

**Phytosanitary procedures**  
**Procédures phytosanitaires**

## **Intentional import of organisms that are plant pests or potential plant pests**

### **Specific scope**

This standard provides guidelines for authorizing and managing imports of living organisms that are plant pests or potential plant pests and minimizing any risks arising from these imports.

### **Specific approval and amendment**

First approved in 2005-09.

### **Introduction**

It is necessary to import living organisms for research, breeding, diagnosis, educational, commercial and other purposes. However, if such organisms are known or potential plant pests, their intentional import may present a risk to the plant health of the importing country if they should escape or be released into the environment. For this reason, this Standard presents guidelines for authorizing and managing such imports and minimizing the risks. The document indicates that the NPPO should be informed of any intended import of any known or potential plant pest. It should receive specified details of the organism and the purpose for its introduction, enabling it to evaluate the risk and, as appropriate, to specify the confinement<sup>1</sup> conditions under which the organism should be maintained and the conditions of its eventual destruction.

The following types of organisms are covered by this standard:

- quarantine pests listed in phytosanitary regulations of the importing country
- pests against which emergency phytosanitary actions are being taken
- other known, or potential pests of plants (cultivated, managed or wild plants), including strains known to differ in pest risk from established strains.

Any life stage of an invertebrate, fungus, bacterium or virus may be imported. Plants (weeds, parasitic plants or those that

could have a negative environmental impact) are not, however, covered in this Standard and will be addressed in a specific Standard in preparation. Biological control agents are already covered by EPPO Standard PM 6/2, and are not included here. Other national regulatory systems may cover the import of certain organisms (for example, veterinary regulations covering vertebrates).

The confinement measures described may also apply to the movement of such organisms within a country and to the management of quarantine pests that occur within the country.

### **Guidelines**

#### **Application for import**

Persons wishing to import an organism (in its isolated state, in a host or in soil), which is known to be a plant pest, or is a potential plant pest (see 'Risk Assessment' below) should make an application to the NPPO for authorization to import.

#### **Information required**

As a minimum, the following information should be provided by the applicant to the NPPO:

- the name and address of the applicant, and persons responsible for confinement if different, including their qualifications
- the scientific name of the organism and any relevant published references, including information on potential vectors where relevant
- the type of material
- the quantity of material

<sup>1</sup>'Confinement' is used in this standard rather than 'containment' which is a term defined in ISPM no. 5 Glossary of Phytosanitary Terms as 'the application of phytosanitary measures in and around an infested area to prevent spread of a pest.'

- the country of export, including name and address of the supplier
- the purpose of the intended import
- the duration, nature and objectives of the activities envisaged
- the full address where the organism will be held, including room numbers
- the conditions under which the organism will be confined
- the proposed standard operating procedures, including the method of destruction or treatment of material on completion of the approved activities, where appropriate
- the proposed point of entry into the country
- the conditions under which the organism will be imported.

Other information or clarification may be requested by the NPPO to enable it to assess the risk.

### Risk analysis

If it is determined that the organism for which import is being requested is a pest of plants or plant products, or a potential plant pest, an assessment of the risk to crops of agriculture, horticulture or forestry, or to wild plants, should be conducted, preferably following the relevant parts of ISPM no. 11 on Pest risk analysis for quarantine pests and EPPO Standards PM 5/3 Decision-support scheme for quarantine pests. The pest risk management should be related to the purpose of the intended import.

A simple initial procedure should exclude from risk assessment:

- quarantine pests, for which risk has already been assessed, but risk management is still necessary in relation to the present standard
- other organisms for which a risk assessment has already been done and is still valid
- organisms which are already present in the importing country (in the sense of ISPM no. 8 Evaluation of pest status) unless they are under official control.<sup>2</sup>

### Import decision

Based on the information provided and on an evaluation of the risk assessment, the NPPO may reach one of the following decisions:

- import is permitted without special precautions. The risk assessment indicates that there is no risk to agriculture, horticulture or forestry, or to wild plants. No further application for import should be necessary for organisms which have been classed in this way
- import may be permitted under specified conditions of confinement and/or destruction. The confinement or destruction

conditions are determined by the NPPO but may be those proposed by the applicant, if considered appropriate by the NPPO. The consignment should be accompanied by an import authorization document issued by the NPPO of the importing country

- import is refused. The risk assessment (EPPO) does not allow the conclusion that the risk posed by the organism within the confinement proposed is acceptable. The applicant may re-submit a revised application based on the comments provided by the NPPO. If no appropriate confinement proves to be available, import is prohibited.

### Confinement conditions

Depending on the import decision, the NPPO may require that the organism be confined under certain conditions to minimize the risk of escape. Keeping an organism under confinement conditions implies that movement from the confinement facility is only permitted if authorized by the NPPO. The conditions of confinement and its duration will be determined in relation to the risk that has been assessed (indications regarding the level of confinement are presented in the Appendix). The NPPO should establish procedures for periodic checking and supervision of the confinement conditions.

### Destruction of the organism

Depending on the import decision, the NPPO may require that the organism be destroyed after a certain period of time. The method of destruction will depend on the biology of the organism. The NPPO should establish procedures ensuring that the organism is destroyed on completion of the work (including supervision by the NPPO when necessary).

## Appendix – Confinement conditions

Table 1 gives guidelines for three broad categories of security. However, each organism poses its own risks and conditions may need to be adapted accordingly, or additional ones imposed. If the organism concerned has a vector, this should be taken into account when determining the confinement conditions.

The confinement conditions for organisms are divided into three categories of security: SL1, SL2 and SL3 (SL3 being the highest). SL1 conditions are required for organisms which are not spread by water or air. SL1 covers, amongst others, risks related to contact with or movement of soil, growing media, plants or plant debris by humans or animals. SL2 conditions are required for organisms which can be spread by water but not by air. SL2 covers, amongst others, risks related to dissemination of fungal spores that are not air-borne, nematodes, fungal vectors, and those mentioned for SL1. SL3 conditions are required for organisms spread by air. SL3 covers, amongst others, risks related to dissemination of winged invertebrates, pollen, seeds, fungal spores, and those mentioned for SL2.

<sup>2</sup>In certain circumstances, the organism intended for import may be present in the importing country but the strain involved may be known to differ significantly in factors such as virulence, host range or vector relationships to such an extent that risk assessment would nevertheless be needed.

**Table 1** Check-list of confinement conditions in laboratory and glasshouse for organisms classified as requiring security levels (SL) 1, 2 or 3

Infrastructures and conditions of use	Laboratory			Glasshouse		
	SL1	SL2	SL3	SL1	SL2	SL3
<b>Infrastructures (physical measures)</b>						
<i>Situation of the confinement facility</i>						
• spatially separated from non-contained activities	R	R	R	R	R	R
• spatially separated from other buildings	–	–	O	–	O	R
• spatially separated from crops or host plants outside	–	–	–	O	O	R
• sited to reduce chance of accidental or deliberate damage	–	–	–	O	O	R
<i>Walls</i>						
• solid, no gaps (including around pipes and ducts)	–	R	R	–	R	R
• washable	R	R	R	R	R	R
<i>Type of floor or bench</i>						
• impermeable	R	R	R	O	R	R
• capable of decontamination	R	R	R	R	R	R
• controlled drainage	O	R	R	O	R	R
<i>Surfaces and furniture</i>						
• materials resistant to chemicals	R	R	R	R	R	R
• smooth surfaces without crevices	O	R	R	O	R	R
<i>Openings and ventilation</i>						
• double doors with vestibule between	–	O	R	–	O	R
• doors air-tight (brushes, seals)	–	O	R	–	O	R
• automatic closing of doors	O	O	R	O	O	R
• automatic locking of doors	–	O	R	–	O	R
• manual locking of doors (manual locking should not be allowed for SL3 levels)	R	R	NA	R	R	NA
• windows fitted with screening appropriate to the organism being confined	–	–	–	–	–	R
• windows air-tight (e.g. sealed)	–	O	R	–	O	R
• windows unbreakable or double glass panes	O	O	R	O	O	R
<i>Pipes &amp; ducts</i>						
• sealed	–	R	R	–	R	R
<i>Forced ventilation</i>						
• negative pressure (minimum 6 mm of water)	–	–	R	–	–	R
• permanent air flow (away from the exits of the premises)	–	O	R	–	O	R
• expelled air filtered by an HEPA filter (or equivalent)	–	–	R	–	–	R
• expelled air filtered by a standard filter	O	NA	–	–	NA	
<b>Protective clothing</b>						
• room for changing clothes	O	R	R	O	R	R
<i>Working clothes</i>						
• distinctive coat	R	R	R	R	R	R
• special shoes or overshoes	O	R	R	O	R	R
• special hat	–	–	R	–	–	R
• disinfection of clothes within unit or use of disposable clothes	–	–	R	–	–	R
<b>Confinement of invertebrates and special equipment</b>						
• sealed rearing cages with appropriate mesh size (working with sleeves)	–	O	R	–	O	R
• decontamination equipment on site (e.g. freezer, autoclave)	R	R	R	R	R	R
• microbiological safety cabinet for microorganisms	O	R	R	–	–	–
• UV radiation in vestibule against spores and sticky traps or pheromone trap for insects	–	–	R	–	–	R
<b>Emergency equipment</b>						
Smoke detectors	O	O	R	O	O	R
Automatic alarm at drop of negative air pressure	–	–	R	–	–	R
Break-in alarm	O	O	O	O	O	O
Stand-by emergency electricity supply (with automatic start-up)	–	O	R	–	O	R
<b>Cleaning and safety</b>						
Regular cleaning of the confinement facilities	R	R	R	R	R	R
<i>Showers</i>						
adjacent to or in the confinement facilities	–	O	R	–	O	R
Hand basins in the confinement facilities or use of disposable gloves	R	R	R	R	R	R
Hand wash on leaving the confinement facilities	R	R	R	R	R	R
Eating, drinking and smoking forbidden	R	R	R	R	R	R

Table 1 *Continued*

Infrastructures and conditions of use	Laboratory			Glasshouse		
	SL1	SL2	SL3	SL1	SL2	SL3
<b>Access</b>						
<i>Access to the confinement facilities</i>						
• appropriate signs indicating restricted access	R	R	R	R	R	R
• limited to authorized personnel	R	R	R	R	R	R
• movement of servicing personnel limited	R	R	R	R	R	R
• visits by the public forbidden or under strict control	R	R	R	R	R	R
<i>Areas surrounding the confinement facilities</i>						
• access forbidden/restricted	O	O	O	O	O	O
• free from host plants	–	–	–	–	O	O
<b>Waste disposal and decontamination</b>						
Aqueous waste collected separately and decontaminated before disposal	O	R	R	O	R	R
Destruction of organisms at the end of the designated use unless the experimental material has been confirmed to be free from all pest risk	R	R	R	R	R	R
Decontamination of material leaving the premises	R	R	R	R	R	R
Removal of organisms in suitable containers						
<b>Pest control</b>						
Control of rodents, birds, insects and mites	R	R	R	R	R	R
<b>Procedures and documentation</b>						
Procedure manual available (including all procedures mentioned in this table)	R	R	R	R	R	R
Authorization by the NPPO visible	O	O	O	O	O	O
<b>Record keeping</b>						
Record of all activities in the confinement facilities	R	R	R	R	R	R
Report to the NPPO in case of accident	R	R	R	R	R	R
<b>Staff qualification and training</b>						
Qualified personnel	R	R	R	R	R	R
Training of the staff on a regular basis	R	R	R	R	R	R

R: Recommended (this corresponds to infrastructures or conditions of use which should be considered for a specific confinement level); O: optional; NA: not appropriate –: not important or not relevant.