

## 2023 Second CONSULTATION

1 July – 30 September 2023

### Compiled comments for 2023 Second Consultation: 2017-029\_Draft\_PT\_CT\_Thaumatotibia

#### Summary

#### Participants


Name	Summary
Azerbaijan	no comment
Barbados	Barbados supports the inclusion of this treatment protocol.
European Union	The comments on the draft standard are submitted by the European Commission on behalf of the European Union and its 27 Member States.
Gabon	annexe validée
Malawi	We support the draft Annex
Singapore	Singapore is supportive of this draft.

**T** (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating

**S** (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment
G	(General Comment)	C	<i>Category : SUBSTANTIVE</i> <b>(35) Argentina (1 Oct 2023 4:19 AM)</b> Argentina supports the COSAVE comments
G	(General Comment)	C	<i>Category : TECHNICAL</i> <b>(34) Costa Rica (30 Sep 2023 6:11 AM)</b> We have no comments
G	(General Comment)	C	<i>Category : SUBSTANTIVE</i> <b>(33) Peru (29 Sep 2023 11:22 PM)</b> Peru agrees with the comments agreed upon as COSAVE
G	(General Comment)	C	<i>Category : EDITORIAL</i> <b>(32) Paraguay (29 Sep 2023 8:58 PM)</b> Paraguay de acuerdo con los comentarios de COSAVE.
G	(General Comment)	C	<i>Category : SUBSTANTIVE</i> <b>(29) Belarus (29 Sep 2023 4:06 PM)</b> General comment: Republic of Belarus, would like to formally endorse the Eppo comments submitted via the IPPC Online Comment System
G	(General Comment)	C	<i>Category : EDITORIAL</i>

			<b>(28) Switzerland (29 Sep 2023 3:15 PM)</b> Switzerland would like to formally endorse the EPPC comments submitted via the IPPC Online Comment System.
G	(General Comment)	C	<i>Category : SUBSTANTIVE</i> <b>(27) Philippines (29 Sep 2023 4:35 AM)</b> The PH has no further comments on the Cold treatment for Thaumatotibia leucotreta on Citrus sinensis
G	(General Comment)	C	<i>Category : SUBSTANTIVE</i> <b>(23) Barbados (28 Sep 2023 2:17 PM)</b> Barbados thinks that this is an important addition to the treatment protocols and has no objection to its inclusion.
G	(General Comment)	C	<i>Category : SUBSTANTIVE</i> <b>(20) New Zealand (28 Sep 2023 9:25 AM)</b> New Zealand supports this PT.
G	(General Comment)	C	<i>Category : SUBSTANTIVE</i> <b>(16) United Kingdom (26 Sep 2023 5:24 PM)</b> The UK supports the comments the EPPC secretariat have submitted on behalf of those EPPC member countries which are not part of the European Union.
G	(General Comment)	C	<i>Category : TECHNICAL</i> <b>(15) IPPC Regional Workshop Africa (23 Sep 2023 3:16 PM)</b> Kenya is in agreement with the draf
G	(General Comment)	C	<i>Category : TECHNICAL</i> <b>(14) IPPC Regional Workshop Africa (23 Sep 2023 3:16 PM)</b> Treatment acceptable.
G	(General Comment)	C	<i>Category : EDITORIAL</i> <b>(13) IPPC Regional Workshop Africa (23 Sep 2023 3:16 PM)</b> Le Mali, après examen, approuve le Projet d'annexe à la NIMP 28, n'a pas d'observation
G	(General Comment)	C	<i>Category : SUBSTANTIVE</i> <b>(12) IPPC Regional Workshop Africa (23 Sep 2023 3:16 PM)</b> We support draft Annex to ISPM 28

G	(General Comment)	C	Category : <i>SUBSTANTIVE</i> <b>(10) Malawi (23 Sep 2023 2:30 PM)</b> We support the draft Annex
G	(General Comment)	C	Category : <i>SUBSTANTIVE</i>  Mexico <b>(7) Mexico (15 Sep 2023 7:19 PM)</b> Mexico has reviewed and supports the: Draft annex to ISPM 28: Cold treatment for <i>Thaumatotibia leucotreta</i> on <i>Citrus sinensis</i> (2017-029) in its current format.
G	(General Comment)	C	Category : <i>EDITORIAL</i> <b>(6) Guyana (4 Sep 2023 12:55 AM)</b> Guyana has no objection to the review of the draft annex to ISPM 28: Cold treatment for <i>Thaumatotibia leucotreta</i> on <i>Citrus sinensis</i>
G	(General Comment)	C	Category : <i>SUBSTANTIVE</i> <b>(5) Thailand (22 Aug 2023 6:45 AM)</b> Thailand agreed with the proposed draft annex to ISPM 28: Cold treatment for <i>Thaumatotibia leucotreta</i> on <i>Citrus sinensis</i>
G	(General Comment)	C	Category : <i>TECHNICAL</i> <b>(2) Brazil (11 Aug 2023 9:53 PM)</b> Brasil está de acuerdo con los comentarios de COSAVE
1	<b>DRAFT ANNEX TO ISPM 28: Cold treatment for <i>Thaumatotibia leucotreta</i> on <i>Citrus sinensis</i> (2017-029)</b>	C	Category : <i>SUBSTANTIVE</i> <b>(31) Russian Federation (29 Sep 2023 4:26 PM)</b> General Comment: The Russian Federation would like to formally endorse the EPPO comments submitted via the IPPC Online Comment System.
1	<b>DRAFT ANNEX TO ISPM 28: Cold treatment for <i>Thaumatotibia leucotreta</i> on <i>Citrus sinensis</i> (2017-029)</b>	C	Category : <i>SUBSTANTIVE</i> <b>(30) Russian Federation (29 Sep 2023 4:25 PM)</b> General Comment: The Russian Federation would like to formally endorse the EPPO comments submitted via the IPPC Online Comment System.
1	<b>DRAFT ANNEX TO ISPM 28: Cold treatment for <i>Thaumatotibia leucotreta</i> on <i>Citrus sinensis</i> (2017-029)</b>	C	Category : <i>TECHNICAL</i> <b>(17) Canada (26 Sep 2023 9:55 PM)</b> General comment: Canada does not have any comments on the draft Annex to ISPM 28: Cold treatment for <i>Thaumatotibia</i>

30	<p>This treatment describes the cold treatment of fruit of <i>Citrus sinensis</i><sup>(1)</sup> to result in the mortality of eggs and larvae of <i>Thaumatotibia leucotreta</i> at the stated efficacy.<sup>2</sup></p>	<p>leucotreta on Citrus sinensis</p> <p>C <i>Category : TECHNICAL</i>  <b>(9) United States of America (20 Sep 2023 8:40 PM)</b>                  USDA treatment experts have expressed concerns about these treatments. USDA has been using a more conservative treatment based on Myburgh (1965), along with a systems approach for field pest suppression, for many years. During this time, detections of live <i>T. leucotreta</i> have occurred after treatment. In addition, results from Myburgh (1965) suggest that a small percentage (0.03%) of <i>T. leucotreta</i> larvae could survive 1.11 °C for 21 days. However, we acknowledge there were limitations to this study.                  The schedule USDA currently uses is - 0.55°C or below for 22 continuous days, with 8 hours of treatment time added for each day or part of a day where the temperature is above 31.5 °F (-0.27 °C). After using this treatment schedule for many years, our impression is that the USDA treatment schedule is at the edge of (operational) treatment efficacy, and that pest pressure can result in interceptions of live pests.</p>
40	<p><b>Schedule 1: -0.2 °C or below for 16 continuous days</b></p>	<p>C <i>Category : TECHNICAL</i>  <b>(21) South Africa (28 Sep 2023 11:16 AM)</b>                  his does not translate into the practical treatment protocol, which is based on the average mean hourly maximum probe readings during the experiment, and is as follows: -0.1 degrees Celsius or below for 16 continuous days. This is because in reality shipping conditions are maintained at a level approximately 0.5 degrees Celsius below threshold, to guard against temperature fluctuations Please refer to an article by More et al 2017</p>
42	<p><b>Schedule 2: 1.0 °C or below for 19 continuous days</b></p>	<p>C <i>Category : TECHNICAL</i>  <b>(22) South Africa (28 Sep 2023 11:17 AM)</b></p>

			This does not translate into the practical treatment protocol, which is based on the average mean hourly maximum probe readings during the experiment, and is as follows: -0.1 degrees Celsius or below for 16 continuous days. This is because in reality shipping conditions are maintained at a level approximately 0.5 degrees Celsius below threshold, to guard against temperature fluctuations Please refer to an article by More et al 2017.
47	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 and Mangan (1997).	C	<i>Category : TECHNICAL</i> <b>(11) IPPC Regional Workshop Africa (23 Sep 2023 3:16 PM)</b> nom conforme
48	Schedules 1 and 2 were based on the work of Moore <i>et al.</i> (2017) and were developed using the fourth- and fifth-instar larvae of <i>Thaumatotibia leucotreta</i> bred on an artificial diet. Research by Myburg (1965) and Moore <i>et al.</i> (2016) demonstrated that larvae bred on an artificial diet were at least as cold-tolerant as larvae on fruit.	C	<i>Category : SUBSTANTIVE</i> <b>(19) China (28 Sep 2023 4:16 AM)</b> At the end of the sentence, add "for the phytosanitary cold treatment (under phytosanitary treatment conditions)".  Based on the findings of Moore et al. (2022), the larvae reared on artificial diet is not less than the population infested in the fruit when the estimated lethal dose (LD) is equal to or greater than LD99.  Reference : Moore S.D., Peyper M., Kirkman W., Marsberg T., Albertyn S., Stephen P.R., Thackeray S.R., Grout T.G., Sharp G., Sutton G., & Hattingh V. 2022. Efficacy of Various Low Temperature and Exposure Time Combinations for <i>Thaumatotibia leucotreta</i> (Meyrick) (Lepidoptera: Tortricidae) Larvae. <i>Journal of Economic Entomology</i> , 115(4): 1115–1128.
48	Schedules 1 and 2 were based on the work of Moore <i>et al.</i> (2017) and were developed using the fourth- and fifth-instar larvae of <i>Thaumatotibia leucotreta</i> bred on an artificial diet. Research by Myburg (1965) and Moore <i>et al.</i> (2016) demonstrated that larvae bred on an artificial diet were at least as cold-tolerant as larvae on fruit.	C	<i>Category : SUBSTANTIVE</i> <b>(18) China (28 Sep 2023 4:15 AM)</b> After Myburg (1965), add a comma and remove "and"; then, after Moore et al. (2016), add "and Moore et al. (2022)." Alternatively, replace Moore et al. (2016) with Moore et al. (2022).  Compared to the reference citation of Moore

			<p>et al. (2016), Moore et al. (2022) conducted a more detailed and comprehensive analysis of the differences in cold tolerance between laboratory populations and field populations. Reference Moore et al. (2022) conducted research and tolerance comparisons based on feedback from the first consultation this draft standard. Therefore, using their work can better capture the actual progress of this proposal. If using Moore et al. (2016), it is also necessary to consider its erratum (Journal of Economic Entomology, 00(0), 2016, 1; doi: 10.1093/jee/tow270). Therefore, it would be advisable to replace Moore et al. (2016) with Moore et al. (2022).</p> <p>Reference : Moore S.D., Kirkman, W., Albertyn, S. &amp; Hattingh, V. 2016. Comparing the use of laboratory-reared and field-collected <i>Thaumatotibia leucotreta</i> (Lepidoptera: Tortricidae) larvae for demonstrating efficacy of postharvest cold treatments in citrus fruit. Journal of Economic Entomology, 109(4) 1571–1577. Erratum (2016), Journal of Economic Entomology 110(2): 793, doi:10.1093/jee/tow270.</p>
48	Schedules 1 and 2 were based on the work of Moore <i>et al.</i> (2017) and were developed using the fourth- and fifth-instar larvae of <i>Thaumatotibia leucotreta</i> bred on an artificial diet. Research by Myburg (1965) and Moore <i>et al.</i> (2016) demonstrated that larvae bred on an artificial diet were at least as cold-tolerant as larvae <del>on</del> <u>in</u> fruit.	P	<p>Category : TECHNICAL  <b>(4) COSAVE (17 Aug 2023 9:21 PM)</b>  T. leucotreta is an internal feeder tortricid.</p>
48	Schedules 1 and 2 were based on the work of Moore <i>et al.</i> (2017) and were developed using the fourth- and fifth-instar larvae of <i>Thaumatotibia leucotreta</i> bred on an artificial diet. Research by Myburg (1965) and Moore <i>et al.</i> (2016) demonstrated that larvae bred on an artificial diet were at least as cold-tolerant as larvae <del>on</del> <u>in</u> fruit.	P	<p>Category : TECHNICAL  <b>(3) Uruguay (14 Aug 2023 2:17 PM)</b>  T.leucotreta is an internal-feeding tortricid</p>
49	The efficacy of schedule 1 was calculated based on <del>98-113</del> <u>98-113 a total of 100 044</u> fourth- and fifth-instar larvae treated with no survivors. This number is based on	P	<p>Category : TECHNICAL  <b>(25) Australia (29 Sep 2023 3:29 AM)</b>  The number of larvae of 100,044 appears to</p>

	<del>100 044</del> a total of 102 016 larvae, corrected per replicate for control mortality; the <del>average overall</del> control mortality was 1.7%.		have already been corrected for control mortality from 102,016. Overall control mortality would be a better term as control mortality has been combined across replicates and not averaged across replicates.  Comment justification: Table 3 and results in Moore et al. (2017)
50	The efficacy of schedule 2 was calculated based on <del>108 859</del> a total of 109 304 fourth- and fifth-instar larvae treated with no survivors. This number is based on <del>109 304</del> a total of 109 751 larvae, corrected per replicate for control mortality; the <del>average overall</del> control mortality was 0.4%.	P	<i>Category : TECHNICAL</i> <b>(26) Australia (29 Sep 2023 3:31 AM)</b> The number of larvae of 109,304 appears to have already been corrected for control mortality from 109,751. Overall control mortality would be a better term as control mortality has been combined across replicates and not averaged across replicates.  Comment justification: Table 5 and results in Moore et al. (2017)
56	<b>Myburgh, A.C.</b> 1965. Low temperature sterilization of false codling moth, <i>Argyroploce leucotreta</i> Myer., in export citrus. <i>Journal of the Entomological Society of Southern Africa</i> , 28(5): <del>277–85</del> <u>277–285</u> .	P	<i>Category : EDITORIAL</i> <b>(24) European Union (28 Sep 2023 6:59 PM)</b> Typo.
56	<b>Myburgh, A.C.</b> 1965. Low temperature sterilization of false codling moth, <i>Argyroploce leucotreta</i> Myer., in export citrus. <i>Journal of the Entomological Society of Southern Africa</i> , 28(5): <del>277–85</del> <u>277–285</u> .	P	<i>Category : EDITORIAL</i> <b>(8) EPPO (19 Sep 2023 9:17 AM)</b> Typo