



**DRAFT ANNEX TO ISPM 28: COLD TREATMENT FOR *CERATITIS CAPITATA*
 ON *CITRUS CLEMENTINA* (2010-102)**

Status box	
<i>This is not an official part of the annex to the standard and it will be modified by the IPPC Secretariat after adoption.</i>	
Date of this document	2016-11-28
Document category	Draft annex to ISPM 28
Current document stage	To CPM for adoption
Major stages	<p>2010-04 <i>Cold treatment for Ceratitis capitata on Citrus clementina var. Clemenules</i> treatment submitted</p> <p>2010-07 TPPT reviewed treatment and requested additional information</p> <p>2012-05 TPPT received additional information</p> <p>2012-12 TPPT requested additional information from Submitter</p> <p>2013-02 TPPT sent letter to Submitter through Secretariat</p> <p>2013-05 Submitter responded</p> <p>2013-07 TPPT recommended to SC for member consultation only for var. <i>Clemenules</i></p> <p>2013-09 TPPT approved treatment schedule (virtual meeting)</p> <p>2014-02 SC e-decision for approval for member consultation</p> <p>2014-03 Secretariat applied changes suggested by forum and opened poll</p> <p>2014-03 SC approved draft treatment for member consultation via poll</p> <p>2014-06 First consultation</p> <p>2015-02 Member consultation comments reviewed by TPPT</p> <p>2015-11 SC assigned the status "pending"</p> <p>2016-07 Modified by Treatment Lead (EW) in response to country comments</p> <p>2016-09 TPPT meeting (TPPT agreed to change title (removing "varieties") and invited SC to note the change in title from <i>Cold treatment for Ceratitis capitata on Citrus clementina var. Clemenules</i> (2010-102) to <i>Cold treatment for Ceratitis capitata on Citrus clementina</i> (2010-102); TPPT agreed that there are no fruit fly population differences in relation to cold treatment)</p> <p>2016-09 TPPT recommended to SC for adoption</p> <p>2016-11 SC recommended to CPM-12 for adoption via e-decision (2016_eSC_Nov_11)</p>
Treatment Lead	<p>2010-11 Mr Antarjo DIKIN (ID)</p> <p>2012-05 Mr Ray CANNON (UK)</p> <p>2012-12 Mr Andrew JESSUP (AU)</p> <p>2015-02 Mr Eduardo WILLINK (AR)</p> <p>2012-12 Mr Guy HALLMAN (US, Assistant Treatment Lead)</p>
Notes	<p>2013-09 Secretariat started using previously revised footnote regarding treatment adoption</p> <p>2014-04 Edited</p> <p>2016-11 Edited</p>

Scope of the treatment

[1] This treatment describes the cold treatment of fruit of *Citrus clementina*¹ to result in the mortality of eggs and larvae of *Ceratitis capitata* at the stated efficacy².

[2] Treatment description

[3] **Name of treatment** Cold treatment for *Ceratitis capitata* on *Citrus clementina*

[4] **Active ingredient** N/A

[5] **Treatment type** Physical (cold)

[6] **Target pest** *Ceratitis capitata* (Wiedemann, 1824) (Diptera: Tephritidae)

[7] **Target regulated articles** Fruit of *Citrus clementina* Hort. ex Tanaka

[8] Treatment schedule

[9] 2 °C (maximum fruit core temperature) or below for 16 continuous days.

[10] There is 95% confidence that the treatment according to this schedule kills not less than 99.9900% of eggs and larvae of *Ceratitis capitata*.

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

[12] Other relevant information

[13] This schedule is based on the work of Santaballa *et al.* (2009) and was developed using the variety “Clemenules”, and using larval mortality.

[14] References

[15] The present annex to the standard may refer to international standards for phytosanitary measures (ISPMs). ISPMs are available on the International Phytosanitary Portal (IPP) at <https://www.ippc.int/core-activities/standards-setting/ispms>.

[16] **Santaballa, E., Laborda, R. & Cerdá, M.** 2009. Quarantine cold treatment against *Ceratitis capitata* (Wiedemann) (Diptera: Tephritidae) to export clementine mandarins to Japan. *Boletín de Sanidad Vegetal Plagas*, 35: 501–512 (in English).

¹ Citrus species and hybrids are named according to the nomenclature in Cottin, R. 2002. *Citrus of the world: A citrus directory*, version 2.0. France, SRA INRA-CIRAD.

² 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 Commission on Phytosanitary Measures may not provide information on specific effects on human health or food safety, which should be addressed using domestic procedures before contracting parties approve 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.