NAPPO
North American Plant Protection Organization
Organización Norteamericana de Protección a las Plantas
MEXICO - USA - CANADA

NAPPO Regional Standards for Phytosanitary Measures (RSPM)

RSPM 39
Packaging for the international shipment of live invertebrates used as biological control agents

The Secretariat of the North American Plant Protection Organization
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Contents

Review

NAPPO Standards for Phytosanitary Measures are subject to periodic review and amendment. The next review for this Standard is 2016. A review of any NAPPO Standard may be initiated at any time upon the request of a NAPPO member country.

Approval

This standard was approved by the North American Plant Protection Organization (NAPPO) Executive Committee on October 17, 2011 and is effective immediately.

Approved by:

Greg Stubbings
Executive Committee Member
Canada

Paul R. Eggert
Executive Committee Member
United States

Javier Trujillo Arriaga
Executive Committee Member
Mexico

Implementation

See the attached Implementation Plans for implementation dates in each NAPPO country.

Amendment Record

Amendments to this Standard will be dated and filed with the NAPPO Secretariat.

Distribution

This standard is distributed by the NAPPO Secretariat, to the Industry Advisory Group (IAG) and Sustaining Associate Members (SAM), the International Plant Protection Convention (IPCC) Secretariat, and to other Regional Plant Protection Organizations (RPPOs).

Background

Each NAPPO member country may have different requirements for packaging of commercial and classical invertebrate biological control agents entering NAPPO countries. This protocol details the materials and packing procedures for shipment of these agents so as to prevent escape or damage in transit by air and land cargo couriers.

Scope

This standard provides guidelines for packaging to be used to facilitate the movement of invertebrate biological control agents into NAPPO member countries. This standard applies only to those invertebrate biological control agents that meet all the import requirements of the importing National Plant Protection Organization (NPPO), and may include imports for research and environmental release.

References

International Air Transport Association (IATA). 2009. Container requirement 62 in General containment requirements for insects and bees (Cr 61-66). Downloaded on April 19, 2011, from http://www.swacargo.com/swacargo/documents/IATAPackaging.pdf

ISPM 3. 2005. *Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms.* Rome, IPPC, FAO.

ISPM 5. (updated annually). *Glossary of Phytosanitary Terms*. Rome, IPPC, FAO.

ISPM 15. 2009. *Regulation of wood packaging material in international trade*. Rome, IPPC, FAO.

RSPM 5. (updated annually). *NAPPO Glossary of Phytosanitary Terms*. Ottawa, NAPPO.

RSPM 7. 2008. *Guidelines for Petition for First Release of Non-indigenous Phytophagous Biological Control Agents.* Ottawa, NAPPO.

RSPM 12. 2008. *Guidelines for Petition for First Release of Non-indigenous Entomophagous Biological Control Agents*. Ottawa, NAPPO.

RSPM 26. 2006. *Guidelines for certification of commercial arthropod biological control agents moving into NAPPO member countries*. Ottawa, NAPPO.

Definitions, Abbreviations and Acronyms

Definitions of phytosanitary terms used in the present standard can be found in ISPM 5 and RSPM 5.

General Requirements

Invertebrate biological control agents are to be packaged in containers that are appropriate for international shipment that prevent escape or damage in transit. Two sets of guidelines describe the minimum requirements. The first is for commercial biological control agents listed in Appendix 2 of RSPM 26: 2006. The second is for biological control agents for research, including field collected material because they require additional layers of escape-proof packaging. This standard does not apply to shipping of sterile insects.

1. Packaging of commercial invertebrate biological control agents

1.1 All commercial arthropod biological control organisms are placed in separate sealed packages (cups, vials, etc) which are securely sealed to effectively prevent escape. If ventilation is required, the mesh size should be adequate to prevent egress of all mobile life-stages. All packages of biological control agents shall be placed in a second container which is also securely sealed achieving double effective barriers to escape. All containers of biological control organisms must be cushioned and sealed in such a way that they remain sealed during the shock, impact and pressure changes that may occur in transit.

1.2 Other packing materials (cold packs and cushioning using inert materials) should be placed in the second container. The packages containing the commercial biological control organisms should be packed firmly to minimize shaking and movement during transit.

1.3 The outer shipping container should be constructed of cardboard, fiberboard or any plastic material of adequate strength to withstand the shock, impact and weight of other cargo during transit.

1.4 Notwithstanding, all containers should comply with IATA Container Requirement 62, or its' replacement.

2. Packaging of invertebrate biological control agents for research

2.1 The biological control agents should be sealed in a container (e.g. micro-pore plastic bags, microcentrifuge vials). If additional ventilation is required, a vented container with the mesh size adequate to prevent egress of all mobile life-stages should be used.

2.2 The containers should be clearly labeled (scientific name, container number, date and collection details).

2.3 The containers should be placed into a heavy duty plastic bag which is securely sealed and placed into the insulated box. A high quality insulated box (e.g. cool box, ice-chest, cooler) with sealable lid may provide a strong shock-proof space which can be cooled if required. Photo 1.

2.4 At this point, if necessary, a cold pack wrapped in paper may be placed into the insulated box. Photo 1.

2.5 The insulated box should be sealed and taped with heavy-duty plastic shipping tape around the lid. Do not use duct tape. Photo 5.

2.6 The insulated box should then be placed into a heavy-duty plastic bag which is taped around the box. Photo 6.

2.7 Copies of the required documents (e.g. import/export permit, a description of contents, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) documentation, the shipping invoice etc.) should be taped in an envelope to the outside of the prepared box. Photo 7.

2.8 The prepared box should then be placed into a heavy-duty, outer cardboard box and securely wedged into place to minimize movement during shipping. New cardboard boxes are preferred. Boxes which have previously contained soil, plant or animal products are not acceptable. Photo 7.

2.9 The outer cardboard box should be taped closed with heavy-duty plastic shipping tape. Continuous bands of tape should be wound round the length and width of the cardboard box. Photo 8.

2.10 The recipient's address should be highly visible and duplicate copies of the required documents (see 2.7) should be securely taped to the outside of the outer cardboard box. Photo 8.

2.11 The cardboard box should be delivered to the shipper who places their own identification and shipment details to the outer cardboard box. Photo 8.

2.12 This system results in five barriers (outer cardboard box, outer plastic bag, insulated box, sealable bag, inner container) of packaging. Photos 1-8.

This appendix was adopted by the NAPPO Executive Committee on October 17, 2011, and revised by the NAPPO Expert Group on Biological Control in August, 2014.

The appendix is for reference purposes only and is not a prescriptive part of the standard.

Appendix 1: Photos of packaging

1. Cold pack to keep low temperature inside the cooler

2. Cold pack wrapped in paper and plastic bag

3. 24 liter plastic cooler

4. Sealed bag placed inside of plastic cooler

5. Side view of the sealed plastic cooler

6. Cooler is sealed in a second plastic bag

7. Shipping carton packed tightly and secure and a copy of all documents included

8. Shipping carton sealed securely and all necessary document attached safely to the outside of the box