

Information sheet 1.15

Conditions of transport

This information sheet is a supporting document to Appendix A ('Standardised checklist of risk reduction options') of the Guidance of the EFSA Plant Health Panel on quantitative pest risk assessment

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A. Description of the RRO

When potentially infested/infected material has to be transported (including proper disposal of infested waste material), specific transport conditions (kind of packaging/protection, time of transport, transport mean) should be defined to prevent the pest from escaping. As some treatments may be applied to commodities prior to, or during, transport to reduce pest prevalence or risk of pest escape, e.g. cold treatment and controlled atmosphere (see specific information sheets 1.14 Heat and cold treatments and 1.09 Controlled atmosphere), this RRO can also be applied to protect commodities from external contamination when crossing infested/infected areas during transport by choosing the kind of physical protection (e.g., insect-resistant packaging film), and the period of transport.

B. Risk factors

Requiring specific transport conditions will reduce the likelihood of spread of the pest out of the infested area and also the contamination of commodities during transport across areas where the pest is present.

Table 1. Points of application of the RROs.

Points where measures may be effective		Transport from the place of production to the border of the exporting country (from sub-step E1 to sub-step E2)	Transport from the border of the exporting to the EU point of entry (from sub-step E2 to sub-step E3)	Transport after leaving the EU point of entry (from sub-step E4 to sub-step E5)	Transport across the risk assessment area (step T)	Transport across the risk assessment area (step S)
RRO	Conditions of transport	X	X	X	X	X

C. Parameters to consider regarding effectiveness of the RROs

The chosen method and conditions of transport should ensure isolation of the commodities from the exterior. The life cycle of the pest, in particular the period and probability of emerging of the pest from the commodity transported, and the pest capacity of surviving during transport shall be considered in the implementation of this RRO.

The conditions of transport, e. g. transport in closed containers or in cages, shall also be defined in relation to the characteristics of the plant material to be transported and the likelihood of re-infestation in case of a commodity that has already received a post-harvest treatment before or during packaging.

D. Applicability / feasibility of the RRO

There may be limitations of applicability of this RRO related to the cost for the producer.

Limitation of transport during certain periods (e.g. outside the flight period of an insect) may be difficult to define for a large area with different climatic conditions as the emergence is defined mostly by these conditions. This restriction will also affect the trade of the commodity during specific periods (see information sheet 1.02 Timing of planting and harvesting).

The use of packaging that may prevent the (re-)infestation of the consignment can be technically possible only for some pests or some commodities. Some plant products may not be easily transported in closed containers (e.g. wood).

Note: the use of specific packaging may affect the efficacy of treatments applied to the consignment itself (e.g. fumigation of fruit).

Some relevant examples for this group of RROs include:

- **Commission Implementing Decision (EU) 2012/270 on *Epitrix* spp.¹**

Article 3a, Requirements concerning vehicles, packaging, machinery and waste soil. Point 1 on vehicles and packaging:

"1. Member States shall ensure that any vehicle and packaging having been used to transport the potato tubers originating in a demarcated area prior to fulfilment of point 1(b) of Section 2 of Annex I is decontaminated and cleaned in an appropriate manner in the following cases:

- (a) before they are moved outside the demarcated area; and
- (b) before they leave a packing facility, as referred to in the second subparagraph of Article 3(1)."

Annex I, Section 2, point (2) on conditions for movement of potato tubers originating in a demarcated area to packing facilities situated outside the demarcated area:

"...(d) the potato tubers are transported to the packing facility in closed vehicles, or in closed and clean packaging, in such a manner to ensure that the specified organisms cannot escape or spread..."

¹ Commission Implementing Decision (EU) 2012/270 of 16 May 2012 as regards emergency measures to prevent the introduction into and the spread within the Union of *Epitrix cucumeris* (Harris), *Epitrix similis* (Gentner), *Epitrix subcrinita* (Lec.) and *Epitrix tuberis* (Gentner). OJ L 132, 23.5.2012, p. 18-21. Amended by Commission Implementing Decision 2014/679/EU of 25 September 2014. OJ L 283, 27.9.2014, p. 61-64.

- **Commission Implementing Decision (EU) 2012/535 on *Bursaphelenchus xylophilus*²**
Annex III, Section 1, Conditions for movement of susceptible plants and susceptible wood and bark from demarcated areas into areas other than demarcated areas and from infested zones into buffer zones:
"1. Susceptible plants may be moved provided that those plants fulfil the following conditions:
... (e) they are transported outside the flight season of the vector or in closed containers or packaging ensuring that infestation with PWN or the vector cannot occur.
2. Susceptible wood and bark, with exception of wood packaging material, may be moved provided that that wood or bark fulfils the following conditions:
... (c) If it is not free from bark, it is moved either outside the flight season of the vector or with a protective covering ensuring that infestation with PWN or the vector cannot occur."
- **Council Directive 2000/29/EC³ on protective measures against the introduction and the spread of pests in the EU territory**
Annex IV, Part B, Point 31 defining provisions for the introduction and the movement in some protected zones of Greece, Malta and Portugal of fruits of *Citrus* L., *Fortunella* Swingle, *Poncirus* Raf., and their hybrids originating in some regions known to be infected by European isolates of Citrus tristeza virus:
"Without prejudice to the requirement in Annex IV Part A Section II point 30.1 that packaging should bear an origin mark:
(a) the fruits shall be free from leaves and peduncles; or
(b) in the case of fruits with leaves or peduncles, official statement that the fruits are packed in closed containers which have been officially sealed and shall remain sealed during their transport through a protected zone, recognised for these fruits, and shall bear a distinguishing mark to be reported on the passport."

E. Other RROs that may lead to similar effects

None.

F. Frequently occurring combinations of RROs that include this RRO

Requirements of transport conditions may be part of a systems approach as defined in ISPM 14 *The use of integrated measures in a systems approach for pest risk management*. For Transportation and distribution: speed and type of transport, sanitation (freedom from contamination of conveyances).

The definition of transport conditions for infested material may be a part of the set of measures implemented to achieve pest eradication or containment.

² Commission Implementing Decision (EU) 2012/535 of 26 September 2012 on emergency measures to prevent the spread within the Union of *Bursaphelenchus xylophilus* (Steiner et Buhner) Nickle et al. (the pine wood nematode).

³ Council Directive 2000/29/EC of 8 May 2000 on protective measures against the introduction into the Community of organism harmful to plants or plant products and against their spread within the Community.

G. Conclusion

Synoptic table for the RRO.

Target	Area of application	Expected effect	Main technical limitations of use	Alternative/combinations
Pest and vector	Everywhere during transport of commodities	Reduce the probability of entry and spread by: - preventing the escape of the pest or the vector from infested consignments or the contamination of vectors with pests present in contaminated consignments; - preventing the contamination of healthy consignments crossing contaminated areas.	- Restrictions of the period of transport can affect the trade of the commodity - Packaging or protections with high efficiency against the pest may be incompatible with the specific commodity transported.	With other RROs, as part of sets of integrated measures in systems approach

References

ISPM 14, 2002. The use of integrated measures in a systems approach for pest risk management. International Plant Protection Convention (IPPC), FAO, Rome.