

ISPM 28 Annex X

INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES

ISPM 28 PHYTOSANITARY TREATMENTS

PT X: Cold treatment for *Bactrocera tryoni* on *Citrus*sinensis

(201<mark>X</mark>)

Scope of the treatment

This treatment comprises the cold treatment of fruit of *Citrus sinensis* (orange) to result in the mortality of eggs and larvae of *Bactrocera tryoni* (Queensland fruit fly) at the stated efficacy¹.

Treatment description

Name of treatment Cold treatment for *Bactrocera tryoni* on *Citrus sinensis*

Active ingredient N/A

Treatment type Physical (cold)

Target pestBactrocera tryoni (Diptera: Tephritidae) (Queensland fruit fly)

Target regulated articles Fruit of *Citrus sinensis* (orange)

Treatment schedule

3 °C or below for 16 continuous days

For cultivar "Navel" the efficacy is effective dose (ED)_{99,9981} at the 95% confidence level.

¹ The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for contracting parties' approval of treatments. IPPC adopted treatments may not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures prior to contracting parties approving 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.

For cultivar "Valencia" the efficacy is ED_{99,9973} at the 95% confidence level.

The fruit must reach the treatment temperature before treatment exposure time is started. The fruit temperature should be monitored and recorded, and the temperature should not exceed the stated level throughout the duration of the treatment.

Other relevant information

In evaluating this treatment the Technical Panel on Phytosanitary Treatments (TPPT) considered issues associated with temperature regimes and thermal conditioning, taking into account the work of Hallman and Mangan (1997).

This schedule is based on the work of De Lima et al. (2007).

References

De Lima, C.P.F., Jessup, A.J., Cruickshank, L., Walsh, C.J. & Mansfield, E.R. 2007. Cold disinfestation of citrus (*Citrus* spp.) for Mediterranean fruit fly (*Ceratitis capitata*) and Queensland fruit fly (*Bactrocera tryoni*) (Diptera: Tephritidae). *New Zealand Journal of Crop and Horticultural Science*, 35: 39–50. ()

Hallman, G.J. & Mangan, R.L. 1997. Concerns with temperature quarantine treatment research. *In* G.L. Obenauf, ed. 1997 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reduction, San Diego, CA, USA, Nov. 3–5. pp. 79-1–79-4.

Publication history

This is not an official part of the standard

2007-09 Treatment submitted in response to the Call for treatments

2007-12 TPPT meeting split Cold treatment of Citrus sinensis for

Bactrocera tryoni from 2007-106 to create 2007-206E

2008-04 CPM-3 added subject under the topic Fruit fly treatments

2008-09 SC approved for member consultation via e-decision

2009-06 Sent for member consultation

2010-07 TPPT meeting revised the text and recommended to SC for CPM-7 (2012) adoption

2011-11 SC recommended to CPM for adoption

2012-03 Treatment was formally objected

2012-09 TPPT virtual meeting drafted response to formal objections

(no revision recommended in response to FO)

2012-12 TPPT meeting revised the text and recommended to SC for CPM adoption

2013-06 SC recommended to CPM-9 for adoption

2014-03 Treatment was formally objected

2014-06 TPPT meeting drafted response to formal objections and revised text

2014-11 SC reviewed TPPT response and approved draft for CPM adoption

ISPM 28. 2007: **Annex XX** Cold treatment for *Bactrocera tryoni* on

Citrus sinensis (201X), Rome, IPPC, FAO.

Publication history: Last modified 2014-11