



2022 SECOND CONSULTATION

1 July – 30 September 2022

Compiled comments for 2022 Second Consultation: Draft PT Irradiation treatment for *Pseudococcus jackbeardsleyi* (2017-027)

Summary

Name	Summary
Cuba	No hay comentarios al borrador de tratamiento fitosanitario
European Union	The comments are submitted by the European Commission on behalf of the European Union (EU) and its 27 Member States.
Ireland	No comments
Singapore	Singapore supports this and do not have further comment.
United Kingdom	please ignore

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S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged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	Comment	SC responses
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (39) Argentina (1 Oct 2022 12:46 AM) We fully support comments from COSAVE	Noted
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (38) Peru (30 Sep 2022 11:21 PM) The document has been reviewed, there are no comments	Noted
G	(General Comment)	<i>Category : TECHNICAL</i> (14) Cameroon (15 Sep 2022 6:44 AM) Nous soutenons l'adoption de ce protocole de traitement. Il donne un nouvel outil pour contrôler un nuisible. Il sera nécessaire de déterminer un seuil au-dessus duquel l'insecte vivant doit être éliminé par un traitement complémentaire.	Considered but not incorporated The treatment prevents development of F1 second-instar nymphs.
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (36) Antigua and Barbuda (30 Sep 2022 5:25 PM) This PT should be a useful guide to those NPPOs able to use irradiation as a phytosanitary treatment. It may be some time before the technology can be utilized in, and the PT adopted by, Antigua and Barbuda due to resource constraints as well as existing food safety considerations and concerns by the general public.	Noted
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (33) European Union (30 Sep 2022 3:53 PM) The annex states under paragraph 41 that "Because irradiation may not result in outright mortality, inspectors may encounter live but non-viable <i>Pseudococcus jackbeardsleyi</i> eggs, nymphs and adults during	Noted An infertile regulated pest is a non-viable pest.

		<p>the inspection process. This does not necessarily imply a failure of the treatment.”</p> <p>The efficacy of the treatment is confirmed by the absence of viable pests in the regulated articles. The assurance of which should be via the correct application and administration of the treatment but can also be confirmed by lab tests after import.</p> <p>However, we note that the ISPM 5 Glossary definition for “treatment (as a phytosanitary measure)” is ‘Official procedure for killing, inactivating, removing, rendering infertile or devitalizing regulated pests.’ none of which possibility fits into this situation of “non-viable”. We encourage the TPG to reflect on this aspect and discuss whether a change in the definition is needed.</p>	
G	(General Comment)	<p><i>Category : TECHNICAL</i> (32) Paraguay (30 Sep 2022 2:13 PM) Paraguay apoya comentarios de COSAVE.</p>	Noted
G	(General Comment)	<p><i>Category : EDITORIAL</i> (31) Nepal (30 Sep 2022 7:32 AM) Nepal has no comments on: DRAFT ANNEX TO ISPM-28: Irradiation treatment for <i>Pseudococcus jackbeardsleyi</i> (2017-027)</p>	Noted
G	(General Comment)	<p><i>Category : SUBSTANTIVE</i> (30) Barbados (29 Sep 2022 10:32 PM) Barbados has no objections to this draft annex.</p>	Noted
G	(General Comment)	<p><i>Category : SUBSTANTIVE</i> (28) Canada (29 Sep 2022 3:49 PM) no comments from Canada</p>	Noted
G	(General Comment)	<p><i>Category : TECHNICAL</i> (27) Mali (29 Sep 2022 3:40 PM) Je n'ai pas d'objection par rapport aux termes révisés du présent projet de document .</p>	Noted
G	(General Comment)	<p><i>Category : TECHNICAL</i> (25) Mozambique (28 Sep 2022 10:45 AM) Mozambique has not yet started to use the irradiation treatment, however, we have no comments for this Standard and we have no objection to it to moving forward</p>	Noted
G	(General Comment)	<p><i>Category : SUBSTANTIVE</i> (24) New Zealand (28 Sep 2022 8:40 AM) New Zealand supports the adoption of this standard.</p>	Noted
G	(General Comment)	<p><i>Category : SUBSTANTIVE</i> (23) Belarus (27 Sep 2022 3:46 PM) Republic of Belarus would like to formally endorse the EPPO comments submitted via the IPPC Online Comment System</p>	Noted
G	(General Comment)	<p><i>Category : EDITORIAL</i> (22) South Africa (27 Sep 2022 3:11 PM) The NPPOZA has no comments</p>	Noted
G	(General Comment)	<p><i>Category : EDITORIAL</i> (21) United Kingdom (27 Sep 2022 2:46 PM)</p>	Noted

		The United Kingdom of Great Britain and Northern Ireland would like to formally endorse the EPPA comments submitted via the IPPC Online Comment System	
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (20) Australia (27 Sep 2022 2:04 AM) Australia has reviewed and is supportive of this current text	Noted
G	(General Comment)	<i>Category : TECHNICAL</i> 🇲🇽 Mexico (19) Mexico (26 Sep 2022 9:37 PM) Mexico supports the DRAFT ANNEX TO ISPM 28: Irradiation treatment for <i>Pseudococcus jackbeardsleyi</i> (2017-027).	Noted
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (18) Guyana (26 Sep 2022 9:31 PM) Guyana has no objection at this time.	Noted
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (17) Egypt (24 Sep 2022 11:30 AM) No comments	Noted
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (16) Congo (15 Sep 2022 4:41 PM) Congo agrees with this ISPM and has nothing to add	Noted
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (15) United States of America (15 Sep 2022 1:32 PM) We don't have any comments on this draft.	Noted
G	(General Comment)	<i>Category : SUBSTANTIVE</i> (13) EPPA (14 Sep 2022 12:23 PM) The annex states under paragraph 41 that "Because irradiation may not result in outright mortality, inspectors may encounter live but non-viable <i>Pseudococcus jackbeardsleyi</i> eggs, nymphs and adults during the inspection process. This does not necessarily imply a failure of the treatment." The efficacy of the treatment is confirmed by the absence of viable pests in the regulated articles. The assurance of which should be via the correct application and administration of the treatment but can also be confirmed by lab tests after import. However, we note that the ISPM 5 Glossary definition for "treatment (as a phytosanitary measure)" is 'Official procedure for killing, inactivating, removing, rendering infertile or devitalizing regulated pests.' none of which possibility fits into this situation of "non-viable". We encourage the TPG to reflect on this aspect and discuss whether a change in the definition is needed.	Noted An infertile regulated pest is a non-viable pest.
G	(General Comment)	<i>Category : TECHNICAL</i> (10) Uruguay (12 Sep 2022 8:25 PM) We agree with the document as it is. No comments	Noted
G	(General Comment)	<i>Category : TECHNICAL</i> (9) Malawi (30 Aug 2022 9:48 PM) We support the draft annex to ISPM 28	Noted

G	(General Comment)	<p><i>Category : SUBSTANTIVE</i> (2) Thailand (25 Aug 2022 11:48 AM) Thailand agreed with the proposed Draft ANNEX TO ISPM 28: Irradiation treatment for <i>Pseudococcus jackbeardsleyi</i></p>	Noted
G	(General Comment)	<p><i>Category : SUBSTANTIVE</i> (1) Trinidad and Tobago (15 Aug 2022 9:19 PM) Feasibility. Applicability and Potential implementation issues <input type="checkbox"/> procedure for carrying out the phytosanitary treatment (including ease of use, risks to operators, technical complexity, training required, equipment required, facilities needed) <input type="checkbox"/> cost of typical treatment facility and operational running costs if appropriate <input type="checkbox"/> commercial relevance, including affordability <input type="checkbox"/> availability of expertise needed to apply the phytosanitary treatment <input type="checkbox"/> the degree to which other phytosanitary measures can be used as part of a systems approach <input type="checkbox"/> Alternative treatment should be explored which are more cost effective for developing countries</p>	Noted
1	DRAFT ANNEX TO ISPM 28: Irradiation treatment for <i>Pseudococcus jackbeardsleyi</i> (2017-027)	<p><i>Category : SUBSTANTIVE</i> (29) Russian Federation (29 Sep 2022 4:45 PM) General Comment: The Russian Federation would like to formally endorse the EPPO comments submitted via the IPPC Online Comment System.</p>	Noted
36	Minimum absorbed dose of 166 Gy to prevent development to the second-instar nymph stage of progeny from mature adult females of <i>Pseudococcus jackbeardsleyi</i> .	<p><i>Category : TECHNICAL</i> (5) Kenya (30 Aug 2022 7:25 AM) Minimum absorbed dose of 166 Gy to prevent development to the second-instar nymph stage of progeny from mature adult females of <i>Pseudococcus jackbeardsleyi</i>. There is 95% confidence that the treatment according to this schedule prevents offspring from developing to the into second-instar nymph stage from not less than 99.9977% of mature adult females of <i>Pseudococcus jackbeardsleyi</i>.</p>	Considered but not incorporated
39	This treatment should not be applied to fruits, vegetables or ornamental plants stored in modified atmospheres because modified atmosphere may affect the treatment efficacy.	<p><i>Category : TECHNICAL</i> (6) Kenya (30 Aug 2022 7:28 AM) This treatment should not be applied to fruits, vegetables or ornamental plants stored in modified atmospheres such as.....because modified atmosphere may affect the treatment efficacy.</p>	<p>Considered but not incorporated</p> <p>It is a recommendation for all fruits, vegetables or ornamental plants</p>
40	Other relevant information	<p><i>Category : SUBSTANTIVE</i> (26) Japan (29 Sep 2022 10:14 AM) This treatment schedule prevents offspring developing to the second-instar nymph stage, but treated mature adult female can rear a lot of</p>	Considered but not incorporated

		<p>F1 generation neonates (Zhan et al., 2016. Table 2) . If the pest transmits virus, it is not confirmed whether this treatment schedule is effective in preventing virus transmission (Zhan et al., 2016. Table 2.) . Mealybugs are known to transmit virus, and last year it was reported that Cacao mild mosaic virus were detected in <i>Pseudococcus jackbeardsleyi</i> (Alina et al., 2021) although transmissions to cacao did not be tested.</p> <p>For this reason, in order to avoid misunderstanding and dispute between contracting parties, it should be clarified in this Annex that the efficacy to prevent virus transmission by this treatment schedule has not been confirmed.</p>	<p>This treatment schedule was specifically developed against the target pest, <i>Pseudococcus jackbeardsleyi</i>.</p> <p>The comment highlights an important issue, however consistent with the approach to other PTs, the definition of the scope focuses on what is covered by the PT and not what is excluded.</p> <p>The NPPO may assess the risk of introduction of viruses or any other regulated pests associated to the target pests and apply additional phytosanitary measures if necessary.</p>
41	Because irradiation may not result in outright mortality, inspectors may encounter live but non-viable <i>Pseudococcus jackbeardsleyi</i> eggs, nymphs and adults during the inspection process. This does not necessarily imply a failure of the treatment.	<p><i>Category : TECHNICAL</i> (37) Cameroon (30 Sep 2022 11:09 PM) We think, it will be necessary to determine a threshold above which the number/density of live insect should be regulated by a lethal treatment. In some countries, the public opinion will not find it acceptable to certify and put on the market, products with too much live insects.</p>	<p>Considered but not incorporated</p> <p>This is a quality issue not a quarantine security concern. A commodity with significant numbers of live pest present in the surface will be rejected before it is subjected to the postharvest treatment.</p>
41	Because irradiation may not result in outright mortality, inspectors may encounter live but non-viable <i>Pseudococcus jackbeardsleyi</i> eggs, nymphs and adults during the inspection process. This does not necessarily imply a failure of the treatment.	<p><i>Category : SUBSTANTIVE</i> (34) European Union (30 Sep 2022 3:54 PM) The addition of "necessarily" is the result of the incorporation of comment 26 from first consultation. We don't agree with this addition because it changes the meaning of the sentence and it is not consistent with the other adopted irradiated treatments (e.g. see PT 43, the last irradiation treatment adopted). The addition of "necessarily" is not needed in conjunction with the verb "imply".</p>	<p>Incorporated</p> <p>Agree with the EU explanation.</p>
41	Because irradiation may not result in outright mortality, inspectors may encounter live but non-viable <i>Pseudococcus jackbeardsleyi</i> eggs, nymphs and adults during the inspection process. This does not necessarily imply a failure of the treatment.	<p><i>Category : SUBSTANTIVE</i> (11) Eppo (14 Sep 2022 12:23 PM) The addition of "necessarily" is the result of the incorporation of comment 26 from first consultation. We don't agree with this addition because it changes the meaning of the sentence and it is not consistent with the other adopted irradiated treatments (e.g. see PT 43, the last irradiation treatment adopted). The addition of "necessarily" is not needed in conjunction with the verb "imply".</p>	<p>Incorporated</p>
41	Because irradiation may not result in outright mortality, inspectors may encounter live but non-viable <i>Pseudococcus</i>	<p><i>Category : TECHNICAL</i> (7) Kenya (30 Aug 2022 7:31 AM) Because irradiation may not result in outright mortality, inspectors</p>	

	<i>jackbeardsleyi</i> eggs, nymphs and adults during the inspection process. This does not necessarily imply a failure of the treatment.	may encounter live but non-viable <i>Pseudococcus jackbeardsleyi</i> eggs, nymphs and adults during the inspection process. This does not necessarily imply a failure of the treatment.	
43	The efficacy of this schedule was calculated based on a total of 131,512 mature adult females treated preventing first instar offspring developing to the second instar nymph stage; in the control, development of offspring from neonates was 98.0%.	<i>Category : TECHNICAL</i> (8) Kenya (30 Aug 2022 7:36 AM) The efficacy of this schedule was calculated based on a total of 131,512 mature adult females treated which prevented development of first instars into offspring developing to the second instar nymph stage; in the control (describe the control), development of offspring from neonates was 98.0%.	Modified Revised: "The efficacy of this schedule was calculated based on a total of 131,512 mature adult females treated preventing offspring developing to the second instar nymph stage; in the control, development of second instar from neonates was estimated 98.5%.
44	Extrapolation of treatment efficacy to all fruits vegetables and ornamental plants was based on knowledge and experience that radiation dosimetry systems measure the actual radiation dose absorbed by the target pest independent of host commodity, and evidence from research studies on a variety of pests and commodities. These include studies on the following pests and hosts: <i>Anastrepha fraterculus</i> (<i>Eugenia pyriformis</i> , <i>Malus pumila</i> and <i>Mangifera indica</i>); <i>Anastrepha ludens</i> (<i>Citrus paradisi</i> , <i>Citrus sinensis</i> , <i>Mangifera indica</i> and artificial diet), <i>Anastrepha obliqua</i> (<i>Averrhoa carambola</i> , <i>Citrus sinensis</i> and <i>Psidium guajava</i>); <i>Anastrepha suspensa</i> (<i>Averrhoa carambola</i> , <i>Citrus paradisi</i> and <i>Mangifera indica</i>), <i>Bactrocera tryoni</i> (<i>Citrus sinensis</i> , <i>Solanum lycopersicum</i> , <i>Malus domestica</i> , <i>Mangifera indica</i> , <i>Persea americana</i> and <i>Prunus avium</i>), <i>Cydia pomonella</i> (<i>Malus pumila</i> and artificial diet) <u>and artificial diet</u> , <i>Grapholita molesta</i> (<i>Malus pumila</i> and artificial diet), <i>Pseudococcus jackbeardsleyi</i> (<i>Cucurbita</i> sp. and <i>Solanum tuberosum</i>); and <i>Tribolium confusum</i> (<i>Triticum aestivum</i> , <i>Hordeum vulgare</i> and <i>Zea mays</i>) (Bustos <i>et al.</i> , 2004; Gould and von Windeguth, 1991; Hallman, 2004a, 2004b, 2013; Hallman and Martinez, 2001; Hallman et al. <u>et al.</u> , 2010; Jessup et al. <u>et al.</u> , 1992; Mansour, 2003; Tunçbilek	<i>Category : EDITORIAL</i> (35) European Union (30 Sep 2022 3:56 PM) Four edits.	Incorporated

	and Kansu, 1996; von Windeguth, 1986; von Windeguth and Ismail, 1987; Zhan <i>et al.</i> , 2016). It is recognized, however, that treatment efficacy has not been tested for all potential fruit, vegetable and ornamental plant hosts of the target pest. If evidence becomes available to show that the extrapolation of the treatment to cover all hosts of this pest is incorrect, the treatment will be reviewed.		
44	<p>Extrapolation of treatment efficacy to all fruits vegetables and ornamental plants was based on knowledge and experience that radiation dosimetry systems measure the actual radiation dose absorbed by the target pest independent of host commodity, and evidence from research studies on a variety of pests and commodities. These include studies on the following pests and hosts: <i>Anastrepha fraterculus</i> (<i>Eugenia pyriformis</i>, <i>Malus pumila</i> and <i>Mangifera indica</i>); <i>Anastrepha ludens</i> (<i>Citrus paradisi</i>, <i>Citrus sinensis</i>, <i>Mangifera indica</i> and artificial diet), <i>Anastrepha obliqua</i> (<i>Averrhoa carambola</i>, <i>Citrus sinensis</i> and <i>Psidium guajava</i>); <i>Anastrepha suspensa</i> (<i>Averrhoa carambola</i>, <i>Citrus paradisi</i> and <i>Mangifera indica</i>), <i>Bactrocera tryoni</i> (<i>Citrus sinensis</i>, <i>Solanum lycopersicum</i>, <i>Malus domestica</i>, <i>Mangifera indica</i>, <i>Persea americana</i> and <i>Prunus avium</i>), <i>Cydia pomonella</i> (<i>Malus pumila</i> and artificial diet) and and artificial diet, <i>Grapholita molesta</i> (<i>Malus pumila</i> and artificial diet), <i>Pseudococcus jackbeardsleyi</i> (<i>Cucurbita</i> sp. and <i>Solanum tuberosum</i>), and <i>Tribolium confusum</i> (<i>Triticum aestivum</i>, <i>Hordeum vulgare</i> and <i>Zea mays</i>) (Bustos <i>et al.</i>, 2004; Gould and von Windeguth, 1991; Hallman, 2004a, 2004b, 2013; Hallman and Martinez, 2001; Hallman et al., 2010; Jessup et al., 1992; Mansour, 2003; Tunçbilek and Kansu, 1996; von Windeguth, 1986; von Windeguth and Ismail, 1987; Zhan <i>et al.</i>, 2016). It is recognized, however, that treatment efficacy has not been tested for all potential fruit, vegetable and ornamental plant hosts of the target pest. If evidence becomes available to show that the extrapolation of the treatment to cover all hosts of this pest is incorrect, the treatment will be reviewed.</p>	<p>Category : EDITORIAL (12) EPPO (14 Sep 2022 12:23 PM) Four edits.</p>	Incorporated

<p>44</p>	<p>Extrapolation of treatment efficacy to all fruits vegetables and ornamental plants was based on knowledge and experience that radiation dosimetry systems measure the actual radiation dose absorbed by the target pest independent of host commodity, and evidence from research studies on a variety of pests and commodities. These include studies on the following pests and hosts: <i>Anastrepha fraterculus</i> (<i>Eugenia pyriformis</i>, <i>Malus pumila</i> and <i>Mangifera indica</i>); <i>Anastrepha ludens</i> (<i>Citrus paradisi</i>, <i>Citrus sinensis</i>, <i>Mangifera indica</i> and artificial diet), <i>Anastrepha obliqua</i> (<i>Averrhoa carambola</i>, <i>Citrus sinensis</i> and <i>Psidium guajava</i>); <i>Anastrepha suspensa</i> (<i>Averrhoa carambola</i>, <i>Citrus paradisi</i> and <i>Mangifera indica</i>), <i>Bactrocera tryoni</i> (<i>Citrus sinensis</i>, <i>Solanum lycopersicum</i>, <i>Malus domestica</i>, <i>Mangifera indica</i>, <i>Persea americana</i> and <i>Prunus avium</i>), <i>Cydia pomonella</i> (<i>Malus pumila</i> and artificial diet) and <i>Grapholita molesta</i> (<i>Malus pumila</i> and artificial diet), <i>Pseudococcus jackbeardsleyi</i> (<i>Cucurbita</i> sp. and <i>Solanum tuberosum</i>), <i>Tribolium confusum</i> (<i>Triticum aestivum</i>, <i>Hordeum vulgare</i> and <i>Zea mays</i>) (Bustos <i>et al.</i>, 2004; Gould and von Windeguth, 1991; Hallman, 2004a, 2004b, 2013; Hallman and Martinez, 2001; Hallman <i>et al.</i>, 2010; Jessup <i>et al.</i>, 1992; Mansour, 2003; Tunçbilek and Kansu, 1996; von Windeguth, 1986; von Windeguth and Ismail, 1987; Zhan <i>et al.</i>, 2016). It is recognized, however, that treatment efficacy has not been tested for all potential fruit, vegetable and ornamental plant hosts of the target pest. If evidence becomes available to show that the extrapolation of the treatment to cover all hosts of this pest is incorrect, the treatment will be reviewed.</p>	<p>Category : <i>SUBSTANTIVE</i> (4) Zambia (29 Aug 2022 9:31 AM) The draft standard reads well, thus Zambia has no objection</p>	<p>Noted</p>
<p>44</p>	<p>Extrapolation of treatment efficacy to all fruits <u>fruits</u>, vegetables and ornamental plants was based on knowledge and experience that radiation dosimetry systems measure the actual radiation dose absorbed by the target pest independent of host commodity, and evidence from research studies on a variety of pests and commodities. These include studies on the following pests and hosts:</p>	<p>Category : <i>SUBSTANTIVE</i> (3) China (28 Aug 2022 4:33 PM) The species of pumpkin have been defined in the paragraph 42.</p>	<p>Incorporated</p>

<p><i>Anastrepha fraterculus</i> (<i>Eugenia pyriformis</i>, <i>Malus pumila</i> and <i>Mangifera indica</i>); <i>Anastrepha ludens</i> (<i>Citrus paradisi</i>, <i>Citrus sinensis</i>, <i>Mangifera indica</i> and artificial diet), <i>Anastrepha obliqua</i> (<i>Averrhoa carambola</i>, <i>Citrus sinensis</i> and <i>Psidium guajava</i>); <i>Anastrepha suspensa</i> (<i>Averrhoa carambola</i>, <i>Citrus paradisi</i> and <i>Mangifera indica</i>), <i>Bactrocera tryoni</i> (<i>Citrus sinensis</i>, <i>Solanum lycopersicum</i>, <i>Malus domestica</i>, <i>Mangifera indica</i>, <i>Persea americana</i> and <i>Prunus avium</i>), <i>Cydia pomonella</i> (<i>Malus pumila</i> and artificial diet) and <i>Grapholita molesta</i> (<i>Malus pumila</i> and artificial diet), <i>Pseudococcus jackbeardsleyi</i> (<i>Cucurbita</i> sp. pepo and <i>Solanum tuberosum</i>), <i>Tribolium confusum</i> (<i>Triticum aestivum</i>, <i>Hordeum vulgare</i> and <i>Zea mays</i>) (Bustos <i>et al.</i>, 2004; Gould and von Windeguth, 1991; Hallman, 2004a, 2004b, 2013; Hallman and Martinez, 2001; Hallman <i>et al.</i>, 2010; Jessup <i>et al.</i>, 1992; Mansour, 2003; Tunçbilek and Kansu, 1996; von Windeguth, 1986; von Windeguth and Ismail, 1987; Zhan <i>et al.</i>, 2016). It is recognized, however, that treatment efficacy has not been tested for all potential fruit, vegetable and ornamental plant hosts of the target pest. If evidence becomes available to show that the extrapolation of the treatment to cover all hosts of this pest is incorrect, the treatment will be reviewed.</p>		
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