

This phytosanitary treatment was adopted by the Tenth Session of the Commission on Phytosanitary Measures in 2015.  
The annex is a prescriptive part of ISPM 28.



**ISPM 28**  
**Annex 18**

## **INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES**

### **ISPM 28 PHYTOSANITARY TREATMENTS**

#### **PT 18**

### **Coldtreatment for *Bactrocera tryoni* on *Citrus limon***

*Adopted 2015; published 2015*

#### **Scope of the treatment**

This treatment applies to the cold treatment of fruit of *Citrus limon* (lemon) to result in the mortality of eggs and larvae of *Bactrocera tryoni* (Queensland fruit fly) at the stated efficacy<sup>1</sup>.

#### Treatment description

<b>Name of treatment</b>	Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus limon</i>
<b>Active ingredient</b>	N/A
<b>Treatment type</b>	Physical (cold)
<b>Target pest</b>	<i>Bactrocera tryoni</i> (Diptera: Tephritidae) (Queensland fruit fly)
<b>Target regulated articles</b>	Fruit of <i>Citrus limon</i> (lemon)

#### **Treatment schedule**

##### **Schedule 1: 2 °C or below for 14 continuous days**

The efficacy is effective dose (ED)<sub>99,99</sub> at the 95% confidence level.

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<sup>1</sup> The scope of phytosanitary treatments does not include issues related to pesticide registration or other domestic requirements for contracting parties' approval of treatments. Treatments adopted by the CPM 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.

**Schedule 2: 3 °C or below for 14 continuous days**

The efficacy is ED<sub>99,9872</sub> 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**

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).

Schedules 1 and 2 were based on the work of De Lima *et al.* (2007) and developed using cultivar “Lisbon”.

The TPPT also considered issues associated with chilling injury in lemons (TPPT, 2012).

**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.
- TPPT.** 2012. TPPT response to SC’s concerns about chilling injury in lemons during in-transit cold disinfestation. Appendix 9, TPPT meeting report, Dec. 2012, pp. 55–57.

**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 limon* for *Bactrocera tryoni* from 2007-106 to create 2007-206G

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 commented by e-decision

2012-12 TPPT meeting finalized response to concern about chilling injury revised the text and recommended to SC for CPM adoption

2013-11 SC agreed to recommend the treatment for CPM for adoption

2014-03 Treatment received formal objection

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

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

2015-03 CPM-10 adopted the treatment

**ISPM 28. Annex 18** Cold treatment for *Bactrocera tryoni* on *Citrus limon* (2015). Rome, IPPC, FAO.

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