europe has provided guidance for the prevention of contamination to shippers and those who pack containers but shipping companies have no means of determining how effective this has been.

For further information, please refer to document CPM 2016/INF/06.

Section 3.2. The CTU Code and other tools that could be developed

Mr Bill Brassington, ETS Consulting, Consultant author of the CTU Code.

The *CTU Code* has gained respect as a non-regulatory code of practice for packing containers and is acting as the support mechanism for other international and national legislation. The primary objective of the *CTU Code* is to provide a “one-stop shop” information paper and guide to all parties in the supply chain, and in particular those actively involved with the packing and shipping of freight containers. It addresses a number of issues that have not previously been included in such guidelines including the means for reducing the risk of the inadvertent transport of pests. The members of the working group that developed the *CTU Code* were most insistent that the sections relating to this subject were retained as they recognized the importance of the subject and they felt that the *CTU Code* was the right vehicle for the message to be disseminated to the wider community.

The *CTU Code* took nearly four years to develop and required the approval of the three United Nations (UN) organizations before publications. It would require a similar commitment for any amendments to be made to the Code or its annexes. Because of this it was felt that if more specific advice and best practice was needed it would be best suited to develop it as part of industry standards and publications, such as those relating to the inspection, repair and cleaning of containers.

Such industry standards are far easier to maintain and improve to reflect the changing world in which the container operates. They have greater visibility for those involved with the preparation of containers and the subsequent packing and transport. Linking the industry standard to the *CTU Code* also adds legal credibility should incidents occur which may result in a prosecution.

The *CTU Code* and existing industry cleaning standards can provide a tool that raises awareness of the risk and is available to those involved in the movement of freight containers.

For further information, please refer to document CPM 2016/INF/05

Section 4.1. Experiences from national plant protection organizations on checking or inspection of sea containers: inspection of sea containers in the United States

By Ms. Wendy Beltz, National Field Operations Director, Plant Protection & Quarantine, Animal Plant Health Inspection Service (APHIS), United States Department of Agriculture (USDA).

Sea containers enter into the United States via maritime and land border ports of entry. In 2015, over 12 million containers entered the United States through 77 ports of entry, over 74,000 of those containers were empty. Animal Plant Health Inspection Service, Plant Protection and Quarantine is the National Plant Protection Organization for the United States and they establish regulations and policies, provide risk analysis guidance, apply remedial measures such as fumigations, and provide specialized inspection of propagative material and pest identification services. However, The Department of Homeland Security’s Customs and Border Protection carries out the agriculture import and entry inspection function. The two government agencies work together to facilitate trade and safeguard American agriculture.

Customs and Border Protection facilitates the movement of all containers. They conduct various types of examinations, from physical examination to document reviews. These inspections are on imports only and are typically conducted at the port of entry, however, there are times when containers are allowed to move to final destination for inspection. Due to the enormous amount of containers that enter the United State every day, Customs and Border Protection can only inspect a fraction of the containers. To

address risk, they utilize various methods to target shipments for inspection including: commodity type; country of origin; previous history of violation of importer, broker or shipper; previous interception of quarantine pests; seasonality of commodity; high risk commodities such as citrus; and known pest pressures or trends. Empty containers are examined but it varies by port of entry on the frequency of those examinations.

Quarantine pests of concern associated with cargo are found every day. There are also instances where quarantine pests of concern are associated with the container and not the cargo. Khapra beetle (*Trogoderma granarium*), Asian Gypsy moth (*Lymantria dispar asiatica*), mollusks (Mollusca), weed seeds, and fruit fly larvae (Tephritidae), are examples of pests that have been found in or on containers, but not associated with the cargo in the container. Khapra beetle, weed seeds, and fruit fly larvae have been found in the container. They were associated with cargo previously carried in the container, but because the container was not adequately cleaned remained in the crevices and grooves of the floor of the container. Weed seeds that have been dispersed by the wind, have also been found in the refrigeration unit of containers. Mollusks are found on the inside and outside of containers and egg masses of Asian Gypsy moth on the outside of containers. In 2015 there were 923 interceptions of weed seeds, 35 interceptions of Asian Gypsy moth, 28 interceptions of Khapra beetle, and 401 mollusks. All pest interception data is stored in a PestID database, however, data is not gathered in such a way to determine if a pest is associated with the container versus the cargo.

The threat of quarantine pests being spread via the sea container pathway is a concern. Once the containers enter the United States they're loaded onto trains and trucks and transported throughout the United States dispersing the pest even further. This, in addition to the numbers of containers involved, will make it hard to develop a sea container ISPM that will be effective. Better data needs to be kept in order to truly analyze the risk of this pathway.

Section 4.2. Experiences from the Chinese national plant protection organization (NPPO) on checking or inspection of sea containers

By Ms Guanghao GU, Deputy Director, Guangming Office of China Inspection and Quarantine (CIQ)-Shenzhen, People's Republic of China, member of the IPPC expert working group on Minimizing pest movement by sea containers (2008-001).

The Chinese National Plant Protection Organization (NPPO) would like to present its experiences on five aspects.

Firstly, general situation. A series of data will be listed, such as total quantity of import or export containers, how many countries and regions where they come from or go to, loaded containers to empty containers ratio, etc.

Secondly, laws and department in charge. There are three laws related to import and export of containers in China. The General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China (AQSIQ) is the department in charge and released the 17th decree "Administrative Measures on import and export container inspection and quarantine". There are 35 of China Inspection and Quarantine Bureaus (CIQ) all over the country which carry out the inspection and checking of containers.

Thirdly, checking and inspection. In 2004, AQSIQ released three operation procedures which are guiding the checking and inspections on containers till today. In many Chinese seaports, import or export sea containers declaration system is used, through which 77.2% of sea containers were declared to CIQ in 2014. CIQ checked 21.74% of declared containers; there were intercepted pests and non-compliances from 84,300 Twenty Foot Equivalent Units (TEU). Disinfection robots are equipped to treat import empty containers.

Fourthly, pest interceptions data and contamination cases. The phenomena of "Empty container is not really empty" will be emphasized. From 2010 on, the Chinese NPPO has set up a database on pests intercepted and non-compliances on empty containers, some cases will be showed.

Fifthly, China's views on sea container ISPM. The risks related to the movement of pests by sea containers are high and the development of a standard is needed to help NPPOs address issues regarding

cleanliness of sea containers. We suggest the draft ISPM on *Minimizing pest movement by sea containers* (2008-001) should be urgently progressed according to the CPM allocated priority 1.