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# COMISIÓN DE MEDIDAS FITOSANITARIAS

**11.ª reunión**

**Roma, 4-8 de abril de 2016**

**Aprobación de normas internacionales para medidas fitosanitarias:  
enmiendas a tinta**

**Tema 9.2 del programa**

**Preparado por la Secretaría de la CIPF**

## I. Introducción

1. En un esfuerzo por armonizar las versiones de las NIMF en los idiomas oficiales, la Secretaría de la CIPF ha iniciado un proceso para la traducción y la incorporación de enmiendas a tinta, de las que la CMF ha tomado nota previamente en inglés, a las versiones de las NIMF en los otros idiomas oficiales. Hasta ahora, el CN examina y recomienda a la CMF unos cuadros en los que figuran las enmiendas a tinta propuestas (en inglés). Posteriormente la CMF toma nota de estas enmiendas a tinta y solamente se actualizan las versiones inglesas de las NIMF. Esto significa que otras versiones lingüísticas de las NIMF no se actualizan, lo que puede dar lugar a conflictos.

2. La Secretaría, que se encarga de la traducción de las NIMF, ha comenzado la labor de traducir las enmiendas a tinta de las que la CMF ya ha tomado nota. Las traducciones de estas enmiendas a tinta deben ser revisadas y validadas por el grupo de revisión lingüística correspondiente (cuando esté disponible para este trabajo) o por el miembro del Grupo técnico sobre el glosario con responsabilidades para el idioma de que se trate. Cuando se señalan traducciones incorrectas durante el proceso, también se corrigen. Las características específicas de la procedencia de los cambios se detallan en la historia de la publicación de la norma pertinente y la Secretaría ha preparado cuadros en los que se detallan las enmiendas a tinta traducidas, quedando esta información a disposición de quienes lo soliciten. Aplicar las enmiendas a tinta en las demás versiones lingüísticas de las NIMF debería contribuir a garantizar una mayor armonización entre las versiones lingüísticas.

*Para minimizar los efectos de los métodos de trabajo de la FAO en el medio ambiente y contribuir a la neutralidad respecto del clima, se ha publicado un número limitado de ejemplares de este documento. Se ruega a los delegados y observadores que lleven sus copias a las reuniones y se abstengan de pedir copias adicionales. La mayoría de los documentos de reunión de la FAO está disponible en Internet, en el sitio [www.fao.org](http://www.fao.org).*

3. Debido a la amplitud de los recursos necesarios, el proceso se llevará a cabo a medida que se disponga de ellos. La Secretaría ha completado el trabajo sobre las versiones en francés y español, que se han actualizado y publicado en el Portal fitosanitario internacional (PFI). El trabajo correspondiente a las versiones en árabe, chino y ruso se llevará a cabo en cuanto se indiquen los recursos para ello.

## **II. Antecedentes para las enmiendas a tinta a los tratamientos fitosanitarios aprobados**

4. En su reunión de julio de 2013, el Grupo técnico sobre tratamientos fitosanitarios (GTTF) propuso que se definiera la expresión “dosis efectiva”, ya que las partes contratantes no la comprendían claramente cuando presentaban tratamientos para su examen como tratamientos de la CIPF. La expresión, con su abreviatura “DE”, se utiliza en los tratamientos fitosanitarios y en la NIMF N.º 28 (Tratamientos fitosanitarios para plagas reglamentadas).

5. El GTTF propuso una definición y que la expresión se incluyera en la NIMF n.º 5 (Glosario de términos fitosanitarios).

6. El Comité de Normas (CN), agregó la expresión a la Lista de temas de las normas de la CIPF en noviembre de 2013 y encargó al Grupo técnico sobre el glosario (GTG) que examinara la definición.

7. El GTG, en febrero de 2014, examinó la definición manifestando reservas fundamentales sobre la propuesta al considerar que una dosis normalmente era una cantidad, pero en la propuesta figuraba como un “nivel de eficacia”. El GTG sugirió varias opciones (véase la sección 6.1.15 del informe del GTG).

8. El CN, en su reunión de mayo de 2014, pidió al GTTF que debatiera la expresión “dosis efectiva” (2013-017), teniendo en cuenta las opciones propuestas por el GTG.

9. El GTTF debatió las propuestas y la expresión en su reunión presencial de junio de 2014, y en sus reuniones virtuales de septiembre de 2014 y febrero de 2015. Se observó que la “dosis efectiva” estaba destinada a representar el nivel de efecto proporcionado por el protocolo de tratamiento para lograr la eficacia prevista en una población de plagas objetivo en un determinado nivel de confianza (por ejemplo, el 95 %). El GTTF debatió las opciones propuestas por el GTG y acordó que la definición de una “dosis” como “efecto” carecía de lógica. El problema se debe a que, en principio, la dosis efectiva (DE, o la dosis letal, DL) se calcula mediante una gama de dosis, la medición de los efectos y después interpolando la dosis estimada para producir un efecto específico (por ejemplo, DL50, DL99, etc.). En un protocolo de tratamiento es necesario representar la “eficacia” (a un nivel de confianza) que se logra mediante el tratamiento cuando este se aplica de conformidad con el protocolo de tratamiento que incluye una “dosis” declarada.

## **III. Conclusiones**

10. Después del necesario estudio, el GTTF propuso que no se definiera la expresión, sino que, a efectos de indicar el nivel de eficacia, se aplicaran enmiendas a tinta a los tratamientos fitosanitarios aprobados para aclarar el significado sin utilizar la expresión. El GTTF propuso una redacción unificada al CN que, en su reunión de mayo de 2015, estuvo de acuerdo con la propuesta. El CN examinó y aprobó, en su reunión de noviembre de 2015, las propuestas de enmiendas a tinta para los tratamientos fitosanitarios aprobados (figuran en el Documento adjunto 1 del presente documento).

#### IV. Recomendación

11. Se invita a la CMF a:

- 1) *tomar nota* del proceso para la traducción y la incorporación de enmiendas a tinta anteriormente aceptadas en inglés a las versiones de las NIMF en los demás idiomas oficiales;
- 2) *tomar nota* de las enmiendas a tinta a los tratamientos fitosanitarios actualmente aprobados que figuran en el Documento adjunto 1 de este documento;
- 3) *acordar* que, una vez que la Secretaría haya aplicado estas enmiendas a tinta, la versión anterior de los tratamientos fitosanitarios sea revocada y sustituida por las nuevas versiones aceptadas;
- 4) *invitar* a las partes contratantes a apoyar la labor de armonización de las versiones lingüísticas de las NIMF realizando las donaciones oportunas al Fondo fiduciario de la CIPF para este fin.

Attachment 1 - Proposed ink amendments to adopted Annexes to ISPM 28 (*Phytosanitary treatments for regulated pests*)

PT#	PT Title	Changes in the treatment schedule	Rationale for ink amendment to reflect end-point
PT 1	<b>Irradiation treatment for <i>Anastrepha ludens</i></b>	<p>Minimum absorbed dose of 70 Gy to prevent the emergence of adults of <i>Anastrepha ludens</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9968</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents emergence of not less than 99.9968% of adults of <i>Anastrepha ludens</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented adult emergence from the fruit that were treated containing third instar larvae that were identified as the most tolerant life stage.
PT 2	<b>Irradiation treatment for <i>Anastrepha obliqua</i></b>	<p>Minimum absorbed dose of 70 Gy to prevent the emergence of adults of <i>Anastrepha obliqua</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9968</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents emergence of not less than 99.9968% of adults of <i>Anastrepha obliqua</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented adult emergence from the fruit that were treated containing third instar larvae that were identified as the most tolerant life stage.
PT 3	<b>Irradiation treatment for <i>Anastrepha serpentina</i></b>	<p>Minimum absorbed dose of 100 Gy to prevent the emergence of adults of <i>Anastrepha serpentina</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9972</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents emergence of not less than 99.9972% of adults of <i>Anastrepha serpentina</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented adult emergence from the fruit that were treated containing third instar larvae that were identified as the most tolerant life stage.

PT#	PT Title	Changes in the treatment schedule	Rationale for ink amendment to reflect end-point
PT 4	<b>Irradiation treatment for <i>Bactrocera jarvisi</i></b>	<p>Minimum absorbed dose of 100 Gy to prevent the emergence of adults of <i>Bactrocera jarvisi</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9981</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents emergence of not less than 99.9981% of adults of <i>Bactrocera jarvisi</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented adult emergence from the fruit that were treated containing 1-day old eggs and third instar larvae that were identified as the most tolerant life stages.
PT 5	<b>Irradiation treatment for <i>Bactrocera tryoni</i></b>	<p>Minimum absorbed dose of 100 Gy to prevent the emergence of adults of <i>Bactrocera tryoni</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9978</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents emergence of not less than 99.9978% of adults of <i>Bactrocera tryoni</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented adult emergence from the fruit that were treated containing 1-day old eggs and third instar larvae that were identified as the most tolerant life stages.
PT 6	<b>Irradiation treatment for <i>Cydia pomonella</i></b>	<p>Minimum absorbed dose of 200 Gy to prevent the emergence of adults of <i>Cydia pomonella</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9978</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents emergence of not less than 99.9978% of adults of <i>Cydia pomonella</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented adult emergence from the fruit that were treated containing fifth instar larvae that were identified as the most tolerant life stage.

PT#	PT Title	Changes in the treatment schedule	Rationale for ink amendment to reflect end-point
PT 7	<b>Irradiation treatment for fruit flies of the family Tephritidae (generic)</b>	<p>Minimum absorbed dose of 150 Gy to prevent the emergence of adults of fruit flies.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9968</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents emergence of not less than 99.9968% of adult fruit flies.</a></p>	The confirmatory trials demonstrated that the stated dose prevented adult emergence from the fruit that were treated containing the most tolerant life stage of a number of economically important species in the Tephritidae.
PT 8	<b>Irradiation treatment for <i>Rhagoletis pomonella</i></b>	<p>Minimum absorbed dose of 60 Gy to prevent the development of phanerocephalic pupae of <i>Rhagoletis pomonella</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9921</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents the development of not less than 99.9921% of phanerocephalic pupae of <i>Rhagoletis pomonella</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented the formation of the phanerocephalic pupa in fruit that were treated containing third instar larvae that were identified as the most tolerant life stage.
PT 9	<b>Irradiation treatment for <i>Conotrachelus nenuphar</i></b>	<p>Minimum absorbed dose of 92 Gy to prevent the reproduction in adults of <i>Conotrachelus nenuphar</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9880</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents the reproduction in not less than 99.9880% of adults of <i>Conotrachelus nenuphar</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented successful reproduction (development of F1 beyond the first instar) in treated adults that were identified as the most tolerant life stage.

PT#	PT Title	Changes in the treatment schedule	Rationale for ink amendment to reflect end-point
PT 10	<b>Irradiation treatment for <i>Grapholita molesta</i></b>	<p>Minimum absorbed dose of 232 Gy to prevent the emergence of adults of <i>Grapholita molesta</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9949</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents emergence of not less than 99.9949% of adults of <i>Grapholita molesta</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented adult emergence from the fruit that were treated containing fifth instar larvae that were identified as the most tolerant life stage.
PT 11	<b>Irradiation treatment for <i>Grapholita molesta</i> under hypoxia</b>	<p>Minimum absorbed dose of 232 Gy to prevent oviposition of <i>Grapholita molesta</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9932</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents oviposition of not less than 99.9932% of <i>Grapholita molesta</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented egg laying (oviposition) in adults that emerged from the fruit that were treated containing fifth instar larvae that were identified as the most tolerant life stage.
PT 12	<b>Irradiation treatment for <i>Cylas formicarius elegantulus</i></b>	<p>Minimum absorbed dose of 165 Gy to prevent the development of F1 adults of <i>Cylas formicarius elegantulus</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9952</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents the development of not less than 99.9952% of F1 adults of <i>Cylas formicarius elegantulus</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented F1 adult production from eggs laid by treated adults that were identified as the most tolerant life stage.

PT#	PT Title	Changes in the treatment schedule	Rationale for ink amendment to reflect end-point
PT 13	<b>Irradiation treatment for <i>Euscepes postfasciatus</i></b>	<p>Minimum absorbed dose of 150 Gy to prevent the development of F1 adults of <i>Euscepes postfasciatus</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9950</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents the development of not less than 99.9950% of F1 adults of <i>Euscepes postfasciatus</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented F1 adult production from eggs laid by treated adults that were identified as the most tolerant life stage.
PT 14	<b>Irradiation treatment for <i>Ceratitis capitata</i></b>	<p>Minimum absorbed dose of 100 Gy to prevent the emergence of adults of <i>Ceratitis capitata</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.9970</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule prevents emergence of not less than 99.9970% of adults of <i>Ceratitis capitata</i>.</a></p>	The confirmatory trials demonstrated that the stated dose prevented adult emergence from the fruit that were treated containing third instar larvae that were identified as the most tolerant life stage.
PT 15	<b>Vapour heat treatment for <i>Bactrocera cucurbitae</i> on <i>Cucumis melo</i> var. <i>reticulatus</i></b>	<p><b>[Scope of the treatment</b></p> <p>This treatment comprises the vapour heat treatment of <i>Cucumis melo</i> var. <i>reticulatus</i> (netted melon) fruit to result in the mortality of eggs and larvae of melon fly (<i>Bactrocera cucurbitae</i>) at the stated efficacy.]</p> <p><b>Treatment schedule</b></p> <p><del>The efficacy and confidence level of the treatment is effective dose (ED)<sub>99.9889</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule kills not less than 99.9889% of eggs and larvae of <i>Bactrocera cucurbitae</i>.</a></p>	The confirmatory trials demonstrated that the stated dose killed the treated eggs and third instar larvae that were identified as the most tolerant life stages.



PT#	PT Title	Changes in the treatment schedule	Rationale for ink amendment to reflect end-point
PT 16	Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus sinensis</i>	<p><b>[Scope of the treatment</b></p> <p>This treatment comprises the cold treatment of fruit of <i>Citrus sinensis</i> (orange) to result in the mortality of eggs and larvae of <i>Bactrocera tryoni</i> (Queensland fruit fly) at the stated efficacy.]</p> <p><b>Treatment schedule</b></p> <p><del>For cultivar “Navel” the efficacy is effective dose (ED)<sub>99.9981</sub> at the 95% confidence level.</del></p> <p><del>For cultivar “Valencia” the efficacy is ED<sub>99.9973</sub> at the 95% confidence level.</del></p> <p><a href="#">For cultivar “Navel”, there is 95% confidence that the treatment according to this schedule kills not less than 99.9981% of eggs and larvae of <i>Bactrocera tryoni</i>.</a></p> <p><a href="#">For cultivar “Valencia”, there is 95% confidence that the treatment according to this schedule kills not less than 99.9973% of eggs and larvae of <i>Bactrocera tryoni</i>.</a></p>	The confirmatory trials demonstrated that the stated dose killed the treated first instar larvae that were identified as the most tolerant life stage.

PT#	PT Title	Changes in the treatment schedule	Rationale for ink amendment to reflect end-point
PT 17	Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus reticulata</i> × <i>Citrus sinensis</i>	<p><b>[Scope of the treatment</b></p> <p>This treatment comprises the cold treatment of fruit of <i>Citrus reticulata</i> × <i>Citrus sinensis</i> (tangor) to result in the mortality of eggs and larvae of <i>Bactrocera tryoni</i> (Queensland fruit fly) at the stated efficacy.]</p> <p><b>Treatment schedule</b></p> <p><del>The efficacy is effective dose (ED)<sub>99.9986</sub> at the 95% confidence level.</del></p> <p><a href="#">There is 95% confidence that the treatment according to this schedule kills not less than 99.9986% of eggs and larvae of <i>Bactrocera tryoni</i>.</a></p>	The confirmatory trials demonstrated that the stated dose killed the treated first instar larvae that were identified as the most tolerant life stage.

PT#	PT Title	Changes in the treatment schedule	Rationale for ink amendment to reflect end-point
PT 18	<b>Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus limon</i></b>	<p><b>[Scope of the treatment</b></p> <p>This treatment applies to the cold treatment of fruit of <i>Citrus limon</i> (lemon) to result in the mortality of eggs and larvae of <i>Bactrocera tryoni</i> (Queensland fruit fly) at the stated efficacy.]</p> <p><b>Treatment schedule</b></p> <p><b>Schedule 1: 2 °C or below for 14 continuous days</b></p> <p>The efficacy is effective dose (ED)<sub>99.99</sub> at the 95% confidence level.</p> <p><a href="#">There is 95% confidence that the treatment according to this schedule kills not less than 99.99% of eggs and larvae of <i>Bactrocera tryoni</i>.</a></p> <p><b>Schedule 2: 3 °C or below for 14 continuous days</b></p> <p>The efficacy is ED<sub>99.9872</sub> at the 95% confidence level.</p> <p><a href="#">There is 95% confidence that the treatment according to this schedule kills not less than 99.9872% of eggs and larvae of <i>Bactrocera tryoni</i>.</a></p>	<p>The confirmatory trials demonstrated that the stated dose killed the treated first instar larvae that were identified as the most tolerant life stage.</p>

PT#	PT Title	Changes in the treatment schedule	Rationale for ink amendment to reflect end-point
<b>PT 19</b>	<b>Irradiation treatment for <i>Dysmicoccus neobrevipes</i>, <i>Planococcus lilacinus</i> and <i>Planococcus minor</i></b>	<p>Minimum absorbed dose of 231 Gy to prevent the reproduction of adult females of <i>Dysmicoccus neobrevipes</i>, <i>Planococcus lilacinus</i> and <i>Planococcus minor</i>.</p> <p><del>Efficacy and confidence level of the treatment is ED<sub>99.99023</sub> at the 95% confidence level.</del></p> <p><u>There is 95% confidence that the treatment according to this schedule prevents the reproduction of not less than 99.99023% of adult females of <i>Dysmicoccus neobrevipes</i>, <i>Planococcus lilacinus</i> and <i>Planococcus minor</i>.</u></p>	The confirmatory trials demonstrated that the stated dose prevented F1 larval development from eggs laid by treated female adults that were identified as the most tolerant life stage.