

This phytosanitary treatment was adopted by the [XXth] Session of the Commission on Phytosanitary Measures in --- 201-.
The annex is a prescriptive part of ISPM 28:2007.



ISPM 28
Annex [x]

INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES

ISPM 28 PHYTOSANITARY TREATMENTS

DRAFT PT [x]: Cold treatment for *Bactrocera tryoni* on *Citrus sinensis*

Scope of the treatment

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

Treatment description

Name of treatment	Cold treatment of fruit of <i>Citrus sinensis</i> for <i>Bactrocera tryoni</i>
Active ingredient	N/A
Treatment type	Cold treatment
Target pest	<i>Bactrocera tryoni</i> (Diptera: Tephritidae) (Queensland fruit fly)
Target regulated articles	Fruit of <i>Citrus sinensis</i> (orange)

Treatment schedule

3 °C or below for 16 continuous days.

Efficacy and confidence level:

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.

For cultivar ‘Navel’ the efficacy is ED_{99,9978} at the 95% confidence level.

For cultivar ‘Valencia’ the efficacy is ED_{99,9968} at the 95% confidence level.

The fruit must reach the treatment temperature before treatment commences. The fruit temperature should be monitored and recorded, and temperatures should not exceed the stated level throughout the duration of the treatment.

Other relevant information

Pre-cooling of the commodity to treatment temperature may be required.

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

This schedule was 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 TPPT treatment submitted

2007-12 TPPT revised draft

2008 CPM-3 added topic 2007-206: Fruit fly treatments: Cold treatments for *Bactrocera tryoni*. - Cold treatment of *Citrus sinensis* for *Bactrocera tryoni*.

2010-07 TPPT revised draft

2010-08 TPPT revised draft

2009-05 SC approved draft for MC

2009-06 MC

2010-08 TPPT revised draft

2011-08 SC e-decision forum

2011-10 SC e-decision poll

2011-10 Secretariat revised draft to incorporate comments from e-decision forum