

ISPM 28 Annex 9

INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES

ISPM 28 PHYTOSANITARY TREATMENTS

PT 9: Irradiation treatment for *Conotrache us nenuphar* (2010)

Scope of the treatment

This treatment applies to the irradiation of dits and weetab at 92 Gy minimum absorbed dose to prevent the reproduction in adults of *Con rachelus ner phar* at the stated efficacy. This treatment should be applied in accordance with the regiments out ned in ISPM 18:2003¹.

Treatment description

Name of treatment: Irraliation treatment for *Conotrachelus nenuphar*

Active ingredient:

Treatment type:

Irradiation

Target pest: Conotrachelus nenuphar (Herbst) (Coleoptera: Curculionidae)

Target regulated artic.

All fruits and vegetables that are hosts of *Conotrachelus nenuphar*.

Treatme sche

Minimum as bed dose of 92 Gy to prevent the reproduction in adults of *Conotrachelus nenuphar*.

Efficacy and continuous ence level of the treatment is ED_{99,9880} at the 95% confidence level.

Treatment should be applied in accordance with the requirements of ISPM 18:2003.

This irradiation treatment should not be applied to fruit and vegetables stored in modified atmospheres.

¹ The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for approval of treatments. Treatments also do not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures prior to approval of a treatment. In addition, potential effects of treatments on product quality are considered for some host commodities before their international adoption. However, evaluation of any effects of a treatment on the quality of commodities may require additional consideration. There is no obligation for a contracting party to approve, register or adopt the treatments for use in its territory.

Other relevant information

Since irradiation may not result in outright mortality, inspectors may encounter live, but non-viable *Conotrachelus nenuphar* (larvae, pupae and/or adults) during the inspection process. This does not imply a failure of the treatment.

Although the treatment may result in the presence of irradiated adults, the following factors may affect the likelihood of adults being found in traps in importing countries:

- Adults are rarely (if ever) present in shipped fruit because the insect pupates off the fruit.
- Irradiated adults are very unlikely to survive for more than one week, post-irradiation, and they are therefore less likely to spread than non-irradiated adults.

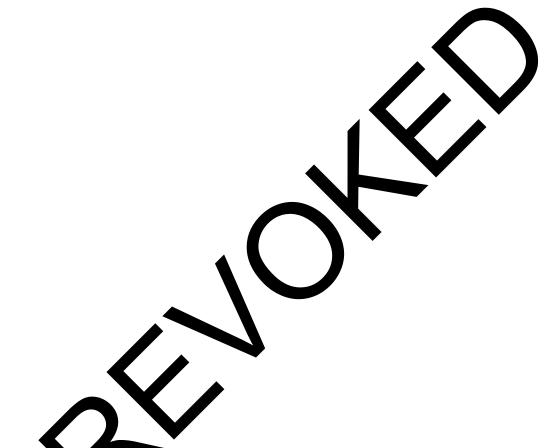
The Technical Panel on Phytosanitary Treatments based its evaluation of this reatment of the research work undertaken by Hallman (2003) that determined the efficacy of irradia on as a treatment for this pest in *Malus domestica*.

Extrapolation of treatment efficacy to all fruits and vegetal nowledge and dose absorbed by the target experience that radiation dosimetry systems measure the actual pest independent of host commodity, and evidence from variety of pests and dies on commodities. These include studies on the following per and h strepha ludens (Citrus paradisi and Mangifera indica), A. suspensa (Averrhoa c ambola, Č paradisi and Mangifera indica), Bactrocera tryoni (Citrus sinensis, Lycopersi Malus domestica, Mangifera indica, Persea americana and Prunus avium), Cydia poli ella (Malus domestica and artificial diet) and Grapholita molesta (Malus domestica) (Bustos et al., 2004; Gould & von Windeguth, 1991; Hallman, 2004, Hallma & Martine 200. Jessup *et al.*, 1992; Mansour, 2003; von Windeguth, 1986; von Windeguth & [smail, 1987 It is recognized, however, that treatment efficacy has not been tested for all p etable hosts of the target pest. If evidence enti fruit and y becomes available to show that the e treatment to cover all hosts of this pest is incorrect, then the treatment will be revi

References

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