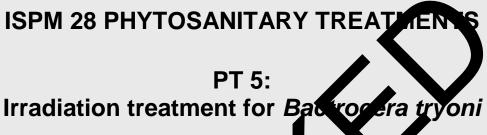


ISPM 28 Annex 5

INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES



(2009)

Scope of the treatment

This treatment applies to the irradiation of faits and variable at 100 Gy minimum absorbed dose to prevent the emergence of adults of *Bactro era tryoni* at the stated efficacy. This treatment should be applied in accordance with the requirement putlined in IS M $18:2003^{1}$.

Treatment description

Name of treatment:

Active ingredient:

Treatment type: Target pest: Irramation

Irra

Bactrocera tryoni (Froggatt) (Diptera: Tephritidae) All fruits and vegetables that are hosts of *Bactrocera tryoni*.

iation treatment for Bactrocera tryoni

Treatmer schedy

Target regulated artic

Minimum bsorb a double 100 Gy to prevent the emergence of adults of *Bactrocera tryoni*.

Efficacy and confidence level of the treatment is ED_{99,9978} at the 95% confidence level.

Treatment should be applied in accordance with the requirements of ISPM 18 (*Guidelines for the use of irradiation as a phytosanitary measure*).

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 *Bactrocera tryoni* (larvae and/or pupae) during the inspection process. This does not imply a failure of the treatment.

The Technical Panel on Phytosanitary Treatments based its evaluation of this treatment on the research work undertaken by Heather *et al.* (1991) that determined the efficacy of irradiation as a treatment for this pest in *Mangifera indica*.

Extrapolation of treatment efficacy to all fruits and vegetables was based on knowledge and experience that radiation dosimetry systems measure the actual radiation dose absorbed by the target pest independent of host commodity, and evidence from research studies on a variety of pests and commodities. These include studies on the following pests and hosts: Anastrepha ludens (Citrus paradisi and Mangifera indica), A. suspensa (Averrhoa carambola, Citrus nd Mangifera indica), Bactrocera tryoni (Citrus sinensis, Lycopersicon lycopersicum, Mg Mangifera s domest indica, Persea americana and Prunus avium), Cydia pomonella (Malus a *estica* and a ficial diet) and Grapholita molesta (Malus domestica and artificial diet) (Bus 2004; G ald & von Windeguth, 1991; Hallman, 2004, Hallman & Martinez, 2001; Je ip et al., isour, 2003; von Windeguth, 1986; von Windeguth & Ismail, 1987). It is cognize that treatment howe efficacy has not been tested for all potential fruit and vegetable the target pest. If evidence osts becomes available to show that the extrapolation of the t hosts of this pest is atmen cover incorrect, then the treatment will be reviewed.

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Publication history

This is not an official part of the standard 2006-04 CPM-1 added topic *Irradiation treatment for* Bactrocera tryoni (2006-119) 2006-12 TPPT developed draft text 2007-05 SC approved draft text for MC 2007-10 Sent for MC under fast-track process 2008-07 TPPT revised draft text 2008-12 SC revised draft text 2008-12 SC revised draft text for adoption via e-decision 2009-03 CPM-4 adopted Annex 5 to ISPM 28:2007 **ISPM 28**. 2007: **Annex 5** *Irradiation treatment for* Bactrocera tryoni (2009). Rome, IPPC, FAO. Publication notes: Last modified August 2011