**2005-004: Movement of growing media in association with plants for planting in international trade**

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| 1. | *G* | Editorial | The second part and the third part are incorporated into the forth part. ~~v~~ | The content of the second part and the third part are the factors that affect pest risk. So the structure is more reasonable after revise. | English | China |
| 2. | *G* | Editorial | I support the document as it is and I have no comments | | English | Bangladesh |
| 3. | *G* | Editorial | I support the document as it is and I have no comments | | English | New Zealand |
| 4. | *G* | Editorial | I support the document as it is and I have no comments | | English | Congo |
| 5. | *G* | Editorial | I support the document as it is and I have no comments | | Français | Congo |
| 6. | *G* | Substantive | We propose to develop this ISPM as an appendix to ISPM 36<br><br>Risk associated to growing media will depend on the method of production of the PPP.<br><br>The term soil should not be defined | This document should be an appendix of ISPM 36. Growing media is one of the production related factors that affect pest risk in the movement of plants for planting, mentioned in Annex 1 of ISPM 36. Growing media is a glossary term. If there is a need to specify that soil is a type of growing medium, it would be better to review the definition of “growing medium”. On the other hand if soil is defined why not follow the same criteria for other types of growing media mentioned in this draft?. We suggest not to define each one and to keep the general definition of the glossary term "growing medium" Regarding to Appendix 1 of this draft that "Types of plants for planting in international trade and their commonly used growing media" are described, it should be specified if the growing media refers to the material in which plant grows or growing media used to ship the plants for planting, because not always PPP are shiped in growing media where they were produced (e.g. bare root nursery stock). In addition, unrooted cuttings should not be included because they are not associated with | English | Uruguay |

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| | | | | any growing media. | | |
| 7. | *G* | Substantive | We propose to develop this ISPM as an appendix to ISPM 36<br><br>Risk associated to growing media will depend on the method of production of the PPP.<br><br>The term soil should not be defined | This document should be an appendix of ISPM 36. Growing media is one of the production related factors that affect pest risk in the movement of plants for planting, mentioned in Annex 1 of ISPM 36. Growing media is a glossary term. If there is a need to specify that soil is a type of growing medium, it would be better to review the definition of “growing medium”. On the other hand if soil is defined why not follow the same criteria for other types of growing media mentioned in this draft?. We suggest not to define each one and to keep the general definition of the glossary term "growing medium" Regarding to Appendix 1 of this draft that "Types of plants for planting in international trade and their commonly used growing media" are described, it should be specified if the growing media refers to the material in which plant grows or growing media used to ship the plants for planting, because not always PPP are shiped in growing media where they were produced (e.g. bare root nursery stock). In addition, unrooted cuttings should not be included because they are not associated with any growing media. | English | COSAVE, Paraguay, Chile, Argentina, Brazil |
| 8. | *G* | Substantive | 1. This standard is very important to the region given the fact that there are many requests for the importation of planting material in growing media especially for the tourist industry.<br>2. The ISPM is relevant and it supplements ISPM 36<br>3. There should be a definition for soil in the glossary | Soil is important and therefore there should be a definition in order to prevent an ambiguity. | English | Suriname |
| 9. | *G* | Substantive | We propose to develop this ISPM as an appendix to ISPM 36<br><br>Risk associated to growing media will depend on the method of production of the PPP.<br><br>The term soil should not be defined | This document should be an appendix of ISPM 36. Growing media is one of the production related factors that affect pest risk in the movement of plants for planting, mentioned in Annex 1 of ISPM 36. Growing media is a glossary term. If there is a need to specify that | English | Ecuador, Mexico, OIRSA, Belize, |

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| | | | | soil is a type of growing medium, it would be better to review the definition of “growing medium”. On the other hand if soil is defined why not follow the same criteria for other types of growing media mentioned in this draft?. We suggest not to define each one and to keep the general definition of the glossary term "growing medium" Regarding to Appendix 1 of this draft that "Types of plants for planting in international trade and their commonly used growing media" are described, it should be specified if the growing media refers to the material in which plant grows or growing media used to ship the plants for planting, because not always PPP are shiped in growing media where they were produced (e.g. bare root nursery stock). In addition, unrooted cuttings should not be included because they are not associated with any growing media. | | Costa Rica |
| 10. | *G* | Substantive | 1. This standard is very important to the region given the fact that there are many requests f or the importation of planting material in growing media especially for the tourist industry.<br><br>2. The ISPM is relevant and it supplements ISPM 36.<br><br>3. There should be a definition for soil in the glossary. | This is an important ISPM to the Caribbean Region. | English | Jamaica |
| 11. | *G* | Substantive | 1. This standard is very important to the Caribbean region given the fact that there are many requests for the importation of planting material in growing media especially for the tourist industry.<br>2. The ISPM is relevant and it supplements ISPM 36<br>3. There should be a definition for soil in the glossary | Soil is important and therefore there should be a definition in order to prevent ambiguity. | English | Saint Kitts And Nevis |
| 12. | *G* | Substantive | This draft should be the annex of ISPM 36. | It's not separate for consideration of pest risk between growing media and plants for planting when moving in international trade. So, the factors that affect the pest risk of growing media could be managed as one of the measure in | English | Thailand |

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| | | | | integrated measures for plants for planting. (Annex I : ISPM 36) | | |
| 13. | *G* | Substantive | Se desea manifestar la preocupación por este proyecto de NIMF dado que el contenido denota que el suelo será tratado como un medio de crecimiento apto para el comercio internacional, a pesar de que en las legislaciones de muchos países el suelo está prohibido. | En muchos párrafos del proyecto se menciona al suelo como medio de crecimiento. | Español | El Salvador |
| 14. | *G* | Substantive | 1. This standard is very important to the region given the fact that there are many requests for the importation of planting material in growing media especially for the tourist industry.<br>2. The ISPM is relevant and it supplements ISPM 36<br>3. There should be a definition for soil in the glossary | Soil is important and therefore there should be a definition in order to prevent an ambiguity. | English | Trinidad and Tobago |
| 15. | *G* | Substantive | | Suggest incorporating a column into Annex 1 with treatments that can be used for each type of growing media in association with plants for planting. The NPPOs would benefit from this additional information by providing harmonized guidance on treatments for growing media. This would also benefit developing countries to apply the appropriate treatments to the different growing media types. For Appendix 2, we suggest further expanding this list to provide more useful information to NPPOs. The draft inadequately addresses the risk of the movement of pests in growing media for two main reasons: 1) Sand, silt, gravel, and clay are not low risk. Mixing these ingredients and you would get soil. All growing media in international trade should preferably be heat treated or fumigated. If this is done properly, then all types of media would be low risk to start with (including organic matter such as peat). 2) Even a medium that is practically sterile prior to plant production, like perlite or vermiculite, will accumulate microbial flora and fauna (including pests) unless extreme precautions are taken (e.g, tissue culture). Systems approaches are needed to reduce pest risk. | English | United States of America |

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| 16. | G | Substantive | 1. This standard is very important to the region given the fact that there are many requests for the importation of planting material in growing media especially for the tourist industry.<br>2. The ISPM is relevant and it supplements ISPM 36<br>3. There should be a definition for soil in the glossary | Soil is important and therefore there should be a definition in order to prevent any ambiguity. | English | Barbados |
| 17. | G | Substantive | 1. This standard is very important to Dominica and the Caribbean Region given the fact that there are many requests for the importation of planting material in growing media especially for the tourist industry.<br>2. The ISPM is relevant and it supplements ISPM 36<br>3. There should be a definition for soil in the glossary | Soil is important and therefore there should be a definition in order to prevent an ambiguity. | English | Dominica |
| 18. | G | Substantive | We propose to develop this ISPM as an appendix to ISPM 36<br><br>Risk associated to growing media will depend on the method of production of the PPP.<br><br>The term soil should not be defined | This document should be an appendix of ISPM 36. Growing media is one of the production related factors that affect pest risk in the movement of plants for planting, mentioned in Annex 1 of ISPM 36. Growing media is a glossary term. If there is a need to specify that soil is a type of growing medium, it would be better to review the definition of “growing medium”. On the other hand if soil is defined why not follow the same criteria for other types of growing media mentioned in this draft?. We suggest not to define each one and to keep the general definition of the glossary term "growing medium" Regarding to Appendix 1 of this draft that "Types of plants for planting in international trade and their commonly used growing media" are described, it should be specified if the growing media refers to the material in which plant grows or growing media used to ship the plants for planting, because not always PPP are shiped in growing media where they were produced (e.g. bare root nursery stock). In | English | Peru |

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| | | | | addition, unrooted cuttings should not be included because they are not associated with any growing media. | | |
| 19. | *G* | Technical | The guidance provided is easy to operate practically.~~v~~ | The standard will be very useful for the management of growing media accompanying plant seedlings in international trade. | English | China |
| 20. | *G* | Technical | Utilidad del Apéndice 2 de la NIMF: podría servir de referencia, pero no es comprensivo en grado satisfactorio;<br><br>Cuan extensivo debería de ser: convendría que fuera más específico, indicando las plagas más frecuentes a nivel de género, nobstante se reconoce la complejidad para lograr esto. | En respuesta a las preguntas del Coordinador de la norma. | Español | El Salvador |
| 21. | *G* | Translation | Ciertos términos no se han traducido en forma apropiada en este proyecto de NIMF | Por ejemplo: "commodity" se ha traducido como "producto básico" y debe traducirse como "producto" (párrafos 10) | Español | El Salvador |
| 22. | *1* | Editorial | ~~**Movement of**~~ **Pest risk management for growing media in association with plants for planting** ~~**in international trade**~~ **(2005-004)** | It's widely known that all of the ISPMs concerned with international trade, so it's not necessary to have "movement of and international trade" in the title. | English | Thailand |
| 23. | *1* | Technical | ~~**Movement of g**~~**Growing media in association with plants for planting in international trade (2005-004)** | International trade involves the movement, so text deleted is redundant. | English | Uruguay |
| 24. | *1* | Technical | ~~**Movement of g**~~**Growing media in association with plants for planting in international trade (2005-004)** | International trade involves the movement, so text deleted is redundant. | English | COSAVE, Paraguay, Chile, Argentina, Brazil |
| 25. | *1* | Technical | ~~**Movement of g**~~**Growing media in association with plants for planting in international trade (2005-004)** | International trade involves the movement, so text deleted is redundant. | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 26. | *1* | Technical | ~~**Movement of g**~~**Growing media in association with plants for planting in international trade (2005-004)** | International trade involves the movement, so text deleted is redundant. | English | Peru |
| 27. | *3* | Editorial | ~~Voir la version anglaise de la présente norme~~. | Harmoniser la présente norme en y incluant les étapes de la publication en langue française | Français | Gabon |

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| 28. | 5 | Translation | **Adoption** | "Adoption" should be translated into Spanish as "adopción" | English | Uruguay |
| 29. | 5 | Translation | **Adoption** | "Adoption" should be translated into Spanish as "adopción" | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 30. | 5 | Translation | **Adoption** | "Adoption" should be translated into Spanish as "adopción" | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 31. | 5 | Translation | **Adopción~~Aprobación~~** | Término usado generalmente | Español | El Salvador |
| 32. | 6 | Translation | This standard was adopted by the Commission on Phytosanitary Measures in [Month 201-]. | "adopted" should be translated as "adoptado" in the Spanish version | English | Uruguay |
| 33. | 6 | Translation | This standard was adopted by the Commission on Phytosanitary Measures in [Month 201-]. | "adopted" should be translated as "adoptado" in the Spanish version | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 34. | 6 | Translation | This standard was adopted by the Commission on Phytosanitary Measures in [Month 201-]. | "adopted" should be translated as "adoptado" in the Spanish version | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 35. | 6 | Translation | La presente norma fue adoptada~~aprobada~~ por la Comisión de Medidas Fitosanitarias en [mes de 201-]. | Para coincidir con el título del apartado | Español | El Salvador |
| 36. | 7 | Editorial | **~~Introduction~~INTRODUCTION** | It should be capital letter same as the other ISPMs. | English | Thailand |

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| 37. | 9 | Editorial | This standard provides guidance for the evaluation of pest risks ~~associated with~~of growing media in association with ~~accompanying p~~plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international movement of plants for planting. | To be consistent with the title. | English | Singapore |
| 38. | 9 | Editorial | ~~This standard provides guidance for the evaluation of pest risks associated with growing media accompanying plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international movement of plants for planting.~~<br><br>This standard provides guidance for the evaluation of pest risks of growing media in association with plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international trade | Scope should be consistent with the title (i.e. association with (not accompanying) )... | English | Malaysia |
| 39. | 9 | Editorial | ~~This standard provides guidance for the evaluation of pest risks associated with growing media accompanying plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international movement of plants for planting.~~<br><br>This standard provides guidance for the evaluation of pest risks of growing media in association with plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international trade | Consistency | English | Korea, Republic of |
| 40. | 9 | Editorial | This standard provides guidance for the evaluation of pest risks ~~associated with~~ of growing media ~~accompanying~~ in association with plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international ~~movement of plants for planting~~ trade. | This is the regional comment made by the 14th APPPC Regional Workshop on Review of draft ISPMs. Scope should be consistent with the title. | English | Japan |
| 41. | 9 | Substantive | This standard provides guidance for the evaluationof pest risks ~~associated with~~ of growing media ~~accompanying~~ in association with plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used with plant for planting in the international trade. ~~movement of plants for planting.~~ | The scpoe should explain the objective of the standard. Language should be consistent with the title. | English | Thailand |
| 42. | 9 | Technical | This standard provides guidance for assessment of pest risks~~the evaluation of pest risks associated~~ linked with growing media accompanying plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international movement of plants for planting. | for consistency with ISPM 5, and for consistency with PRA procedure | English | EPPO, Estonia, Norway, Algeria |
| 43. | 9 | Technical | This standard provides guidance for the assessment ~~evaluation~~ of pest risks associated with growing media accompanying plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international movement | This is to be consistent in keeping with ISPM 5 | English | Suriname, Jamaica, |

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| | | | of plants for planting. | | | Trinidad and Tobago, Dominica |
| 44. | *9* | Technical | This standard provides guidance for the assessment ~~evaluation~~ of pest risks associated with growing media accompanying plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international movement of plants for planting. | This is more consistent with ISPM 5 | English | Saint Kitts And Nevis |
| 45. | *9* | Technical | La presente normaproporciona directrices para evaluar los riesgos de plagas asociados a los medios de crecimiento que acompañan a las plantas para plantar y describe medidas fitosanitarias encaminadas a facilitar el manejo del riesgo de plagas reglamentadas asociado a tales medios de crecimiento utilizados en el movimiento internacional de plantas para plantar. | Término más apropiado. El manejo del riesgo se aplica a plagas reglamentadas | Español | El Salvador |
| 46. | *9* | Technical | This standard provides guidance for the assessment ~~evaluation~~ of pest risks associated with growing media accompanying plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international movement of plants for planting. | This is to be consistent in keeping with ISPM 5 | English | Barbados |
| 47. | *9* | Technical | This standard provides guidance for the assessment ~~evaluation~~ of pest risks associated with growing media accompanying plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international movement of plants for planting. | Consistency in keeping with ISPM 5 | English | Guyana |
| 48. | *9* | Technical | This standard provides guidance for assessment of pest risks~~the evaluation of pest risks associated~~ linked with growing media accompanying plants for planting and describes phytosanitary measures to facilitate pest risk management of such growing media used in the international movement of plants for planting. | For consistency with ISPM 5, and for consistency with PRA procedure. | English | European Union |
| 49. | *9* | Translation | La presente normaproporciona directrices para evaluar los riesgos de plagas asociados a los medios de crecimiento que acompañan a las plantas para plantar y describe medidas fitosanitarias para ~~encaminadas~~ a facilitar el manejo del riesgo de plagas asociado a tales medios de crecimiento utilizados en el movimiento internacional de plantas para plantar. | Término más apropiado | Español | El Salvador |
| 50. | *10* | Editorial | Bulk growing media and growing media as contamination of a commodity are not considered in this standard. Animal and human health risks ~~associated with~~ caused from growing media are also not considered. | more appropriate words | English | Thailand |

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| 51. | *10* | Substantive | Bulk growing media, ~~and~~ growing media as a contaminant or as~~contamination~~ packaging, material ~~of a commodity~~ are not considered in this standard. Animal and human health risks associated with growing media are also not considered., However, other relevant authorities may apply. | Sometimes the plant for planting can be shipped in packaging material that supports plant growth or root development, so this needs to be clarified in the scope. It is referred to in the ISPM 5 definition of “contamination”, and this is not limited to commodities only. Adding this last sentence for clarification. | English | United States of America |
| 52. | *10* | Substantive | Les milieux de culture en vrac et les milieux de culture contaminants pour les marchandises ne sont pas pris en compte dans la présente norme. De même, les risques pour la santé animale et humaine associés aux milieux de culture ne sont pas pris en compte. | Les milieux de culture en vrac et les milieux de culture contaminants [...] en compte dans la présente norme: Expliquer ces deux expressions pour davantage de clarté | Français | Gabon, Congo, DR* |
| 53. | *10* | Substantive | Les milieux de culture en vrac et les milieux de culture contaminants pour les marchandises ne sont pas pris en compte dans la présente norme. De même, les risques pour la santé animale et humaine associés aux milieux de culture ne sont pas pris en compte. | Expliquer ces deux expressions pour davantage de clarté | Français | Burundi |
| 54. | *10* | Technical | G~~Bulk g~~rowing media moved as a separate commodity and growing media ~~as~~ contaminating~~on of~~ a commodity are not considered in this standard. ~~Animal and human health risks associated with growing media are also not considered~~. | 1) Proposed clearer wording 2) Proposed better english 3)The statement that aspects beyond plant health are not covered is not relevant and never spelled out in ISPMs' scope section, because there is no expectation that an ISPM should cover such aspects. | English | EPPO, Estonia, Norway |
| 55. | *10* | Technical | ~~Bulk g~~Growing media as a commodity and ~~growing media~~ as contamination of a commodity are not considered in this standard. Animal and human health risks associated with growing media are also not considered. | Not only bulk growing media is moved in international trade, but also packed growing media. What is important to mention here is that growing media as a commodity or contaminating commodities are not considered in this draft. | English | Uruguay |
| 56. | *10* | Technical | ~~Bulk g~~Growing media as a commodity and ~~growing media~~ as contamination of a commodity are not considered in this standard. Animal and human health risks associated with growing media are also not considered. | Not only bulk growing media is moved in international trade, but also packed growing media. What is important to mention here is that growing media as a commodity or contaminating commodities are not considered in this draft. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 57. | *10* | Technical | ~~Bulk g~~Growing media as a commodity and ~~growing media~~ as contamination of a commodity are not considered in this standard. Animal and human health risks associated with growing media are also not considered. | Not only bulk growing media is moved in international trade, but also packed growing media. What is important to mention here is that growing media as a commodity or contaminating commodities are not considered in this draft. | English | Ecuador, Mexico, Belize, Costa Rica |
| 58. | *10* | Technical | ~~Bulk g~~Growing media as a commodity and ~~growing media~~ as contamination of a commodity are not considered in this standard. Animal and human health risks associated with growing | Not only bulk growing media is moved in international trade, but also packed growing | English | OIRSA |

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| | | | media are also not considered. | media. What is important to mention here is that growing media as a commodity or contaminating commodities are not considered in this draft. | | |
| 59. | *10* | Technical | G~~Bulk g~~rowing media moved as a separate commodity and growing media ~~as~~ contaminati~~n~~g~~on of~~ a commodity are not considered in this standard. ~~Animal and human health risks associated with growing media are also not considered~~. | 1) Proposed clearer wording. 2) Proposed better English. 3)The statement that aspects beyond plant health are not covered is not relevant and never spelled out in ISPMs' scope section, because there is no expectation that an ISPM should cover such aspects. | English | European Union |
| 60. | *10* | Translation | Bulk growing media and growing media as contamination of a commodity are not considered in this standard. Animal and human health risks associated with growing media are also not considered. | "commodity" should be translated into Spanish as "producto" | English | Uruguay |
| 61. | *10* | Translation | Bulk growing media and growing media as contamination of a commodity are not considered in this standard. Animal and human health risks associated with growing media are also not considered. | "commodity" should be translated into Spanish as "producto" | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 62. | *10* | Translation | Bulk growing media and growing media as contamination of a commodity are not considered in this standard. Animal and human health risks associated with growing media are also not considered. | "commodity" should be translated into Spanish as "producto" | English | Ecuador, Mexico, Belize, Costa Rica |
| 63. | *10* | Translation | Bulk growing media and growing media as contamination of a commodity are not considered in this standard. Animal and human health risks associated with growing media are also not considered. | "commodity" should be translated into Spanish as "producto" | English | OIRSA |
| 64. | *11* | Editorial | **Impact on Biodiversity and the Environment** | Moved to para 34 | English | Malaysia |
| 65. | *11* | Editorial | **Impact on Biodiversity and the Environment** | Moved to para 34 | English | Korea, Republic of |
| 66. | *11* | Editorial | **Impact on Biodiversity and the Environment** | Moved to para 34 | English | Viet Nam |
| 67. | *11* | Substantive | **Impact on Biodiversity and the Environment** | This portion including the 2 associated paragraphs should not be under th Scope & rather move to under the Background to highight the concerns on biodiversity & the environment. | English | Singapore |

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| 68. | *11* | Substantive | ~~**Impact on Biodiversity and the Environment**~~ | This section is not appropriate after the scope, it should be moved to background section. | English | Thailand |
| 69. | *12* | Editorial | Regulated pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | Moved to para 34 | English | Malaysia |
| 70. | *12* | Editorial | Regulated pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | Moved to para 34 | English | Korea, Republic of |
| 71. | *12* | Editorial | Regulated pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. Pests that may be associated with growing media include: bacteria and phytoplasmas, fungi, oomycetes, nematodes, viruses and virus-like organisms, insects and mites, molluscs and weeds and weed seeds. | Add a new sentence in replacement of Appendix 2 which is incomplete and could be misleading. | English | Canada |
| 72. | *12* | Editorial | Regulated pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | Moved to para 34 | English | Viet Nam |
| 73. | *12* | Substantive | Quarantine~~Regulated~~ pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of quarantineÂ pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | Only quarantine pests associated with growing media can be introduced and spread (ISPM 5). | English | Uruguay |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| 74. | *12* | Substantive | Quarantine~~Regulated~~ pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of quarantineÂ pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | Only quarantine pests associated with growing media can be introduced and spread (ISPM 5). | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 75. | *12* | Substantive | Quarantine~~Regulated~~ pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of quarantineÂ pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | Only quarantine pests associated with growing media can be introduced and spread (ISPM 5). | English | Ecuador, Mexico, Belize, Costa Rica |
| 76. | *12* | Substantive | Regulated pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | These 2 paragrahs should be moved to under the Background after para 34 instead as it is not consistent with the format of all approved standards even though the emphasis is to highlight the biodiversity and environment. | English | Singapore |
| 77. | *12* | Substantive | ~~Regulated pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity.~~ | It should be moved to background section. | English | Thailand |
| 78. | *12* | Substantive | Regulated pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity (see Appendix 2). Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | Adding reference to Appendix 2 helps substantiate this statement. | English | United States of America |
| 79. | *12* | Technical | ~~Regulated~~ pePests associated with the movement of growing media associated with~~accompanying~~ plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce | 1) Pests do not need to be regulated to have an impact on biodiversity. 2) recommended change of "accompagnying" with "associated with" in all the document: to reflect the fact that pests do not | English | EPPO, Estonia, Norway |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | always accompany plants. | | |
| 80. | *12* | Technical | ~~Regulated~~ pePests associated with the movement of growing media associated with~~accompanying~~ plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity. | 1) Pests do not need to be regulated to have an impact on biodiversity. 2) recommended change of "accompagnying" with "associated with" in all the document: to reflect the fact that pests do not always accompany plants. | English | European Union |
| 81. | *13* | Editorial | Certain pest risk management measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | Moved to para 34 | English | Malaysia |
| 82. | *13* | Editorial | Certain pest risk management measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | Moved to para 34 | English | Korea, Republic of |
| 83. | *13* | Editorial | Certain pest risk management measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | Moved to para 34 | English | Viet Nam |
| 84. | *13* | Substantive | Certain pest risk management measures ~~(e.g. some treatments with fumigants)~~ may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | Deleted because these are not a good examples because this type of measure is not applied to PPP in growing media. | English | Uruguay |
| 85. | *13* | Substantive | Certain pest risk management measures ~~(e.g. some treatments with fumigants)~~ may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | Deleted because these are not a good examples because this type of measure is not applied to PPP in growing media. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 86. | *13* | Substantive | Certain pest risk management measures ~~(e.g. some treatments with fumigants)~~ may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | Deleted because these are not a good examples because this type of measure is not applied to PPP in growing media. | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 87. | *13* | Substantive | Certain pest risk management measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of | This paragraph shoul dbe moved to after para 34 under Background to be consistent with all | English | Singapore |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | phytosanitary measures that have a minimal negative impact on the environment. | approved ISPMs. | | |
| 88. | *13* | Substantive | ~~Certain pest risk management measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment~~. | It should be moved to background section. | English | Thailand |
| 89. | *13* | Technical | Certain ~~pest risk management~~ phytosanitary measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | For consistency | English | Uruguay |
| 90. | *13* | Technical | Certain ~~pest risk management~~ phytosanitary measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | For consistency | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 91. | *13* | Technical | Certain ~~pest risk management~~ phytosanitary measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | For consistency | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 92. | *13* | Translation | Certain pest risk management measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | "that have a minimal negative impact on the environment" should be translated into Spanish as "que tengan el mínimo impacto negativo sobre el ambiente" | English | Uruguay |
| 93. | *13* | Translation | Certain pest risk management measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | "that have a minimal negative impact on the environment" should be translated into Spanish as "que tengan el mínimo impacto negativo sobre el ambiente" | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 94. | *13* | Translation | Certain pest risk management measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment. | "that have a minimal negative impact on the environment" should be translated into Spanish as "que tengan el mínimo impacto negativo sobre el ambiente" | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| 95. | *14* | Substantive | **References** | Add reference to ISPM 21. See US comment on paragraph 37. | English | United States of America |
| 96. | *17* | Editorial | **ISPM 11.** 201304. *Pest risk analysis for quarantine pests ~~including analysis of environmental risks and living modified organisms~~*. Rome, IPPC, FAO. | Current version of ISPM 11 | English | Uruguay |
| 97. | *17* | Editorial | **ISPM 11.** 201304. *Pest risk analysis for quarantine pests ~~including analysis of environmental risks and living modified organisms~~*. Rome, IPPC, FAO. | Current version of ISPM 11 | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 98. | *17* | Editorial | **ISPM 11.** 201304. *Pest risk analysis for quarantine pests ~~including analysis of environmental risks and living modified organisms~~*. Rome, IPPC, FAO. | Current version of ISPM 11 | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 99. | *17* | Editorial | **ISPM 11.** 201304. *Pest risk analysis for quarantine pests ~~including analysis of environmental risks and living modified organisms~~*. Rome, IPPC, FAO. | Change the reference to the new title | English | NEPPO, Morocco |
| 100. | *17* | Editorial | **ISPM 11.** 2004. *Pest risk analysis for quarantine pests including analysis of environmental risks and living modified organisms.* Rome, IPPC, FAO.<br><br>ISPM 14. 2002. The use of integrated measures in a systems approach for pest risk management. Rome, IPPC, FAO. | ISPM 14 is now referred to under section 5. and therefore shoud be listed in the reference section of this standard. | English | Canada |
| 101. | *17* | Editorial | **ISPM 11.** 201304. *Pest risk analysis for quarantine pests ~~including analysis of environmental risks and living modified organisms~~*. Rome, IPPC, FAO. | Change the reference to the new title | English | Algeria |
| 102. | *17* | Technical | **ISPM 11.** ~~2004~~ 2013. *Pest risk analysis for quarantine pests ~~including analysis of environmental risks and living modified organisms~~*. Rome, IPPC, FAO. | ISPM 11 was revised in 2013 and its title changed. | English | EPPO |
| 103. | *17* | Technical | **ISPM 11.** ~~2004~~ 2013. *Pest risk analysis for quarantine pests ~~including analysis of environmental risks and living modified organisms~~*. Rome, IPPC, FAO. | ISPM 11 was revised in 2013 and its title changed. | English | European Union |
| 104. | *17* | Technical | **ISPM 11.** ~~2004~~ 2013. *Pest risk analysis for quarantine pests ~~including analysis of environmental risks and living modified organisms~~*. Rome, IPPC, FAO. | ISPM 11 was revised in 2013 and its title changed. | English | Norway, Algeria |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| 105. | 23 | Editorial | Definitions of phytosanitary terms can be found in ISPM 5 (*Glossary of phytosanitary terms*)~~,~~ revised annually~~)~~. | for clarity | English | Ghana |
| 106. | 24 | Substantive | ~~In addition to the definitions in ISPM 5, in this standard the following definition applies:~~ | Deleted paragraph because proposed changes in paragraph 25 | English | Uruguay |
| 107. | 24 | Substantive | ~~In addition to the definitions in ISPM 5, in this standard the following definition applies:~~ | Deleted paragraph because proposed changes in paragraph 25 | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 108. | 24 | Substantive | ~~In addition to the definitions in ISPM 5, in this standard the following definition applies:~~ | Deleted paragraph because proposed changes in paragraph 25 | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 109. | 24 | Substantive | In addition to the definitions in ISPM 5, in this standard the following definitions appl~~ies~~y:<br><br>Peat: the non-viable, incompletely decomposed organic residue of plants, mostly Sphagnum mosses, which accumulates under anaerobic and acidic conditions usually in saturated bogs in temperate and cold regions and often to depths of 2-6 metres. | There is no definition of “peat” in ISPM No. 5 therefore the term should be defined in this document as it is often use as a growing medium and there is a need to clarify the term in order to avoid confusion. | English | Canada |
| 110. | 25 | Substantive | Soil: A growing medium that is naturally occurring, composed of the loose surface material of the earth and consisting of a mixture of minerals and organic material. | Eppo does not know if this definition will get consensus support, although appreciate the difficulty of finding one that is satisfactory. Eppo support sthis definition. | English | EPPO, Estonia, Algeria |
| 111. | 25 | Substantive | ~~Soil: A growing medium that is naturally occurring, composed of the loose surface material of the earth and consisting of a mixture of minerals and organic material.~~ | Growing media is a glossary term. If there is a need to specify that soil is a type of growing medium, it would be better to review the definition of “growing medium”. On the other hand if soil is defined other types of growing media should also be defined because they are used in this draft, so that we suggest not to define each one and keep only the general definition of growing medium | English | Uruguay |
| 112. | 25 | Substantive | ~~Soil: A growing medium that is naturally occurring, composed of the loose surface material~~ | Growing media is a glossary term. If there is a need to specify that soil is a type of growing medium, it would be better to review the | English | COSAVE, Paraguay, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | ~~of the earth and consisting of a mixture of minerals and organic material.~~ | definition of “growing medium”. On the other hand if soil is defined other types of growing media should also be defined because they are used in this draft, so that we suggest not to define each one and keep only the general definition of growing medium | | Chile, Argentina, Peru, Brazil |
| 113. | *25* | Substantive | ~~Soil: A growing medium that is naturally occurring, composed of the loose surface material of the earth and consisting of a mixture of minerals and organic material.~~ | Growing media is a glossary term. If there is a need to specify that soil is a type of growing medium, it would be better to review the definition of “growing medium”. On the other hand if soil is defined other types of growing media should also be defined because they are used in this draft, so that we suggest not to define each one and keep only the general definition of growing medium | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 114. | *25* | Substantive | Soil: A growing medium that is naturally occurring, composed of the loose surface material of the earth and consisting of a mixture of minerals and organic material.<br><br>It was proposed that naturally occurring should not be deleted in ISPM No.5 Glossary of phytosanitary terms because it is used in this new standard<br><br>OR<br><br>To replace the word/phrase naturally occurring to realign it with the revision in the Glosaary of Phytosanitary terms. | This affects the definition of the soil given in this standard | English | Mozambique, Ghana, Lesotho |
| 115. | *25* | Substantive | Soil: A growing medium that is naturally occurring, composed of the loose surface material of the earth and consisting of a mixture of minerals and organic material. | Recommend this definition is added to ISPM 5 after adoption. | English | United States of America |
| 116. | *25* | Substantive | Sol: Milieu de culture présent naturellement, composé de la couche superficielle meuble de la croûte terrestre et consistant en un mélange de matières minérales et de matières organiques.<br><br>Ajouter dans ce paragraphe les définitions de:<br><br>- Milieux de culture en vrac<br><br>- Milieux de culture contaminant | Améliorer la compréhension du document | Français | Gabon, Congo, DR* |

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| 117. | 25 | Substantive | Soil: A growing medium that is naturally occurring, composed of the loose surface material of the earth and consisting of a mixture of minerals and organic material. | EU supports this definition. | English | European Union |
| 118. | 25 | Substantive | Soil: A growing medium that is naturally occurring, composed of the loose surface material of the earth and consisting of a mixture of minerals and organic material. | The term "naturally occuring" is proposed to be deleted in the draft amendment to ISPM 15: Glossary of Phytosanitary terms. It is therefore requested that clarification be provided on the terminology "naturally occuring" on how it will be defined under this paragraph or that the definition must not be deleted from ISPM 5. | English | South Africa |
| 119. | 25 | Technical | Soil: A growing medium that is naturally occurring, composed of the upper loose surface material of the earth and consisting of a mixture of minerals, lving organisms and ~~and~~ organic material. | Make the definition more complete | English | Suriname, Dominica |
| 120. | 25 | Technical | Soil: A growing medium that is naturally occurring, composed of the upper loose surface material of the earth and consisting of a mixture of minerals, living organisms and ~~and~~ organic material. | Make the definition more complete | English | Jamaica |
| 121. | 25 | Technical | Soil: A growing medium that is naturally occurring, composed of the upper loose surface material of the earth and consisting of a mixture of minerals, living organisms and ~~and~~ organic material. | Makes the definition more complete | English | Saint Kitts And Nevis |
| 122. | 25 | Technical | Soil: A growing medium that is naturally occurring, composed of the upper loose surface material of the earth and consisting of a mixture of minerals, living organisms and ~~and~~ organic material. | Make the definition more complete | English | Trinidad and Tobago |
| 123. | 25 | Technical | Soil: A growing medium that is naturally occurring, composed of the upper loose surface material of the earth and consisting of a mixture of minerals, lving organisms and ~~and~~ organic material. | Makes the definition more complete | English | Barbados |
| 124. | 25 | Translation | Suelo: medio de crecimiento presente naturalmente, compuesto por el material suelto superficial ~~de la superficie~~ de la tierra y consistente en una mezcla de minerales y materia orgánica. | Para mayor clarida | Español | El Salvador |
| 125. | 25 | Translation | Soil: A growing medium that is naturally occurring, composed of the loose surface material | In the French version of the draft standard, soil (“sol”) is defined but not the term “terre” which is | English | Canada |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | of the earth and consisting of a mixture of minerals and organic material.<br><br>Terre: Milieu de culture présent naturellement, composé de la couche superficielle meuble de la croûte terrestre et consistant en un mélange de matières minérales et de matières organiques. | used throughout the text of the draft standard. Replace the word "sol" in the definition by "terre" to reflect the common use and for consistency across the text. | | |
| 126. | *27* | Substantive | Pest risk analysis (PRA)~~, which is carried out by the national plant protection organization (NPPO) of the importing country,~~ should provide the technical justification for phytosanitary import requirements for regulated pests associated with the international movement of growing media accompanying plants for planting. | Either the importing or exporting country can carry out the PRA. | English | United States of America |
| 127. | *27* | Technical | Pest risk analysis (PRA), which is carried out by the national plant protection organization (NPPO) of the importing country, should provide the technical justification for phytosanitary import requirements for ~~regulated pests associated with~~ the international movement of growing media accompanying plants for planting. | Better wording, not to be read as an encouragement to import the pests themselves. | English | EPPO, Norway |
| 128. | *27* | Technical | Pest risk analysis (PRA), which is carried out by the national plant protection organization (NPPO) of the importing country, should provide the technical justification for phytosanitary import requirements for ~~regulated~~ quarantine pests associated with the international movement of growing media accompanying plants for planting. | Quarantine pests are the relevant pests associated with growing media | English | Uruguay |
| 129. | *27* | Technical | Pest risk analysis (PRA), which is carried out by the national plant protection organization (NPPO) of the importing country, should provide the technical justification for phytosanitary import requirements for ~~regulated~~ quarantine pests associated with the international movement of growing media accompanying plants for planting. | Quarantine pests are the relevant pests associated with growing media | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 130. | *27* | Technical | Pest risk analysis (PRA), which is carried out by the national plant protection organization (NPPO) of the importing country, should provide the technical justification for phytosanitary import requirements for ~~regulated~~ quarantine pests associated with the international movement of growing media accompanying plants for planting. | Quarantine pests are the relevant pests associated with growing media | English | Ecuador, Mexico, Belize, Costa Rica |
| 131. | *27* | Technical | Pest risk analysis (PRA), which is carried out by the national plant protection organization (NPPO) of the importing country, should provide the technical justification for phytosanitary import requirements for ~~regulated pests associated with~~ the international movement of growing media accompanying plants for planting. | Better wording, not to be read as an encouragement to import the pests themselves. | English | European Union |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | | | | |
| 132. | 27 | Translation | Pest risk analysis (PRA), which is carried out by the national plant protection organization (NPPO) of the importing country, should provide the technical justification for phytosanitary import requirements for regulated pests associated with the international movement of growing media accompanying plants for planting. | Brackets should be deleted in the Spanish version for consistency with English version | English | Ecuador, OIRSA, Belize, Costa Rica |
| 133. | 28 | Editorial | The origin and the production methods of constituents of growing media, ~~which can be~~ used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions ~~to~~ which prevent contamination. Growing media should be treated by an approved method before use if previously exposed to plants or soil. | Better English | English | EPPO, Algeria |
| 134. | 28 | Editorial | The origin and the production methods of constituents of growing media, which can be used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media should be treated by an appropriate~~approved~~ method before use if previously exposed to plants or soil. | For consistency with paragraph 43 | English | Mozambique, Ghana, Lesotho |
| 135. | 28 | Editorial | The origin and the production methods of constituents of growing media, ~~which can be~~ used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions ~~to~~ which prevent contamination. Growing media should be treated by an approved method before use if previously exposed to plants or soil. | Better English | English | European Union |
| 136. | 28 | Substantive | The origin and the production methods of ~~constituents~~, components of growing media, which can be used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media should be treated by an NPPO-approved method before use if previously exposed to plants or soil. | Global change from "constituent" to "component". Component is a more commonly used term in association with growing media. For clarification | English | United States of America, Mexico |
| 137. | 28 | Substantive | The origin and the production methods of constituents of growing media, which can be used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media should be treated by an appropriate ~~approved~~ method before use if previously exposed to plants or soil. | Suggest that the word "approved" be deleted and replaced with "appropriate" as also used in paragraph 43 for consistency. | English | South Africa |
| 138. | 28 | Technical | The origin and the production methods of constituents of growing media, which can be used alone or in combination, affect the pest risks that are associated with the growing media | Not always will be treated, growing media will be treated if exposed to plants or soil. “Method” was | English | Uruguay |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media ~~should~~ may be treated by an approved ~~method~~ treatment before use if previously exposed to plants or soil. | changed by “treatment” for consistency with ISPM 5 | | |
| 139. | 28 | Technical | The origin and the production methods of constituents of growing media, which can be used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media ~~should~~ may be treated by an approved ~~method~~ treatment before use if previously exposed to plants or soil. | Not always will be treated, growing media will be treated if exposed to plants or soil. “Method” was changed by “treatment” for consistency with ISPM 5 | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 140. | 28 | Technical | The origin and the production methods of constituents of growing media, which can be used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media ~~should~~ may be treated by an approved ~~method~~ treatment before use if previously exposed to plants or soil. | Not always will be treated, growing media will be treated if exposed to plants or soil. “Method” was changed by “treatment” for consistency with ISPM 5 | English | Ecuador, OIRSA, Belize, Costa Rica |
| 141. | 28 | Technical | The origin and the production methods of constituents of growing media~~, which can be used alone or in combination,~~ can both affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media should be treated by an approved method before use if previously exposed to plants or soil. | It is not clear what this text was intending to say. If it is only that the source and methods are factors that influence pest risk, then the better language may be to state that these can both influence pest risk | English | Australia |
| 142. | 28 | Translation | The origin and the production methods of constituents of growing media, which can be used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media should be treated by an approved method before use if previously exposed to plants or soil. | Brackets should be deleted in the Spanish version | English | Uruguay |
| 143. | 28 | Translation | The origin and the production methods of constituents of growing media, which can be used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media should be treated by an approved method before use if previously exposed to plants or soil. | Brackets should be deleted in the Spanish version | English | COSAVE, Paraguay, Chile, Argentina, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | Peru, Brazil |
| 144. | 28 | Translation | The origin and the production methods of constituents of growing media, which can be used alone or in combination, affect the pest risks that are associated with the growing media used with plants for planting. Growing media should be produced, stored and maintained under conditions to prevent contamination. Growing media should be treated by an approved method before use if previously exposed to plants or soil. | Brackets should be deleted in the Spanish version | English | Ecuador, OIRSA, Belize, Costa Rica |
| 145. | 29 | Editorial | Production methods of plants for planting may ~~alter~~ vary the pest risks of growing media used with these plants for planting. | To clarify | English | Uruguay |
| 146. | 29 | Editorial | Production methods of plants for planting may ~~alter~~ vary the pest risks of growing media used with these plants for planting. | To clarify | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 147. | 29 | Editorial | Production methods of plants for planting may ~~alter~~ vary the pest risks of growing media used with these plants for planting. | To clarify | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 148. | 29 | Substantive | ~~Production methods of plants for planting may alter the pest risks of growing media used with these plants for planting.~~ | Not necessary, repetitive, covered in other sections | English | United States of America |
| 149. | 29 | Technical | Production methods of plants for planting may alter the pest risks of growing media associated ~~used~~ with these plants for planting. | for clarity (see [12]) | English | EPPO, Estonia, Norway, Algeria |
| 150. | 29 | Technical | Production methods of plants for planting may alter the pest risks of growing media associated ~~used~~ with these plants for planting. | For clarity (see [12]). | English | European |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | | | | Union |
| 151. | 30 | Substantive | Various pest risk management options related to growing media in association with plants for planting – including phytosanitary measures such as treatment, inspection, sampling, testing, ~~integrated measures in a systems approach~~, post-entry quarantine and prohibition – are described in this standard. | This measure is not described in this standard and not applicable to growing media. | English | Uruguay |
| 152. | 30 | Substantive | Various pest risk management options related to growing media in association with plants for planting – including phytosanitary measures such as treatment, inspection, sampling, testing, ~~integrated measures in a systems approach~~, post-entry quarantine and prohibition – are described in this standard. | This measure is not described in this standard and not applicable to growing media. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 153. | 30 | Substantive | Various pest risk management options related to growing media in association with plants for planting – including phytosanitary measures such as treatment, inspection, sampling, testing, ~~integrated measures in a systems approach~~, post-entry quarantine and prohibition – are described in this standard. | This measure is not described in this standard and not applicable to growing media. | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 154. | 30 | Substantive | ~~Various~~ Ppest risk management options related to growing media in association with plants for planting – including production methods and phytosanitary measures for~~such as~~ treatment, inspection, sampling, testing, integrated measures in a systems approach~~, post-entry quarantine~~ and prohibition – are described in this standard. | "Various" is unnecessary. Need to clarify in the outline of requirements that the standard also covers production methods. Propose deleting post entry quarantine. See US comments in paragraph 67. | English | United States of America |
| 155. | 32 | Editorial | Growing medium is defined by the IPPC as “any material in which plant roots are growing or intended for that purpose” (ISPM 5). Many countries have legislation in place to regulate the movement of growing media, particularly soil or soil as a constituent ~~component~~ of growing media. | Consistent with other mentions in the text | English | EPPO |
| 156. | 32 | Editorial | Growing medium is defined by the IPPC as “any material in which plant roots are growing or intended for that purpose” (ISPM 5). Many countries have legislation in place to regulate the international movement of growing media in association with plants for planting. ~~, particularly soil or soil as a component of growing media~~. | According to ISPM 5 soil is a type of growing media | English | Uruguay |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 157. | 32 | Editorial | Growing medium is defined by the IPPC as “any material in which plant roots are growing or intended for that purpose” (ISPM 5). Many countries have legislation in place to regulate the international movement of growing media in association with plants for planting. ~~, particularly soil or soil as a component of growing media~~. | According to ISPM 5 soil is a type of growing media | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 158. | 32 | Editorial | Growing medium is defined by the IPPC as “any material in which plant roots are growing or intended for that purpose” (ISPM 5). ~~Many countries have legislation in place to regulate the movement of growing media, particularly soil or soil as a component of growing media.~~ | More or less duplicates sentence 1 of para 34, so delete here | English | Australia |
| 159. | 32 | Editorial | Growing medium is defined by the IPPC as “any material in which plant roots are growing or intended for that purpose” (ISPM 5). Many countries have legislation in place to regulate the movement of growing media, particularly soil or soil as a constituent ~~component~~ of growing media. | Consistent with other mentions in the text | English | European Union |
| 160. | 32 | Editorial | Growing medium is defined by the IPPC as “any material in which plant roots are growing or intended for that purpose” (ISPM 5). Many countries have legislation in place to regulate the movement of growing media, particularly soil or soil as a constituent ~~component~~ of growing media. | Consistent with other mentions in the text | English | Norway, Algeria |
| 161. | 32 | Substantive | Growing medium is defined by the IPPC as “any material in which plant roots are growing or intended for that purpose” (ISPM 5). Many countries have legislation in place to regulate theinternational movement of growing media in association with plants for planting~~, particularly soil or soil as a component of growing media.~~ | According to ISPM 5 soil is a type of growing media. | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 162. | 32 | Substantive | La~~e Secrétariat de la~~ CIPV définit le concept de «milieu de culture» comme suit: «Toute matière dans laquelle poussent les racines de végétaux, ou qui est destinée à cet effet» (NIMP 5). De nombreux pays se sont dotés d'une législation réglementant le transport des milieux de culture, en particulier la terre ou la terre en tant que composant d'un milieu de culture. | Pour davantage de précision | Français | Mauritania |
| 163. | 32 | Substantive | Growing medium is defined ~~by the IPPC as â€œany material in which plant roots are growing or intended for that purposeâ€• (~~ in ISPMÂ 5~~)~~. Many countries have legislation in place to regulate the movement of growing media, particularly soil or soil as a component of growing media. | The definition for growing media is already defined in ISPM 5. It should not be defined in the standard. | English | United States of America |
| 164. | 32 | Substantive | ~~Le Secrétariat de l~~La CIPV définit le concept de «milieu de culture» comme suit: «Toute matière dans laquelle poussent les racines de végétaux, ou qui est destinée à cet effet» | Pour davantage de précision | Français | Gabon, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | (NIMP 5). De nombreux pays se sont dotés d'une législation réglementant le transport des milieux de culture, en particulier la terre ou la terre en tant que composant d'un milieu de culture. | | | Congo, DR* |
| 165. | 32 | Substantive | L~~Le Secrétariat de l~~a CIPV définit le concept de «milieu de culture» comme suit: «Toute matière dans laquelle poussent les racines de végétaux, ou qui est destinée à cet effet» (NIMP 5). De nombreux pays se sont dotés d'une législation réglementant le transport des milieux de culture, en particulier la terre ou la terre en tant que composant d'un milieu de culture. | Pour plus de précision | Français | Burundi |
| 166. | 32 | Technical | Growing medium is defined by the IPPC as “any material in which plant roots are growing or intended for that purpose” (ISPM 5). Many countries have legislation in place to regulate the movement of growing media~~, particularly soil or soil as a component of growing media~~. | There is an over emphasis on soil as a risk. Other materials can be just as risky and are regulated by many countries | English | Australia |
| 167. | 33 | Editorial | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous pests of phytosanitary concern to many countries. The pest risks of growing media accompanying plants for planting depend on a number of factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant’s production cycle, and for growing media containing soil, the ~~separation~~ distance between the country of origin and the country of import. | For clarity | English | Ghana |
| 168. | 33 | Editorial | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of ~~quarantine~~ regulated pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous pests of phytosanitary concern to many countries. The pest risks of growing media accompanying plants for planting depend on a number of factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant’s production cycle, and for growing media containing soil, the separation between the country of origin and the country of import. | To ensure consistency between paragraphs [12] and [27]. | English | Japan |
| 169. | 33 | Editorial | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous pests of phytosanitary concern to many countries. The pest risks of growing media accompanying plants for planting depend on a number of factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant’s production cycle, and for growing media containing soil, the geographical separation between the country of origin and the country of import. | Insert the word "geographical" before "separation" in the last sentence of the paragraph for clarity and to better convey the intent. | English | Canada |
| 170. | 33 | Substantive | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a | This sentence is not really needed here in the Background section. The important pest risk | English | EPPO, Norway, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | high-risk pathway because it can harbour numerous pests of phytosanitary concern to many countries. The pest risks of growing media accompanying plants for planting depend on a number of factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. ~~Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant's production cycle, and for growing media containing soil, the separation between the country of origin and the country of import.~~ | factors should be explained in Section 4. | | Algeria |
| 171. | *33* | Substantive | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous pests of phytosanitary concern to many countries. The pest risks of growing media accompanying plants for planting depend on a number of factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. ~~Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant's production cycle, and for growing media containing soil, the separation between the country of origin and the country of import.~~ | If soil is considered a growing media, the exposure to soil is not a factor to be evaluated in this case. On the other side it is not clear that the separation between both countries being a factor, it is not a matter of distance between countries, but of the pest status in the country of origin and destination. | English | Uruguay |
| 172. | *33* | Substantive | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous pests of phytosanitary concern to many countries. The pest risks of growing media accompanying plants for planting depend on a number of factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. ~~Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant's production cycle, and for growing media containing soil, the separation between the country of origin and the country of import.~~ | If soil is considered a growing media, the exposure to soil is not a factor to be evaluated in this case. On the other side it is not clear that the separation between both countries being a factor, it is not a matter of distance between countries, but of the pest status in the country of origin and destination. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 173. | *33* | Substantive | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous pests of phytosanitary concern to many countries. The pest risks of growing media accompanying plants for planting depend on a number of factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. ~~Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant's production cycle, and for growing media containing soil, the separation between the country of origin and the country of import.~~ | If soil is considered a growing media, the exposure to soil is not a factor to be evaluated in this case. On the other side it is not clear that the separation between both countries being a factor, it is not a matter of distance between countries, but of the pest status in the country of origin and destination. | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| 174. | *33* | Substantive | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous pests of phytosanitary concern to many countries. The pest risks of growing media accompanying plants for planting depend on a number of factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plantâ€™s production cycle, and for growing media containing soil, the separation between the country of origin and the country of import. Examples of growing media are provided in Annex 1A. | Adding last sentence to link the annex to the text. | English | United States of America |
| 175. | *33* | Substantive | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous pests of phytosanitary concern to many countries. The pest risks of growing media accompanying plants for planting depend on a number of factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. ~~Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant's production cycle, and for growing media containing soil, the separation between the country of origin and the country of import.~~ | This sentence is not really needed here in the Background section. The important pest risk factors should be explained in Section 4. The important risk factors should be in one section. This should be moved to para [49]. | English | European Union |
| 176. | *33* | Technical | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous quarantine pests ~~of phytosanitary concern~~ to many countries. The pest risks of growing media accompanying plants for planting depend on ~~a number of~~ factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant's production cycle, and for growing media containing soil, the separation between the country of origin and the country of import. | Pests of quarantine concern are quarantine pests, glossary term should be used in ISPM. "a number of" was deleted because is not necessary | English | Uruguay |
| 177. | *33* | Technical | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous quarantine pests ~~of phytosanitary concern~~ to many countries. The pest risks of growing media accompanying plants for planting depend on ~~a number of~~ factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant's production cycle, and for growing media containing soil, the separation between the country of origin and the country of import. | Pests of quarantine concern are quarantine pests, glossary term should be used in ISPM. "a number of" was deleted because is not necessary | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 178. | *33* | Technical | A number of growing media are recognized internationally as high-risk pathways for the introduction and spread of quarantine pests. Soil as a growing medium is considered to be a high-risk pathway because it can harbour numerous quarantine pests ~~of phytosanitary~~ | Pests of quarantine concern are quarantine pests, glossary term should be used in ISPM. "a number of" was deleted because is not | English | Ecuador, Mexico, OIRSA, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | ~~concern~~ to many countries. The pest risks of growing media accompanying plants for planting depend on ~~a number of~~ factors associated with both the production of the growing media and the production of the plants, as well as the interaction of the two. Important pest risk factors include the presence of or exposure to soil during propagation and production, the length of the plant's production cycle, and for growing media containing soil, the separation between the country of origin and the country of import. | necessary | | Belize, Costa Rica |
| 179. | *34* | Editorial | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil or soil as a constituent of growing media. While some plants for planting can have associated growing media washed off or shaken off, it is often difficult to completely avoid the movement of growing media with plants for planting. Some plants can survive transport only when moved in growing media. There is a need for internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of pests with the movement of growing media accompanying plants for planting in international trade. | As appear the very important of pest risk level ,it's very important to permit enter the soil this translate in our permenant law No.44 for year 2002 .May this need special regulation to have sharp restriction between the country of origin and the country of import | English | Jordan |
| 180. | *34* | Editorial | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil or when soil isÂ ~~soil as~~ a constituent of theÂ growing mediumm~~edia~~. While it is possible to wash or shake off growing media from ï»¿some plants for planting ~~can have associated growing media washed off or shaken off~~, it is often difficult ~~to~~ completely toï»¿avoid the movement of growing media with plants ~~for planting~~. Some plants can survive transport only when moved in growing media. This standard provides guidance on ï»¿~~There is a need for~~ internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of pests with the movement of growing media accompanying plants for planting in international trade. | 1. Better wording 2. More sensible wording in the context of an ISPM | English | EPPO, Algeria |
| 181. | *34* | Editorial | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil ~~or soil as a constituent of growing media~~. While some plants for planting can have associated growing media washed off or shaken off, it is often difficult to completely avoid the movement of growing media with plants for planting. Some plants can survive transport only when moved in growing media. There is a need for internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of pests with the movement of growing media accompanying plants for planting in international trade. | Text deleted is included in the mention to soil | English | Uruguay |
| 182. | *34* | Editorial | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil ~~or soil as a constituent of growing media~~. While some plants for planting can have associated growing media washed off or shaken off, it is often difficult to completely avoid the movement of growing media with plants for planting. Some plants can survive transport only when moved in growing media. There is a need for internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of pests with the movement of growing media | Text deleted is included in the mention to soil | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | accompanying plants for planting in international trade. | | | |
| 183. | *34* | Editorial | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil ~~or soil as a constituent of growing media~~. While some plants for planting can have associated growing media washed off or shaken off, it is often difficult to completely avoid the movement of growing media with plants for planting. Some plants can survive transport only when moved in growing media. There is a need for internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of pests with the movement of growing media accompanying plants for planting in international trade. | Text deleted is included in the mention to soil | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 184. | *34* | Editorial | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil or when soil is ~~soil as~~ a constituent of the growing medium~~media~~. While it is possible to wash or shake off growing media from some plants for planting ~~can have associated growing media washed off or shaken off~~, it is often difficult ~~to~~ completely to avoid the movement of growing media with plants ~~for planting~~. Some plants can survive transport only when moved in growing media. This standard provides guidance on ~~There is a need for~~ internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of pests with the movement of growing media accompanying plants for planting in international trade. | 1. Better wording. 2. More sensible wording in the context of an ISPM. | English | European Union |
| 185. | *34* | Substantive | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil or soil as a constituent of growing media. While some plants for planting can have associated growing media washed off or shaken off, it is often difficult to completely avoid the movement of growing media with plants for planting. Some plants can survive transport only when moved in growing media. There is a need for internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of pests with the movement of growing media accompanying plants for planting in international trade.<br><br>It is known that regulated pests associated with the movement of growing media accompanying plants for planting in international trade may have negative impacts on biodiversity. Implementation of this standard could significantly reduce the introduction and spread of pests associated with growing media and consequently reduce their negative impacts. In addition, the application of phytosanitary measures in accordance with this standard could also reduce the probability of introduction and spread of other organisms that may become invasive alien species in the country of import and thus affect biodiversity.<br><br>Certain pest risk management measures (e.g. some treatments with fumigants) may have a negative impact on the environment. Countries are encouraged to promote the use of phytosanitary measures that have a minimal negative impact on the environment | The new paragraph comes from para 12 and 13. | English | Thailand |
| 186. | *34* | Substantive | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil or soil as a | Global change. This sentence appears to be in contradiction with the scope, because it refers to | English | United |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | component ~~constituent~~ of growing media. While some plants for planting can have associated growing media washed off or shaken off, it ~~is often~~ may be difficult to completely avoid the movement of growing media with plants for planting, which may require additional phytosanitary measures. Some plants can survive transport only when moved in growing media. There is a need for internationally harmonized phytosanitary measures to minimize the ~~probability~~ risk of introduction or spread of pests with the movement of growing media accompanying plants for planting in international trade. | contaminants. Modified for clarification. "Risk" is more common terminology in ISPMs. | | States of America |
| 187. | *34* | Technical | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil or soil as a constituent of growing media. While some plants for planting can have associated growing media washed off or shaken off, it is often difficult to completely avoid the movement of growing media with plants for planting. Some plants can survive transport only when moved in growing media. There is a need for internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of quarantine pests with the movement of growing media accompanying plants for planting in international trade. | Quarantine pests are the relevant pests associated with growing media | English | Uruguay |
| 188. | *34* | Technical | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil or soil as a constituent of growing media. While some plants for planting can have associated growing media washed off or shaken off, it is often difficult to completely avoid the movement of growing media with plants for planting. Some plants can survive transport only when moved in growing media. There is a need for internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of quarantine pests with the movement of growing media accompanying plants for planting in international trade. | Quarantine pests are the relevant pests associated with growing media | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 189. | *34* | Technical | Many countries therefore regulate the movement of growing media in association with plants for planting. Growing media are often prohibited, particularly soil or soil as a constituent of growing media. While some plants for planting can have associated growing media washed off or shaken off, it is often difficult to completely avoid the movement of growing media with plants for planting. Some plants can survive transport only when moved in growing media. There is a need for internationally harmonized phytosanitary measures to minimize the probability of introduction or spread of quarantine pests with the movement of growing media accompanying plants for planting in international trade. | Quarantine pests are the relevant pests associated with growing media | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 190. | *35* | Substantive | **Requirements** | The "Requirements" portion should only comprised of 2 points i.e. PRA & PRM Options instead of the 5 points now. Existing point 2 & 3 are sub-sets under point 4 which are on PRA. | English | Singapore |
| 191. | *37* | Editorial | For the evaluation of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of ~~various~~ growing media described in this standard. It should be noted that pests carried with growing medium | Better wording. | English | Uruguay |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | accompanying a plant may be pests of other plants. | | | |
| 192. | *37* | Editorial | For the evaluation of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of ~~various~~ growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | Better wording. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 193. | *37* | Editorial | For the evaluation of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2013~~04~~, including the consideration of pest risk factors of ~~various~~ growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | Better wording. | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 194. | *37* | Editorial | Pour l'évaluation des risques phytosanitaires associés aux milieux de culture accompagnant les végétaux destinés à la plantation, l'ONPV du pays importateur devrait procéder à une ARP conformément à la NIMP 2:2007 et à la NIMP 11:~~2004~~ 2013, et prendre notamment en considération les facteurs de risque phytosanitaire des différents milieux de culture décrits dans la présente norme. Il convient de noter que les organismes nuisibles transportés avec les milieux de culture accompagnant des végétaux peuvent être nuisibles à d'autres végétaux. | date | Français | Mauritania |
| 195. | *37* | Editorial | For the evaluation of pest risks of growing media ~~accompanying~~ associated with plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | Clearer | English | Malaysia |
| 196. | *37* | Editorial | For the evaluation of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2013~~04~~, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | See comment on 17 | English | NEPPO |
| 197. | *37* | Editorial | For the evaluation of pest risks of growing media ~~accompanying~~associated with plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | consistency | English | Korea, Republic of |
| 198. | *37* | Editorial | For the evaluation of pest risks of growing media ~~accompanying~~ associated with plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with | This is the regional comment made by the 14th APPPC Regional Workshop on Review of draft | English | Japan |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | the growing medium accompanying a plant may be pests of other plants. | ISPMs. The same reason as No. 1. | | |
| 199. | *37* | Editorial | For the evaluation of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004 13, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | Change the reference to the new title | English | Algeria, Morocco |
| 200. | *37* | Substantive | ~~For the evaluation of~~ Phytosanitary import requirements for pest risks of growing media accompanying plant for planting should be technically justified. This technical justification should be based on a ~~pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out~~ PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | Not all evaluation of pest risks should be done by a PRA. As written in other ISPMs import requirements should be technically justified on the basis of a PRA. | English | EPPO, Norway |
| 201. | *37* | Substantive | For the evaluation of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard and factors related to the production of plants for planting (ISPM 36: 2012). It should be noted that quarantine pests carried with growing medium accompanying a plant may be pests of other plants. | Both factors and their interaction should be considered when conducting PRA for plants for planting associated with growing media. | English | Uruguay |
| 202. | *37* | Substantive | For the evaluation of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard and factors related to the production of plants for planting (ISPM 36: 2012). It should be noted that quarantine pests carried with growing medium accompanying a plant may be pests of other plants. | Both factors and their interaction should be considered when conducting PRA for plants for planting associated with growing media. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 203. | *37* | Substantive | For the evaluation of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPMÂ 2:2007 and ISPMÂ 11:2004, including the consideration of pest risk factors of various growing media described in this standard and factor related to the production of plants for planting (ISPM 36:2012). It should be noted that quarantine pests carried with growing medium accompanying a plant may be pests of other plants. | Both factors and their interaction should be considered when conducting PRA for plants for planting associated with growing media. | English | Ecuador, OIRSA, Belize |
| 204. | *37* | Substantive | For the evaluation of pest risks of growing media ~~accompanying~~ in association with plants for planting, the NPPO of the importing country should carry out PRA in accordance with | The phrase "growing media in association with plants for plantings" should be used throughout | English | Thailand |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | ISPM 2:2007 and ISPM 11:2004, including the consideration of ~~pest risk~~ factors that affect the pest risk of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants.<br><br>Meanwhile, the exporting country should develop the pest risk management such as applying the treatments recommened in section 5.1 to meet import requirements. | the standard. The exporting country which has to consider the mitigation pest risk should also be concerned in this paragraph. | | |
| 205. | *37* | Substantive | For the evaluation of pest risks of growing media accompanying plants for planting, ~~the NPPO of the importing country should carry out~~ PRA should carried out in accordance with ISPM 2:2007, ~~and~~ ISPMÃ‚Â 11:2004 and ISPM 21: 2004, including the consideration of pest risk factors of various growing media described in this standard.<br>Plants for planting and growing media are often assessed together. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | Not a requirement of the NPPO of the importing country. PRA could also be developed by the NPPO of the exporting country. Should also include a reference to ISPM 21. | English | United States of America |
| 206. | *37* | Substantive | ~~For the evaluation of~~<br>Phytosanitary import requirements for pest risks of growing media accompanying plant for planting should be technically justified. This technical justification should be based on a ~~pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out~~ PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | As written in other ISPMs, import requirements should be technically justified. | English | European Union |
| 207. | *37* | Substantive | For the evaluation of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard and factors related to the production of plants for planting (ISPM 36: 2012). It should be noted that quarantine pests carried with growing medium accompanying a plant may be pests of other plants. | Both factors and their interaction should be considered when conducting PRA for plants for planting associated with growing media. | English | Costa Rica |
| 208. | *37* | Technical | For the evaluation of pest risks of a growing media accompanying plants for planting, the NPPO of the importing country should carry out a PRA in accordance with ISPM 2:2007 and ISPM 11:~~2004~~2013, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | 1) Clearer (consistency with [40]). 2) Clearer (consistency with [40]). 3) ISPM 11 was revised in 2013. | English | EPPO |
| 209. | *37* | Technical | For theassessment ~~evaluation~~ of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | It is assessment of pest risks and not evaluation. | English | Suriname, Jamaica, Trinidad and Tobago, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | Dominica |
| 210. | *37* | Technical | For the assessment ~~evaluation~~ of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | This term is more consistent with ISPM 5. | English | Saint Kitts And Nevis |
| 211. | *37* | Technical | For the assessment ~~evaluation~~ of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | It is assessment of pest risks and not evaluation and is in keeping with the definintion of PRA. | English | Barbados |
| 212. | *37* | Technical | For the assessment ~~evaluation~~ of pest risks of growing media accompanying plants for planting, the NPPO of the importing country should carry out PRA in accordance with ISPM 2:2007 and ISPM 11:2004, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | Consistency in keeping with ISPM 5 | English | Guyana |
| 213. | *37* | Technical | For the evaluation of pest risks of a growing media accompanying plants for planting, the NPPO of the importing country should carry out a PRA in accordance with ISPM 2:2007 and ISPM 11:~~2004~~2013, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | 1) Clearer (consistency with [40]). 2) Clearer (consistency with [40]). 3) ISPM 11 was revised in 2013. | English | European Union |
| 214. | *37* | Technical | For the evaluation of pest risks of a growing media accompanying plants for planting, the NPPO of the importing country should carry out a PRA in accordance with ISPM 2:2007 and ISPM 11:~~2004~~2013, including the consideration of pest risk factors of various growing media described in this standard. It should be noted that pests carried with growing medium accompanying a plant may be pests of other plants. | 1) Clearer (consistency with [40]). 2) Clearer (consistency with [40]). 3) ISPM 11 was revised in 2013. | English | Norway, Algeria |
| 215. | *38* | Editorial | ~~2.~~ 1.1 **Constituents of Growing Media and their Associated Pest Risk** | This section should be a sub section under Pest Risk Analysis | English | Thailand, Malaysia |
| 216. | *38* | Editorial | ~~2.~~ 1.1**Constituents of Growing Media and their Associated Pest Risk** | This section should be a sub section under Pest Risk Analysis | English | Korea, Republic of |
| 217. | *38* | Editorial | **2. Constituents of Growing Media and their Associated Pest Risk** | This section should be a sub-section under pest risk analysis. | English | Nepal |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 218. | *38* | Editorial | ~~2.~~1.1. **Constituents of Growing Media and their Associated Pest Risk** | This section should be a sub section under Pest Risk Analysis | English | Viet Nam |
| 219. | *38* | Substantive | **2. ~~Constituents~~ Components of Growing Media and their Associated Pest Risk** | Clearer. Suggest a global change. | English | United States of America, Mexico |
| 220. | *39* | Editorial | The origin and the production methods of constituents (used alone or in combination) of growing media affect the pest risks that are associated with ~~the~~ growing media associated with~~accompanying~~ plants for planting. Annex 1~~a~~ lists constituents of growing media and indicates their pest risk under the assumption that they were not previously used as growing media or packing material and that they have been handled and stored in a way that minimizes contamination. ~~Annex 1b provides specific guidance on growing media associated with plants for planting that may generally be considered of low or negligible risk.~~ | 1) english 2) see [27] 3) see 4) Clearer. 5) see [79] | English | EPPO, Algeria |
| 221. | *39* | Editorial | The origin and the production methods of constituents (used alone or in combination) of growing media affect the pest risks that are associated with ~~the~~ growing media associated with~~accompanying~~ plants for planting. Annex 1a lists constituents of growing media and indicates their pest risk under the assumption that they were not previously used as growing media or packing material and that they have been handled and stored in a way that minimizes contamination. Annex 1b provides specific guidance on growing media associated with plants for planting that may generally be considered of ~~low or~~ negligible risk. | 1) English. 2) See [27]. 3) Clearer. 4) See [79]. | English | European Union |
| 222. | *39* | Substantive | The origin and the production methods of ~~constituents~~components (used alone or in combination) of growing media affect the pest risks that are associated with the growing media accompanying plants for planting. Annex 1a lists components~~constituents~~ of growing media and indicates their ~~pest~~relative phytosanitary risk, under the assumption that they were not previously used as growing media for planting and were ~~or packing material and have been~~ handled and stored in a way that prevents~~minimizes~~ contamination. Annex 1b provides information~~specific guidance~~ on growing media associated with plants for planting that may generally be considered of low or negligible risk. | Global change. See US comment on paragraph 74. To match the footnote in Annex 1a. See US comment on paragraph 76. Annex 1b provides information, not guidance. The underlying assumption that mineral substrates are low risk is questionable. No growing media are low risk unless the production process sterilizes it (such as perlite or vermiculite). It is simplistic to imagine that sand (or silt or clay) does not contain pathogens merely because there is no plant growing in it when you scoop it up. A survey of sand and soils in New Zealand found Pythium spp. in 13 of 20 sand and pumice samples. In contrast, no Pythium spp. were recovered from the upper 25 cm of peat deposits (peat sampled at Waitakaruru, near Thames) or from the roots of plants growing in the area (Robertson, 1973). Researchers in the Netherlands found sand filtration effective in | English | United States of America |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | | removing Phytophthora ramorum from recirculated irrigation water. This means the Phytophthora spores stayed in the sand. | | |
| 223. | *39* | Substantive | The origin and the production methods of constituents (used alone or in combination) of growing media affect the pest risks that are associated with the growing media accompanying plants for planting. Annex 1a lists constituents of growing media and indicates their pest risk under the assumption that they were not previously used as growing media or packing material and have been handled and stored in a way that minimizes contamination. ~~Annex 1b provides specific guidance on growing media associated with plants for planting that may generally be considered of low or negligible risk.~~ | Delete the last sentence of the paragraph as it should not refer to Annex 1b which has been deleted. Please see comment under Para. 77 below. | English | Canada |
| 224. | *39* | Technical | The origin and the production methods of constituents (whether considered~~used~~ alone or in combination) of growing media affect the pest risks that are associated with the growing media accompanying plants for planting. Annex 1a lists constituents of growing media and indicates their pest risk under the assumption that they were not previously used as growing media or packing material and have been handled and stored in a way that minimizes contamination. Annex 1b provides specific guidance on growing media associated with plants for planting that may generally be considered of low or negligible risk. | refer to comments on para 28 | English | Australia |
| 225. | *40* | Editorial | Growing media containing organic constituents may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk, even after heat or chemical treatment, than mineral or synthetic growing media.The PRA should focus on the growing media constituent(s) posing the highest pest risk.<br><br>If soil is part of the growing medium or the probability that the medium will be contaminated with soil is considered high, the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests and other organisms not yet deemed to be pests. ~~The PRA should focus on the growing media constituent(s) posing the highest pest risk.~~ | It's more clearly. | English | China |
| 226. | *40* | Editorial | Growing media containing organic constituents may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk, even after heat or chemical treatment, than mineral or synthetic growing media. If soil is part of the growing medium or the probability that the medium will be contaminated with soil is considered high, the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests and other organisms that could be ~~not yet~~ deemed to be pests. The PRA should focus on the growing media constituent(s) posing the highest pest risk. | Unclear as to what 'not yet' meant to mean so amend | English | Australia |
| 227. | *40* | Substantive | Growing media containing organic constituents may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk~~, even after heat or chemical treatment,~~ than mineral or | 1. If a treatment is effective, then growing medium consisting of plant debris does not pose a higher risk than mineral or synthetic medium. | English | EPPO, Norway |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | synthetic growing media. If soil is part of the growing medium or the probability that the medium will be contaminated with soil is considered high, the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests and other organisms not yet deemed to be pests. ~~The PRA should focus on the growing media constituent(s) posing the highest pest risk.~~ | 2. This is wrong - it predicts the result of the PRA before it is carried out, and overlooks the potential risks of other constituents. | | |
| 228. | *40* | Substantive | Growing media containing organic constituents may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk, even after heat or chemical treatment, than mineral or synthetic growing media. If soil is part of the growing medium or the probability that the medium will be contaminated with soil is considered high, the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests ~~and other organisms not yet deemed to be pests.~~ The PRA should ~~focus~~ consider ~~on~~ the risk posed by growing media constituent(s) ~~posing the highest pest risk~~. | What is relevant are pests, it is not clear what are organisms not yet deemed to be pests. The PRA should consider all constituents and not focused to those of highest pest risks. | English | Uruguay |
| 229. | *40* | Substantive | Growing media containing organic constituents may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk, even after heat or chemical treatment, than mineral or synthetic growing media. If soil is part of the growing medium or the probability that the medium will be contaminated with soil is considered high, the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests ~~and other organisms not yet deemed to be pests.~~ The PRA should ~~focus~~ consider ~~on~~ the risk posed by growing media constituent(s) ~~posing the highest pest risk~~. | What is relevant are pests, it is not clear what are organisms not yet deemed to be pests. The PRA should consider all constituents and not focused to those of highest pest risks. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 230. | *40* | Substantive | Growing media containing organic constituents may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk, even after heat or chemical treatment, than mineral or synthetic growing media. If soil is part of the growing medium or the probability that the medium will be contaminated with soil is considered high, the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests ~~and other organisms not yet deemed to be pests.~~ The PRA should ~~focus~~ consider ~~on~~ the risk posed by growing media constituent(s) ~~posing the highest pest risk~~. | What is relevant are pests, it is not clear what are organisms not yet deemed to be pests. The PRA should consider all constituents and not focused to those of highest pest risks. | English | Ecuador, OIRSA, Belize, Costa Rica |
| 231. | *40* | Substantive | Growing media containing organic components ~~constituents~~ may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk, even after heat or chemical treatment, than mineral or synthetic growing media. If soil is part of the growing medium, ~~or the probability that the medium will be contaminated with soil is considered high,~~ the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests and other organisms not yet deemed to be pests. ~~The PRA should focus on the growing media constituent(s) posing the highest pest risk.~~ | Global change. 2nd deletion, soil as a contaminant is not included in the scope of this standard. PRA considers all pest risks. The NPPO shouldn't focus on only the highest pest risk, but should also consider the pest risks of all the components. The blanket statement "Growing media containing organic constituents may be more likely to harbor pests than purely mineral" (or synthetic growing media) is disputable. It is true that synthetic media have | English | United States of America |

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| | | | | few pests prior to plant production, but during the growing process, organic matter greatly influences microbial population dynamics, and can be useful in pathogen control (Hoitink and Boehm, 1999). For example, Nesbit et al. (1979) found organic matter reduced the survival of Phytophthora cinnamomi in soil. They suggested the abortion of spores was caused by the increased nutrient capacity fostering beneficial microbial populations antagonistic to the pathogen. | | |
| 232. | *40* | Substantive | Growing media containing organic constituents may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk~~, even after heat or chemical treatment,~~ than mineral or synthetic growing media. If soil is part of the growing medium or the probability that the medium will be contaminated with soil is considered high, the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests and other organisms not yet deemed to be pests. ~~The PRA should focus on the growing media constituent(s) posing the highest pest risk.~~ | 1. If a treatment is effective, then growing medium consisting of plant debris does not pose a higher risk than mineral or synthetic medium.<br>2. This is wrong - it predicts the result of the PRA before it is carried out, and overlooks the potential risks of other constituents. | English | European Union |
| 233. | *40* | Technical | Growing media containing organic constituents may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk, even after heat or chemical treatment, than mineral or synthetic growing media. If soil is part of the growing medium or the probability that the medium will be contaminated with soil is considered high, the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests and other organisms ~~not yet deemed to be pests~~. The PRA should focus on the growing media constituent(s) posing the highest pest risk. | "All of the organisms that are potentially pests" is too large to be all taken in. | English | EPPO, Norway, Algeria |
| 234. | *40* | Technical | Growing media containing organic constituents may be more likely to harbour pests than purely mineral or synthetic growing media. Growing media consisting of plant debris generally pose a greater pest risk, even after heat or chemical treatment, than mineral or synthetic growing media. If soil is part of the growing medium or the probability that the medium will be contaminated with soil is considered high, the pest risk may be particularly difficult to fully assess due to the likely presence of many different pests and other organisms ~~not yet deemed to be pests~~. The PRA should focus on the growing media constituent(s) posing the highest pest risk. | "All of the organisms that are potentially pests" is too large to be all taken in. | English | European Union |
| 235. | *41* | Editorial | ~~**3. Production of Growing Media and Treatment Before Use**~~ | restructuring | English | Thailand, Malaysia |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 236. | 41 | Editorial | ~~3. Production of Growing Media and Treatment Before Use~~ | delete | English | Korea, Republic of |
| 237. | 41 | Editorial | ~~3. Production of Growing Media and Treatment Before Use~~ | Restructuring | English | Viet Nam |
| 238. | 41 | Substantive | ~~3. Production of Growing Media and Treatment Before Use~~ | Suggest moving to become a new Section under paragraph 53 because the information it includes is more appropriate as a pest risk management option and includes information on treatments. | English | United States of America |
| 239. | 42 | Editorial | ~~The pest risks posed by growing media depend largely on the media's production methods and the degree of processing.~~ | restructuring | English | Thailand, Malaysia |
| 240. | 42 | Editorial | ~~The pest risks posed by growing media depend largely on the media's production methods and the degree of processing.~~ | Move under new 1.2 | English | Korea, Republic of |
| 241. | 42 | Editorial | ~~The pest risks posed by growing media depend largely on the media's production methods and the degree of processing.~~ | Move under new 1.2 | English | Viet Nam |
| 242. | 42 | Substantive | ~~The pest risks posed by growing media depend largely on the mediaÃƒÂ¢Ã¢â€šÂ¬Ã¢â€žÂ¢s production methods and the degree of processing.~~ | Suggest moving to under paragraph 53. See US comment on paragraph 41. | English | United States of America |
| 243. | 42 | Substantive | The pest risks posed by growing media depend largely on the media's production methods , treatment and the degree of processing. | We believe that treatment ishould be considered important when assessing the risk , | English | Dominica |
| 244. | 43 | Editorial | Growing media should be produced under a management system that allows appropriate traceability (back and forward). Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, depending on the result of the PRA, the growing media may need to be treated by an appropriate method ~~before use~~, such as steam pasteurization, heat treatment, chemical treatment, fumigation or sterilization For claritybefore use. | For clarity | English | Ghana |
| 245. | 43 | Substantive | ~~Growing media should be produced under a management system that allows appropriate traceability (back and forward). Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, depending on the result of the PRA, the growing media may need to be treated by an appropriate method before use, such as steam pasteurization, heat treatment, chemical treatment, fumigation or sterilization.~~ | See US comment on paragraph 41. | English | United States of America |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 246. | 43 | Technical | Growing media should be produced under a management system that allows appropriate traceability (back and forward)of both it and its constituents where appropriate. Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, ~~depending on the result of the PRA,~~ the growing media may need to be treated by an appropriate method before use, such as steam pasteurization, heat treatment, chemical treatment, ~~fumigation~~ or sterilization. | 1) To clarify what should be traced back and forward. 2) Reference to PRA here is strange. PRA is conducted to justify import requirements, not to assess pest risks in cases of (incidental?) contamination of growing media with soil 3) fumigation is generally considered as a chemical treatment. | English | EPPO, Norway |
| 247. | 43 | Technical | Growing media should be produced under a management system that allows appropriate traceability (back and forward). Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, depending on the result of the PRA, the growing media may need to be treated by an appropriate ~~method~~ treatment before use, such as steam pasteurization, heat treatment, chemical treatment, ~~fumigation or sterilization~~. | Heat treatment can also lead to sterilization. Besides, fumigation is a type of chemical treatment. Sterilization can be achieved using different procedures | English | Uruguay |
| 248. | 43 | Technical | Growing media should be produced under a management system that allows appropriate traceability (back and forward). Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, depending on the result of the PRA, the growing media may need to be treated by an appropriate ~~method~~ treatment before use, such as steam pasteurization, heat treatment, chemical treatment, ~~fumigation or sterilization~~. | Heat treatment can also lead to sterilization. Besides, fumigation is a type of chemical treatment. Sterilization can be achieved using different procedures | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 249. | 43 | Technical | Growing media should be produced under a management system that allows appropriate traceability (back and forward). Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, depending on the result of the PRA, the growing media may need to be treated by an appropriate ~~method~~ treatment before use, such as steam pasteurization, heat treatment, chemical treatment, ~~fumigation or sterilization~~. | Heat treatment can also lead to sterilization. Besides, fumigation is a type of chemical treatment. Sterilization can be achieved using different procedures | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 250. | 43 | Technical | Growing media should be produced under a management system that allows appropriate traceability (back and forward)of both it and its constituents where appropriate. Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, ~~depending on the result of the PRA,~~ the growing media may need to be treated by an appropriate method before use, such as steam pasteurization, heat treatment, chemical treatment, ~~fumigation~~ or sterilization. | 1) To clarify what should be traced back and forward. 2) Reference to PRA here is strange. PRA is conducted to justify import requirements, not to assess pest risks in cases of (incidental?) contamination of growing media with soil 3) fumigation is generally considered as a chemical | English | European Union |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | | treatment. | | |
| 251. | 44 | Editorial | **4. Factors that Affect the Pest Risks of Growing Media associated with~~Used for~~ Plants for Planting** | for clarity | English | EPPO |
| 252. | 44 | Editorial | **4. Factors that Affect the Pest Risks of Growing Media ~~Used for~~ associated with Plants for Planting** | For consistency throughout the text | English | Uruguay |
| 253. | 44 | Editorial | **4. Factors that Affect the Pest Risks of Growing Media ~~Used for~~ associated with Plants for Planting** | For consistency throughout the text | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 254. | 44 | Editorial | **4. Factors that Affect the Pest Risks of Growing Media ~~Used for~~ associated with Plants for Planting** | For consistency throughout the text | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 255. | 44 | Editorial | **~~4.~~ 1.2 Factors that Affect the Pest Risks of Growing Media Used for Plants for Planting**<br><br>The pest risks posed by growing media depend largely on the media's production methods and the degree of processing.<br><br>Growing media should be produced under a management system that allows appropriate traceability (back and forward). Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, depending on the result of the PRA, the growing media may need to be treated by an appropriate method before use, such as steam pasteurization, heat treatment, chemical treatment, fumigation or sterilization. | This section should be a sub section under Pest Risk Analysis | English | Thailand, Malaysia |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 256. | *44* | Editorial | ~~4.~~ 1.2 **Factors that Affect the Pest Risks of Growing Media Used for Plants for Planting**<br><br>The pest risks posed by growing media depend largely on the media's production methods and the degree of processing. Growing media should be produced under a management system that allows appropriate traceability (back and forward). Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, depending on the result of the PRA, the growing media may need to be treated by an appropriate method before use, such as steam pasteurization, heat treatment, chemical treatment, fumigation or sterilization. | This section should be a sub section under Pest Risk Analysis | English | Korea, Republic of |
| 257. | *44* | Editorial | **4. Factors that Affect the Pest Risks of Growing Media associated with~~Used for~~ Plants for Planting** | For clarity. | English | European Union |
| 258. | *44* | Editorial | **4. Factors that Affect the Pest Risks of Growing Media Used for Plants for Planting** | This section should be a sub-section under pest risk analysis. | English | Nepal |
| 259. | *44* | Editorial | ~~4.~~1.2. **Factors that Affect the Pest Risks of Growing Media Used for Plants for Planting**<br><br>The pest risk posed by growing media depend largely on the media's production methods and the degree of processing. Growing media should be produced under a management system that allows appropriate traceability (back and forward). Growing media should be produced, stored and maintained under conditions that prevent their contamination. The medias should not be exposed to any plant or soil (in the case of soil-<br>free growing media). If this has not been achieved, depending on the result of the PRA, the growing media may need to be treated by an appropriate method before use, such as steam pasteurization, heat treatment, chemical treatment (fumigation or sterilization). | This section should be a sub section under Pest Risk Analysis | English | Viet Nam |
| 260. | *44* | Substantive | 3~~4~~. **Factors that Affect the Pest Risks of Growing Media Used for Plants for Planting** | See US comment in paragraph 41 | English | United States of America |
| 261. | *45* | Substantive | ~~The production methods of plants for planting may affect the pest risks of the growing media used. While some growing media may pose a low pest risk by nature of their production, they may become contaminated during the production process of plants for planting. Requirements contained in ISPMÂ 36:2012 on integrated measures for plants for planting should be considered to prevent contamination of the growing media. Production should be initiated from growing media, plants for planting and water that are all pest free. Additional phytosanitary measures may be used, either alone or in combination, to ensure the pest~~ | Suggest moving to chapeau of Risk Management Options section | English | United States of America |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | ~~risks are managed.~~ | | | |
| 262. | *45* | Technical | The production methods of plants for planting may affect the pest risks of the growing media used. While some growing media may pose a low pest risk by nature of their production, they may become contaminated during the production process of plants for planting. Requirements contained in ISPM 36:2012 on integrated measures for plants for planting should be considered to prevent contamination of the growing media. Production should be initiated from growing media, plants for planting and water that are all ~~pest~~ free of pests regulated by the importing country. Additional phytosanitary measures may be used, either alone or in combination, to ensure the pest risks are managed. | What is required is pest freedom from pests regulated in the importing country | English | Uruguay |
| 263. | *45* | Technical | The production methods of plants for planting may affect the pest risks of the growing media used. While some growing media may pose a low pest risk by nature of their production, they may become contaminated during the production process of plants for planting. Requirements contained in ISPM 36:2012 on integrated measures for plants for planting should be considered to prevent contamination of the growing media. Production should be initiated from growing media, plants for planting and water that are all ~~pest~~ free of pests regulated by the importing country. Additional phytosanitary measures may be used, either alone or in combination, to ensure the pest risks are managed. | What is required is pest freedom from pests regulated in the importing country | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 264. | *45* | Technical | The production methods of plants for planting may affect the pest risks of the growing media used. While some growing media may pose a low pest risk by nature of their production, they may become contaminated during the production process of plants for planting. Requirements contained in ISPM 36:2012 on integrated measures for plants for planting should be considered to prevent contamination of the growing media. Production should be initiated from growing media, plants for planting and water that are all ~~pest~~ free of pests regulated by the importing country. Additional phytosanitary measures may be used, either alone or in combination, to ensure the pest risks are managed. | What is required is pest freedom from pests regulated in the importing country | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 265. | *45* | Technical | The production methods of plants for planting may affect the pest risks of the growing media used. While some growing media may pose a low pest risk by nature of their production, they may become contaminated during the production process of plants for planting. Requirements contained in ISPM 36:2012 on integrated measures for plants for planting should be considered to prevent contamination of the growing media. Production should be initiated from growing media, plants for planting and water that are all of known pest status~~free~~. Additional phytosanitary measures may be used, either alone or in combination, to ensure the pest risks are managed. | It is very onerous to specify that all input materials SHOULD be pest free. The only practical approach is to know the status of the materials and apply appropriate measures as and when required. | English | Australia |
| 266. | *46* | Substantive | ~~The NPPO of the importing country may take into consideration the pest risks (as outlined in Annex 1a and 1b and Appendix 1) of constituents of growing media in association with plants for planting when conducting a PRA to identify appropriate phytosanitary measures. Furthermore~~ In general,<br>PRA should consider the status of regulated pests in the importing and exporting countries, and the degree of similarity between those countries (see ISPM 2:2007 and ISPM 11:2004).<br>P~~p~~est risks may also depend on: | For clarity, much of the text is redundant. | English | United States of America |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 267. | *47* | Substantive | • ~~degree of geographical similarity of, or distance between, country of origin and country of import (e.g. pest risk related to soil originating in different continents versus adjacent countries within one ecoclimatic region)~~ | Redundant, incorporated into paragraph 46. | English | United States of America |
| 268. | *47* | Technical | • for soil and growing media containing soil the degree of ~~geographical~~ similarity of or distance between country of origin and country of import ~~, or distance between,~~ country of origin and country of import (e.g. pest risk related to soil originating in different continents versus adjacent countries within one ecoclimatic region) | The meaning of 'geographical' similarity seems unclear, and keeping the wording very simple might actually provide more clarity here. | English | EPPO |
| 269. | *47* | Technical | • ~~degree of geographical similarity of, or distance between, country of origin and country of import (e.g. pest risk related to soil originating in different continents versus adjacent countries within one ecoclimatic region)~~ | Not clear wording, it could be taken into account but it is not relevant, it mixes distance between countries and geographic similarity between countries. The factor that should be taken into account is the pest status in the country of origin and destination, distance has nothing to do. | English | Uruguay |
| 270. | *47* | Technical | • ~~degree of geographical similarity of, or distance between, country of origin and country of import (e.g. pest risk related to soil originating in different continents versus adjacent countries within one ecoclimatic region)~~ | Not clear wording, it could be taken into account but it is not relevant, it mixes distance between countries and geographic similarity between countries. The factor that should be taken into account is the pest status in the country of origin and destination, distance has nothing to do. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 271. | *47* | Technical | • ~~degree of geographical similarity of, or distance between, country of origin and country of import (e.g. pest risk related to soil originating in different continents versus adjacent countries within one ecoclimatic region)~~ | Not clear wording, it could be taken into account but it is not relevant, it mixes distance between countries and geographic similarity between countries. The factor that should be taken into account is the pest status in the country of origin and destination, distance has nothing to do. | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 272. | *47* | Technical | • ~~degree of geographical similarity of, or distance between, country of origin and country of import (e.g. pest risk related to soil originating in different continents versus adjacent countries within one ecoclimatic region)~~ | Soil is an interacting system. It is rich on diversified microorganisms which in some cases can have antagonist effect on pests. The interacting system can vary from on part to another depending upon a soil structure, chemical compounds and exchanges between roots and microorganisms of soils. The climate and crops can also impact the biological component of the soil. So, it is difficult on this | English | NEPPO |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | basis to take into consideration this similarity. | | |
| 273. | *47* | Technical | • for soil and growing media containing soil the degree of ~~geographicalÃ‚Â~~ similarity of, or distance between, country of origin and country of import ~~, or distance between,~~ country of origin and country of import (e.g. pest risk related to soil originating in different continents versus adjacent countries within one ecoclimatic region) | The meaning of 'geographical' similarity seems unclear, and keeping the wording very simple might actually provide more clarity here. | English | European Union |
| 274. | *47* | Technical | • for soil and growing media containing soil, the degree of ~~geographicalÃ‚Â~~ similarity of, or distance between, ~~, or distance between,~~ country of origin and country of import (e.g. pest risk related to soil originating in different continents versus adjacent countries within one ecoclimatic region) | The meaning of 'geographical' similarity seems unclear, and keeping the wording very simple might actually provide more clarity here. | English | Norway |
| 275. | *47* | Technical | • degree of geographical similarity (i.e. countries with high degree of geographical similarity shall influence the establish of the pest), ~~of, or~~ distance between~~,~~ country of origin and country of import (e.g. pest risk related to soil originating in different continents versus adjacent countries within one ecoclimatic region) | More clarification | English | Algeria, Morocco |
| 276. | *48* | Editorial | • pest status ~~of relevant pests~~ in the exporting or importing country (e.g. pest free area, area of low pest prevalence) | Glossary term | English | Uruguay |
| 277. | *48* | Editorial | • pest status ~~of relevant pests~~ in the exporting or importing country (e.g. pest free area, area of low pest prevalence) | Glossary term | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 278. | *48* | Editorial | • pest status ~~of relevant pests~~ in the exporting or importing country (e.g. pest free area, area of low pest prevalence) | Glossary term | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 279. | *48* | Substantive | • ~~status of relevant pests in the exporting or importing country (e.g. pest free area, area of low pest prevalence)~~ | Redundant | English | United States of America |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 280. | 48 | Technical | • status of relevant pests in the exporting or importing country (e.g. presence, absence or transience ~~pest free area, area of low pest prevalence~~) | Descriptions of pest status, not measures | English | EPPO |
| 281. | 48 | Technical | • status of relevant pests in the exporting or importing country ~~(e.g. pest free area, area of low pest prevalence)~~ | These are not examples of pest status according to ISPM 8 | English | Uruguay |
| 282. | 48 | Technical | • status of relevant pests in the exporting or importing country ~~(e.g. pest free area, area of low pest prevalence)~~ | These are not examples of pest status according to ISPM 8 | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 283. | 48 | Technical | • status of relevant pests in the exporting or importing country ~~(e.g. pest free area, area of low pest prevalence)~~ | These are not examples of pest status according to ISPM 8 | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 284. | 48 | Technical | • status of relevant pests in the exporting or importing country (e.g. presence, absence or transience ~~pest free area, area of low pest prevalence~~) | Descriptions of pest status, not measures | English | European Union |
| 285. | 48 | Technical | • status of relevant pests in the exporting or importing country ~~(e.g. pest free area, area of low pest prevalence)~~ | The examples were of measures not pest status | English | Norway |
| 286. | 48 | Technical | • status of relevant pests in the exporting or importing country (e.g. presence, absence or transience ~~pest free area, area of low pest prevalence~~) | Descriptions of pest status, not measures | English | Algeria |
| 287. | 49 | Substantive | • production systems in place to prevent contamination of growing media, and traceability of the growing media during production and storage<br>• production system for the plants ( e.g. the presence of or exposure to soil)<br>• length of the plant's production cycle | Moved part of text from Background. Clarify that first bullet is about production of growing media (up til it is used for planting) and next bullet point is about what happens after planting, other two bullets are additional conditions that seem | English | EPPO, Norway |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • Presence of, or exposure to, soil during plant propagation and production, | relevant. | | |
| 288. | 49 | Substantive | • production systems in place to prevent contamination of growing media, and traceability of the growing media during production and storage<br>• Measures to prevent contamination of growing media during transportation. | To include the inserted bullet as a new bullet no 50 to highlight the dependency of measures during transportation under pest risk. | English | Singapore |
| 289. | 49 | Substantive | • production systems in place to prevent contamination of growing media, and traceability of the growing media during production and storage<br>• Measures to prevent contamination of growing media during transportation | adding new bullet. It should be considered a pest risk during transportation. | English | Thailand |
| 290. | 49 | Substantive | • production systems in place to prevent contamination of growing media, and traceability of the growing media during production and storage<br>• New para [50]<br>• •Measures to prevent contamination of growing media during transportation | Thailand proposed to add a new point | English | Malaysia |
| 291. | 49 | Substantive | • components of growing media<br>• production systems in place to prevent contamination of growing media~~, and traceability of the growing media during production and storage~~ | Delete 2nd part of bullet because traceability is not a factor affecting pest risk, and is addressed as a risk management option in paragraph 43. | English | United States of America |
| 292. | 49 | Substantive | • production systems in place to prevent contamination of growing media, and traceability of the growing media during production and storage<br>• production system for the plants ( e.g. the presence of or exposure to soil)<br>• length of the plant's production cycle<br>• presence of, or exposure to, soil during plant propagation and production, | Moved part of text from Background. Clarify that first bullet is about production of growing media (up til it is used for planting) and next bullet point is about what happens after planting, other two bullets are additional conditions that seem relevant. See our comment No.10. | English | European Union |
| 293. | 49 | Substantive | • production systems in place to prevent contamination of growing media, and traceability of the growing media during production and storage | Clearly for a system | English | Viet Nam |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • New paragraph [50]<br>• Measures to prevent contamination of growing media during transportation | | | |
| 294. | *49* | Technical | • production systems in place to prevent contamination of growing media, ~~and traceability of the growing media during production and storage~~ | It is too difficult to trace back the growing media during production or storage for growing media associated with plants for planting. This seems to be more appropriate for bulk growing media as a commodity. What is relevant is that the growing media could be certified by the NPPO of the exporting country and complies with phytosanitary import requirements of the NPPO of the importing country | English | Uruguay |
| 295. | *49* | Technical | • production systems in place to prevent contamination of growing media, ~~and traceability of the growing media during production and storage~~ | It is too difficult to trace back the growing media during production or storage for growing media associated with plants for planting. This seems to be more appropriate for bulk growing media as a commodity. What is relevant is that the growing media could be certified by the NPPO of the exporting country and complies with phytosanitary import requirements of the NPPO of the importing country | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 296. | *49* | Technical | • production systems in place to prevent contamination of growing media, ~~and traceability of the growing media during production and storage~~ | It is too difficult to trace back the growing media during production or storage for growing media associated with plants for planting. This seems to be more appropriate for bulk growing media as a commodity. What is relevant is that the growing media could be certified by the NPPO of the exporting country and complies with phytosanitary import requirements of the NPPO of the importing country | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 297. | *50* | Substantive | • ~~intended location and use of the plants for planting associated with the growing media~~ | Intended use of plants for planting is “planting" | English | Uruguay |
| 298. | *50* | Substantive | • ~~intended location and use of the plants for planting associated with the growing media~~ | Intended use of plants for planting is “planting" | English | COSAVE, Paraguay, Chile, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | Argentina, Peru, Brazil |
| 299. | *50* | Substantive | • ~~intended location and use of the plants for planting associated with the growing media~~ | Intended use of plants for planting is “planting" | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 300. | *50* | Substantive | • intended location and use (e.g. commercial vs. residential) of the plants for planting associated with the growing media<br>• new or re-used growing media | Plants for planting is an intended use. Need to clarify the meaning of “intended use” in this indent. Suggest providing examples. New bullet: Once growing media is used, the risk level is affected. | English | United States of America |
| 301. | *50* | Technical | • intended ~~location~~ and use of the plants for planting associated with the growing media | "intended location" should be detailed if it is to be kept, as it makes no sense here. | English | EPPO |
| 302. | *50* | Technical | • intended ~~location~~ and use of the plants for planting associated with the growing media | "intended location" should be detailed if it is to be kept, as it makes no sense here. | English | European Union |
| 303. | *50* | Technical | • intended ~~location and~~ use of the plants for planting associated with the growing media | "intended location" should be detailed if it is to be kept, as it makes no sense here. | English | Norway |
| 304. | *51* | Substantive | • history of trade, if it exists ~~(e.g. new trade versus long trade history of plants with soil)~~ | Is the intention to suggest that if you have been importing plants with soil for many years then the pest risk of more soil should be lower. This may be correct in some cases but is really a sweeping generalisation that would be highly dependent on the specific circumstances. | English | Australia |
| 305. | *51* | Substantive | • ~~history of trade, if it exists (e.g. new trade versus long trade history of plants with soil)~~ | This example expresses confidence in the system and is not an inherent property of growing media. | English | United States of America |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 306. | *51* | Technical | • historical or existing import of soil or growing media ~~history of trade, if it exists (e.g. new trade versus long trade history of plants with soil~~) | clearer wording for better link to the impact on pest risk | English | EPPO, Algeria |
| 307. | *51* | Technical | • ~~history of trade, if it exists (e.g. new trade versus long trade history of plants with soil)~~ | Pest risks do not depend on history of trade. Besides if it is necessary to carry out a PRA there is no history of trade | English | Uruguay |
| 308. | *51* | Technical | • ~~history of trade, if it exists (e.g. new trade versus long trade history of plants with soil)~~ | Pest risks do not depend on history of trade. Besides if it is necessary to carry out a PRA there is no history of trade | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 309. | *51* | Technical | • ~~history of trade, if it exists (e.g. new trade versus long trade history of plants with soil)~~ | Pest risks do not depend on history of trade. Besides if it is necessary to carry out a PRA there is no history of trade | English | Ecuador, OIRSA, Belize, Costa Rica |
| 310. | *51* | Technical | In the assessment of risk, the following points may be relevant:<br>• history of trade, if it exists (e.g. new trade versus long trade history of plants with soil) | Para 46 and the dot points are a mixture of factors influencing pest risk and factors that could be considered in assessing the risk. Dot points at 51 and 52 relate to the assessment of risk. They do not directly affect the risk. | English | Australia |
| 311. | *51* | Technical | • historical or existing import of soil or growing media ~~history of trade, if it exists (e.g. new trade versus long trade history of plants with soil~~) | Clearer wording for better link to the impact on pest risk. | English | European Union |
| 312. | *51* | Technical | • historical or existing import of plants with soil or growing media ~~history of trade, if it exists (e.g. new trade versus long trade history of plants with soil~~) | clearer wording for better link to the impact on pest risk | English | Norway |
| 313. | *52* | Substantive | • ~~notifications of non-compliance of imported consignments, if they exist.~~ | Deleted bullet expresses confidence in the system, and is not an inherent property of growing media. Added bullet, this point should be | English | United States of |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • Degree to which plant parts (especially roots) are obscured for pests of concern | included. | | America |
| 314. | 52 | Technical | • ~~notifications of non-compliance of imported consignments, if they exist.~~ | Merged into new un-bulleted para 51. | English | EPPO, Norway, Algeria |
| 315. | 52 | Technical | • ~~notifications of non-compliance of imported consignments, if they exist.~~ | It is not clear if this item refers to notifications received by the importing country or notifications in general. If it refers to the first case, there is no history of trade and a PRA is being conducted to assess pest risk. If it refers to the second case, notification of non compliance is a bilateral process and not always available for third countries. | English | Uruguay |
| 316. | 52 | Technical | • ~~notifications of non-compliance of imported consignments, if they exist.~~ | It is not clear if this item refers to notifications received by the importing country or notifications in general. If it refers to the first case, there is no history of trade and a PRA is being conducted to assess pest risk. If it refers to the second case, notification of non compliance is a bilateral process and not always available for third countries. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 317. | 52 | Technical | • ~~notifications of non-compliance of imported consignments, if they exist.~~ | It is not clear if this item refers to notifications received by the importing country or notifications in general. If it refers to the first case, there is no history of trade and a PRA is being conducted to assess pest risk. If it refers to the second case, notification of non compliance is a bilateral process and not always available for third countries. | English | Ecuador, OIRSA, Belize, Costa Rica |
| 318. | 52 | Technical | • ~~notifications of non-compliance of imported consignments, if they exist.~~ | Merged into new un-bulleted para 51. | English | European Union |
| 319. | 53 | Editorial | ~~5~~ 2. **Pest Risk Management Options** | Rearrangement of numbering as a result of comment for paragraph 38. | English | Singapore |
| 320. | 53 | Editorial | ~~5.~~ 2 **Pest Risk Management Options** | Restructuring | English | Thailand |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 321. | 53 | Editorial | ~~5.~~ 2 **Pest Risk Management Options** | Numbering rearranged | English | Malaysia |
| 322. | 53 | Editorial | ~~5.~~ 2.**Pest Risk Management Options** | Numbering rearranged | English | Korea, Republic of |
| 323. | 53 | Editorial | ~~5~~2**. Pest Risk Management Options** | Numbering rearranged | English | Viet Nam |
| 324. | 53 | Substantive | ~~5~~4**. Pest Risk Management Options**<br><br>~~ÃƒÆ'Ã†â€™ÃƒâÃ¢â‚¬Â¬â„¢ÃƒÆ'Ã‚Â¢ÃƒÂ¢Ã¢â‚¬Å¡Ã‚Â¬Ã¢â€¡Ã‚Â¡ÃƒÆ'Ã†â€™ÃƒÂ¢Ã¢â€šÂ¬Ã…Â¡ÃƒÆ'Ã¢â‚¬Å¡Ã¢â€šÃ‚Â~~<br><br>The production methods of plants for planting may affect the pest risks of the growing media used. While some growing media may pose a low pest risk by nature of their production, they may become contaminated during the production process of plants for planting. Requirements contained in ISPM 36:2012 on integrated measures for plants for planting should be considered to prevent contamination of the growing media. Production should be initiated from growing media, plants for planting and water that are all pest free. Additional phytosanitary measures may be used, either alone or in combination, to ensure the pest risks are managed.<br><br>**4.1 Production of Growing Media and Treatment Before Use**<br><br>~~ÃƒÆ'Ã†â€™ÃƒÂ¢Ã¢â€šÂ¬Ã…Â¡ÃƒÆ'Ã¢â‚¬Å¡Ã¢â€šÃ‚~~ The pest risks posed by growing media may depend on the physical origin, the media's production methods and the degree of processing.<br><br>Growing media should be produced under a management system that allows appropriate traceability (back and forward). Growing media should be produced, stored and maintained under conditions that prevent their contamination. The media should not be exposed to any plants or soil (in the case of soil-free growing media). If this has not been achieved, depending on the result of the PRA, the growing media may need to be treated by an appropriate method before use.~~ÃƒÆ'Ã†â€™ÃƒÂ¢Ã¢â€šÂ¬Ã…Â¡ÃƒÆ'Ã¢â‚¬Å¡Ã¢â€šÃ‚~~ | See US comment in paragraph 41. New chapeau moved from paragraph 45. Modification to original paragraph 42. Origin is an important factor (e.g. the depth/layer of the earth where the growing media is removed, natural vs. agricultural land). The pest risk posed may depend on the origin and components of the growing media, which may be mitigated by production methods, based on PRA. See US comments on paragraph 40. Modification to original paragraph 43, last sentence. The examples of treatment types are already indicated elsewhere in the standard. | English | United States of America |
| 325. | 53 | Substantive | **5. Pest Risk Management Options**<br><br>Integrated measures may be developed and implemented by the NPPO of the exporting country to manage the risk associated with pests, including those that may be associated | Systems approaches are a crucial phytosanitary measure for growing media and should be addressed in this draft standard. | English | Canada |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | with growing media. The following measures can be used singly or in combination as part of a systems approach (cf. ISPM 14:2002). | | | |
| 326. | *54* | Editorial | ~~5~~2.1 **Treatments to prevent or limit the movement of pests with growing media** | Rearrangement of numbering of this sub-section due to comment in paragraph 38. | English | Singapore |
| 327. | *54* | Editorial | ~~5.1~~ 2.1 **Treatments to prevent or limit the movement of pests with growing media** | This section should be a sub section under Pest Risk Management Option | English | Thailand, Malaysia |
| 328. | *54* | Editorial | ~~5.1~~ 2.1 **Treatments to prevent or limit the movement of pests with growing media** | This section should be a sub section under Pest Risk Management Option | English | Korea, Republic of |
| 329. | *54* | Editorial | **5.~~1~~2 Treatments to prevent or limit the movement of pests with growing media** | New sub-section 5.2 - Re-number to accommodate new sub-section 5.1. | English | Canada |
| 330. | *54* | Editorial | ~~5~~2.1 **Treatments to prevent or limit the movement of pests with growing media** | This section should be a sub section under Pest Risk Management Option | English | Viet Nam |
| 331. | *54* | Substantive | 4.2~~5.1~~ **Treatments to prevent or limit the movement of pests with growing media** | See US comment from paragraph 41. | English | United States of America |
| 332. | *54* | Substantive | ~~**5.1 Treatments to prevent or limit the movement of pests with growing media**~~<br><br>**5.1 Prevention of colonization by the relevant pest**<br><br>**The following measures may be used to prevent colonization by the relevant pest:**<br><br>**• pest free area**<br><br>**• pest free place of production**<br><br>**• protected conditions**<br><br>**• prevention of transmission by wind**<br><br>**• growth on benches separated from contact with soil** | New sub-section 5.1 to incorporate information deleted from Annex 1b, table 2 as these measures are important to consider and better placed in the core text of the standard. | English | Canada |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 333. | *54* | Technical | **5.1 Treatments ~~to prevent or limit the movement of pests with growing media~~** | Treatment is defined in the ISPM 5 and to explain the aim of its application is redundant | English | Uruguay |
| 334. | *54* | Technical | **5.1 Treatments ~~to prevent or limit the movement of pests with growing media~~** | Treatment is defined in the ISPM 5 and to explain the aim of its application is redundant | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 335. | *54* | Technical | **5.1 Treatments ~~to prevent or limit the movement of pests with growing media~~** | Treatment is defined in the ISPM 5 and to explain the aim of its application is redundant | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 336. | *54* | Technical | **5.1 Treatments to manage or reduce the pest risks of ~~prevent or limit the movement of pests with~~ growing media** | None of these treatments directly influence movement. They all manage the pest risks. | English | Australia |
| 337. | *55* | Editorial | Treatments may~~can~~ be applied at various stages~~points~~ in the production cycle of plants for planting to mitigate the risks associated with pests in the growing media. These treatments may ~~can~~ be applied alone or in combination: | Usual use of verb | English | EPPO, Algeria, Morocco |
| 338. | *55* | Editorial | Treatments can be applied at various points in the production cycle of plants for planting to mitigate the risks associated with pests in the growing media. These treatments may~~can~~ be applied alone or in combination. For example: | For clarification | English | United States of America |
| 339. | *55* | Editorial | Treatments may~~can~~ be applied at various stages~~points~~ in the production cycle of plants for planting to mitigate the risks associated with pests in the growing media. These treatments may ~~can~~ be applied alone or in combination: | Usual use of verb | English | European Union |
| 340. | *55* | Substantive | Treatments can be applied at various points in the production cycle of plants for planting to mitigate the risks associated with pests in the growing media. These treatments can be applied alone or ~~in combination:~~in a system approach | to be consistent with already define terms in ISPM 5 and already approved standards | English | Dominica |
| 341. | *55* | Technical | Treatments can be applied at various points in the production cycle of plants for planting to mitigate the risks associated with quarantine pests in the growing media. These treatments can be applied alone or in combination: | Quarantine pests are the relevant pest associated with growing media | English | Uruguay |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | |
| 342. | 55 | Technical | Treatments can be applied at various points in the production cycle of plants for planting to mitigate the risks associated with quarantine pests in the growing media. These treatments can be applied alone or in combination: | Quarantine pests are the relevant pest associated with growing media | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 343. | 55 | Technical | Treatments can be applied at various points in the production cycle of plants for planting to mitigate the risks associated with quarantine pests in the growing media. These treatments can be applied alone or in combination: | Quarantine pests are the relevant pest associated with growing media | English | Ecuador, OIRSA, Belize, Costa Rica |
| 344. | 56 | Editorial | • treatment of growing media before planting ~~(see section 3)~~ (steam pasteurization, heat treatment, chemical treatment, fumigation or sterilization) | detail description moved from para 43. | English | Thailand |
| 345. | 56 | Editorial | • treatment of growing media before planting ~~(see section 3)~~ (steam pasteurization, heat treatment, chemical treatment, fumigation or sterilization) | detail description | English | Malaysia |
| 346. | 56 | Editorial | • treatment of growing media before planting ~~(see section 3)~~ (steam pasteurization, heat treatment, chemical treatment, fumigation or sterilization) | clarify | English | Korea, Republic of |
| 347. | 56 | Substantive | • treatment of growing media before planting ~~(see sectionÂ 3)~~ , such as steam pasteurization, heat treatment, chemical treatment, fumigation or sterilization | Copied from Paragraph 43 | English | United States of America |
| 348. | 56 | Substantive | • treatment of growing media before planting (see section 3)<br>• treatment (e.g. filtration, sterilization) of water or water-based nutrient solution used for irrigation or as growing medium | Add a new bullet to capture information about treatment of water from deleted Annex 1b, Table 1 as this treatment would be important to consider and better placed in the core text of the standard. | English | Canada |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
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| | | | | | | |
| 349. | *56* | Substantive | • treatment of growing media before planting (~~see section 3~~steam pasteurization, heat treatment, chemicaltreatment) | Detail description | English | Viet Nam |
| 350. | *56* | Technical | • treatment of growing media before planting (see section 3)<br>• treatment of fields or planting beds intended for the production of plants for planting | see [58] | English | EPPO, Norway, Algeria |
| 351. | *56* | Technical | • treatment of growing media before planting (see section 3)<br>• treatment of fields or planting beds intended for the production of plants for planting | See [58]. | English | European Union |
| 352. | *58* | Substantive | • treatment related to~~of~~ growing conditions (annex I of ISPM 36) ~~fields or planting beds~~ intended for the production of plants for planting | It should referred to growing condition in annex 1 of ISPM 36 (1) growth chamber (2) greenhouse (3) screen house (4) field grown in containers (pots, tubs etc.) (5) field grown | English | Thailand |
| 353. | *58* | Technical | • ~~treatment of fields or planting beds intended for the production of plants for planting~~ | Would be better located after paragraph [56] because in both cases plants are not treated. | English | EPPO, Norway, Algeria |
| 354. | *58* | Technical | • ~~treatment of fields or planting beds intended for the production of plants for planting~~ | Would be better located after paragraph [56] because in both cases plants are not treated. | English | European Union |
| 355. | *60* | Technical | • élimination du milieu de culture en lavant les racines ou en secouant la plante. | Attention, le fait de secouer les plants ou de laver les racines ne veut pas dire que le milieu de culture est éliminé car il peut tomber ailleurs et contaminer ! | Français | Mauritania |
| 356. | *60* | Translation | • removal of growing media by root washing or plant shaking. | There was long discussion on whether plant shaking was a treatment and the forum ask for clarification | English | Dominica |
| 357. | *61* | Substantive | Verification of the effectiveness of a treatment after application may be necessary. ~~It may be important to verify the effectiveness of a treatment after application.~~ Factors such as temperature may affect the efficacy of certain pesticides. | 1) clarified sentence - underscoring necessity, not only importance. 2) Important additional information | English | EPPO, Norway |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | Also, some pesticides may suppress, rather than eradicate, pest populations.- | | | |
| 358. | 61 | Substantive | It may be important to verify the effectiveness of a treatment after application. Factors such as temperature may affect the efficacy of certain pesticides.<br><br>To change to "It is important..." or to rephrase to " Verification of the effectiveness of the treatment should be done after application" | Verification of the efficay of the treatment should be done after application where possible. It should not be conveyed as optional. | English | Singapore |
| 359. | 61 | Substantive | ~~It may be important to verify the effectiveness of a treatment after application.~~ Factors such as temperature may affect the results~~efficacy~~ of treatments ~~certain pesticides~~. It may be important to verify the effectiveness of a treatment after application. | More appropriate wording. Deletion: More appropriate as the second sentence in the paragraph | English | United States of America |
| 360. | 61 | Substantive | Verification of the effectiveness of a treatment after application may be necessary. ~~It may be important to verify the effectiveness of a treatment after application.~~ Factors such as temperature may affect the efficacy of certain pesticides.<br><br>Also, some pesticides may suppress, rather than eradicate, pest populations.- | 1) clarified sentence - underscoring necessity, not only importance. 2) Important additional information | English | European Union |
| 361. | 61 | Translation | It may be important to verify the effectiveness of a treatment after application. Factors such as temperature may affect the efficacy of certain pesticides. | The term effectiveness should be translated into spanish as "efectividad". | English | Uruguay |
| 362. | 61 | Translation | It may be important to verify the effectiveness of a treatment after application. Factors such as temperature may affect the efficacy of certain pesticides. | The term effectiveness should be translated into spanish as "efectividad". | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 363. | 61 | Translation | It may be important to verify the effectiveness of a treatment after application. Factors such as temperature may affect the efficacy of certain pesticides. | The term effectiveness should be translated into spanish as "efectividad". | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 364. | 62 | Editorial | Removal of the original growing media by root washing or plant shaking may be accompanied by a requirement for the plants to be replanted in fresh, pest free growing | It's reasonable in logistic. | English | China |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | media shortly before export.<br><br>The 62nd paragraph should be in the front of the 61st paragraph. | | | |
| 365. | *62* | Substantive | Removal of the original growing media by root washing or plant shaking may be accompanied by a requirement for the plants to be replanted in fresh, pest free growing media shortly before export. | Comment: Even if this control option may be relevant, it does't cover the possible pests and diseases located inside/outside the plant material (for instance endo-ectoparasite nematodes such as Meloidogyne or Pratylenchus genera. However, this is a problem relating to the plants for planting and not to the growing media, so it doesn't seem relevant for this standard. | English | EPPO |
| 366. | *62* | Substantive | Removal of the original growing media by root washing or plant shaking may be accompanied by a requirement for the plants to be replanted in not previously used~~fresh, pest free~~ growing media shortly before export. | A word "fresh" for growing media is difficult to determine. We may use a word "not previously used" same as footnote of table 1a. | English | Thailand |
| 367. | *62* | Substantive | Removal of the original growing media by root washing or plant shaking may be accompanied by a requirement for the plants to be replanted in fresh, pest free growing media shortly before export. | Comment: Even if this control option may be relevant, it doesn't cover the possible pests and diseases located inside/outside the plant material (for instance endo-ectoparasite nematodes such as Meloidogyne or Pratylenchus genera. However, this is a problem relating to the plants for planting and not to the growing media, so it doesn't seem relevant for this standard. | English | European Union |
| 368. | *62* | Substantive | Removal of the original growing media by root washing or plant shaking may be accompanied by a requirement for the plants to be replanted in fresh, pest free growing media shortly before export. | Comment: Even if this control option may be relevant, it does't cover the possible pests and diseases located inside/outside the plant material (for instance endo-ectoparasite nematodes such as Meloidogyne or Pratylenchus genera. However, this is a problem relating to the plants for planting and not to the growing media, so it doesn't seem relevant for this standard. | English | Norway |
| 369. | *62* | Technical | A requirement for r~~R~~emoval of the original growing media by root washing or plant shaking may be accompanied by an option ~~requirement~~ for the plants to be replanted in unused~~fresh,~~ pest free growing media shortly before export. | 1) freedom from growing media is the requirement, it is then an option for the exporter to replant in fresh media. 2) To explain what is meant by "fresh" in this context (cf. [76]). | English | EPPO, Norway, Algeria, Morocco |
| 370. | *62* | Technical | A requirement for r~~R~~emoval of the original growing media by root washing or plant shaking may be accompanied by an option ~~requirement~~ for the plants to be replanted in unused~~fresh,~~ pest free growing media shortly before export. | 1) freedom from growing media is the requirement, it is then an option for the exporter to replant in fresh media. 2) To explain what is | English | European Union |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | meant by "fresh" in this context (cf. [76]). | | |
| 371. | 63 | Editorial | After treatment, appropriate measures should be taken to avoid ~~re~~contamination. | removes assumption that there was contamination in the first place | English | EPPO |
| 372. | 63 | Editorial | After treatment, appropriate measures should be taken to avoid ~~re~~contamination. | Removes assumption that there was contamination in the first place. | English | European Union |
| 373. | 63 | Editorial | After treatment, appropriate measures should be taken to avoid further ~~re~~contamination. | Better wording | English | Algeria |
| 374. | 64 | Editorial | ~~5~~2.2 **Inspection, sampling and testing** | Rearrangement of numbering due to the comment in paragraph 38. | English | Singapore |
| 375. | 64 | Editorial | ~~5.2~~ 2.2 **Inspection, sampling and testing** | Restructuring | English | Thailand |
| 376. | 64 | Editorial | ~~5.2~~ 2.2 **Inspection, sampling and testing** | This section should be a sub section under Pest Risk Analysis | English | Malaysia |
| 377. | 64 | Editorial | ~~5.2~~ 2.2 **Inspection, sampling and testing** | This section should be a sub section under Pest Risk Analysis | English | Korea, Republic of |
| 378. | 64 | Editorial | **5.~~2~~3 Inspection, sampling and testing** | Renumbering sub-section due to new sub-section 5.1 insertion in paragraph 54. | English | Canada |
| 379. | 64 | Editorial | ~~5~~2.2 **Inspection, sampling and testing** | This section should be a sub section under Pest Risk Analysis | English | Viet Nam |
| 380. | 64 | Substantive | 4.3~~5.2~~ **Inspection, sampling and testing** | See US comment from paragraph 41 | English | United States of America |
| 381. | 65 | Editorial | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary import requirements. However, inspection is not a reliable method for detecting most pests in soil. | Cf. ISPM 5. | English | EPPO |
| 382. | 65 | Editorial | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements. However, inspection is not a reliable method for detecting most pests in soil.<br><br>The last sentence in the 65th paragraph is moved to the beginning of the 66th paragraph. | It's reasonable in logistic. | English | China |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 383. | 65 | Editorial | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary import requirements. However, inspection is not a reliable method for detecting most pests in soil. | Cf. ISPM 5. | English | European Union |
| 384. | 65 | Editorial | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary import requirements. However, inspection is not a reliable method for detecting most pests in soil. | Cf. ISPM 5. | English | Algeria |
| 385. | 65 | Substantive | ~~Growing media associated with p~~Plants for planting and associated growing media may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements. However, inspection is not a reliable method for detecting most pests in soil. ~~.~~ | Under inspection context, it is not a common practice to inspect growing media at entry, what is carried out is sampling of the plants for planting and inspect for the detection of pests in growing media and plants for planting. | English | Uruguay |
| 386. | 65 | Substantive | ~~Growing media associated with p~~Plants for planting and associated growing media may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements. However, inspection is not a reliable method for detecting most pests in soil. ~~.~~ | Under inspection context, it is not a common practice to inspect growing media at entry, what is carried out is sampling of the plants for planting and inspect for the detection of pests in growing media and plants for planting. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 387. | 65 | Substantive | ~~Growing media associated with p~~Plants for planting and associated growing media may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements. However, inspection is not a reliable method for detecting most pests in soil. ~~.~~ | Under inspection context, it is not a common practice to inspect growing media at entry, what is carried out is sampling of the plants for planting and inspect for the detection of pests in growing media and plants for planting. | English | Ecuador, OIRSA, Belize, Costa Rica |
| 388. | 65 | Substantive | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements. However, inspection is not a reliable method for detecting most pests in ~~soil.~~growing media | It's consistent with before. | English | China |
| 389. | 65 | Substantive | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements (cf. ISPM 23:2005). However, inspection is not a reliable method for detecting most pests in soil. | ISPM 23 should be referred. | English | Thailand |
| 390. | 65 | Technical | Growing media associated with plants for planting should~~may~~ may need to be inspected~~in the country of origin or at the point of entry to the importing country~~ to determine if pests are present or to determine compliance with phytosanitary import requirements. ~~However, inspection is not a reliable method for detecting most pests in~~ | 1) "may" alone does not seem to reflect clearly on the need for an inspection or not. Inspection is inspection wherever it is done. 2) less negative | English | EPPO, Algeria, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | ~~soil.~~ However, most pests in soil cannot be detected by inspection. | wording. | | Morocco |
| 391. | *65* | Technical | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements. However, inspection is not a reliable method for detecting most pests in ~~soil~~ growing medium. | This is referred to to all growing media and not only soil | English | Uruguay |
| 392. | *65* | Technical | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements. However, inspection is not a reliable method for detecting most pests in ~~soil~~ growing medium. | This is referred to to all growing media and not only soil | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 393. | *65* | Technical | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements. However, inspection is not a reliable method for detecting most pests in ~~soil~~ growing medium. | This is referred to to all growing media and not only soil | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 394. | *65* | Technical | Growing media associated with plants for planting may be inspected in the country of origin or at the point of entry to the importing country to determine if pests are present or to determine compliance with phytosanitary requirements. However, inspection based solely on visual means is not a reliable method for detecting most pests in soil. | While “inspection” is defined in ISPM5 as being visual, there is benefit in reinforcing that point here which will then also lead into para 66 more logically. Common use of the term “inspection” includes other techniques, including sampling and microscopy that may detect many of the potential pests (as discussed in Para 66). | English | Australia |
| 395. | *65* | Technical | Growing media associated with plants for planting ~~may~~ may need to be inspected~~in the country of origin or at the point of entry to the importing country~~ to determine if pests are present or to determine compliance with phytosanitary import requirements. ~~However, inspection is not a reliable method for detecting most pests in soil.~~ However, most pests in soil cannot be detected by inspection. | 1) "may" alone does not seem to reflect clearly on the need for an inspection or not. Inspection is inspection wherever it is done. 2) less negative wording. | English | European Union |
| 396. | *66* | Editorial | Therefore, the NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM 20:2004 and ISPM 31:2008). | It’s reasonable in logistic. | English | China |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | This may include testing for indicator organisms. However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media.<br><br>The last sentence in the 68th paragraph is moved to the beginning of the 68th paragraph. | | | |
| 397. | *66* | Editorial | Therefore, the NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM 20:2004 and ISPM 31:2008). This may include testing for ~~indicator~~ organisms that can provide an indication if the growing media has been treated (eg total bacterial or fungal numbers). However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media. | Indicator organisms needs further explanation. | English | Australia |
| 398. | *66* | Substantive | Therefore, the NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM 20:2004 and ISPM 31:2008). This may include testing for indicator organisms. ~~However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media.~~ | Last sentence, as it is written, suggests the idea of zero risk, and is not compatible with the principle of managed risk. | English | Uruguay |
| 399. | *66* | Substantive | Therefore, the NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM 20:2004 and ISPM 31:2008). This may include testing for indicator organisms. ~~However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media.~~ | Last sentence, as it is written, suggests the idea of zero risk, and is not compatible with the principle of managed risk. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 400. | *66* | Substantive | Therefore, the NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM 20:2004 and ISPM 31:2008). This may include testing for indicator organisms. ~~However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media.~~ | Last sentence, as it is written, suggests the idea of zero risk, and is not compatible with the principle of managed risk. | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 401. | *66* | Substantive | Therefore, the NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM 20:2004 and ISPM 31:2008). This may include testing for indicator organisms. However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media.<br><br>the explanation or definition of “indicator organisms”. | The different understandings of indicator organisms will affect implementation of the standard. | English | China |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 402. | 66 | Substantive | Therefore, the NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM20:2004 and ISPM31:2008). ~~This may include testing for indicator organisms.~~ However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media. | For deletion, this is a very general statement, and testing should be very specific. In addition, NPPOs should identify quarantine pests to trading partners. | English | United States of America |
| 403. | 66 | Substantive | The places of production and process/treatment procedures of growing media may be inspected, monitored, and approved by the NPPO of exporting country to ensure that phytosanitary import requirements are met in order to prevent contamination.<br><br>~~Therefore,~~ T~~t~~he NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM 20:2004 and ISPM 31:2008). ~~This may include testing for indicator organisms.~~ However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media. | This sentence has replaced the previous one to elaborate on mitigation measures that can be implemented at origin. | English | Canada |
| 404. | 66 | Technical | Therefore, the NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM 20:2004 and ISPM 31:2008). ~~This may include testing for indicator organisms.~~ However, even sampling and testing may be not be a fully reliable detection method for many pests, and, in particular, for the detection of low-level infestation of growing media. Therefore, testing may include testing for indicator organisms (easily detectable organsms whose presence indicates that required measures failed to be effective and that the growing medium may contain regulated pests). ~~However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media.~~ | rewriting for clarification of what "indicators" are. | English | EPPO, Norway, Algeria |
| 405. | 66 | Technical | Therefore, the NPPO of the importing country may require sampling and testing of the growing media accompanying plants for planting (cf. ISPM 20:2004 and ISPM 31:2008). ~~This may include testing for indicator organisms.~~ However, even sampling and testing may be not be a fully reliable detection method for many pests, and, in particular, for the detection of low-level infestation of growing media. Therefore, testing may include testing for indicator organisms (easily detectable organsms whose presence indicates that required measures failed to be effective and that the growing medium may contain regulated pests). ~~However, even sampling and testing may not be a fully reliable detection method for many pests, and in particular, for detecting low-level contamination of growing media.~~ | Rewriting for clarification of what "indicators" are. | English | European Union |
| 406. | 67 | Editorial | ~~5~~2**.3 Post-entry quarantine** | Rearrangement of numbering due to the comment in paragraph 38. | English | Singapore |
| 407. | 67 | Editorial | ~~5.3~~ 2.3 **Post-entry quarantine** | Restructuring | English | Thailand |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 408. | 67 | Editorial | ~~5.3~~ 2.3 **Post-entry quarantine** | This section should be a sub section under Pest Risk Analysis | English | Malaysia |
| 409. | 67 | Editorial | ~~5.3~~ 2.3 **Post-entry quarantine** | This section should be a sub section under Pest Risk Analysis | English | Korea, Republic of |
| 410. | 67 | Editorial | **5.~~3~~4 Post-entry quarantine** | Renumbering sub-section due to new sub-section 5.1 insertion in paragraph 54. | English | Canada |
| 411. | 67 | Editorial | **5.3 Post-entry quarantine** | Annex changed to Appendix. | English | Nepal |
| 412. | 67 | Editorial | ~~5~~2**.3 Post-entry quarantine** | This section should be a sub section under Pest Risk Analysis | English | Viet Nam |
| 413. | 67 | Substantive | ~~**5.3 Post-entry quarantine**~~ | This section is not relevant to soil and growing media and applies to viruses and diseases in plants (indexing). Propose deletion of this section. | English | United States of America |
| 414. | 68 | Substantive | ~~The NPPO of the importing country may require post-entry quarantine (PEQ) to verify compliance or to apply phytosanitary measures before the release of the consignment. ISPMÂ 34:2010 provides guidance for the design and operation of PEQ stations.~~ | This section is not relevant to soil and growing media and applies to viruses and diseases in plants (indexing). Propose deletion of this section. | English | United States of America |
| 415. | 68 | Technical | The NPPO of the importing country may require post-entry quarantine (PEQ) for plants for planting associated with growing media to verify compliance or to apply phytosanitary measures before the release of the consignment. ~~ISPMÃ‚Â 34:2010 provides guidance for the design and operation of PEQ stations.~~ | For consistency with other paragraphs which relate the pest risk management option with growing media associated with plant for planting. The ISPM 34 refers to design and operation of PEQ stations, no related to content of this paragraph | English | Uruguay |
| 416. | 68 | Technical | The NPPO of the importing country may require post-entry quarantine (PEQ) for plants for planting associated with growing media to verify compliance or to apply phytosanitary measures before the release of the consignment. ~~ISPMÃ‚Â 34:2010 provides guidance for the design and operation of PEQ stations.~~ | For consistency with other paragraphs which relate the pest risk management option with growing media associated with plant for planting. The ISPM 34 refers to design and operation of PEQ stations, no related to content of this paragraph | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 417. | 68 | Technical | The NPPO of the importing country may require post-entry quarantine (PEQ) for plants for planting associated with growing media to verify compliance or to apply phytosanitary measures before the release of the consignment. ~~ISPMÃ‚Â 34:2010 provides guidance for the design and operation of PEQ stations.~~ | For consistency with other paragraphs which relate the pest risk management option with growing media associated with plant for planting. The ISPM 34 refers to design and operation of PEQ stations, no related to content of this | English | Ecuador, OIRSA, Belize, Costa Rica |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | paragraph | | |
| 418. | 69 | Editorial | In cases where knowledge about the pest risks is incomplete or there is an indication of a failure of measures taken in the exporting country (e.g. from a significant number of interceptions), PEQ may be an option for monitoring or assessing if the exporting country's measures will reliably meet the required pest management ~~regaining trust in the reliability of measures taken in the exporting country.~~ | The word 'trust' has connotations that are not appropriate in an ISPM. | English | Australia |
| 419. | 69 | Substantive | ~~In cases where knowledge about the pest risks is incomplete or there is an indication of a failure of measures taken in the exporting country (e.g. from a significant number of interceptions), PEQ may be an option for monitoring or regaining trust in the reliability of measures taken in the exporting country~~. | Under this section pest risk management options are being described, PEQ is an option as mentioned in paragraph 68. Text was deleted because refers to measures to be taken in case of non compliance, which do not correspond to include here | English | Uruguay |
| 420. | 69 | Substantive | ~~In cases where knowledge about the pest risks is incomplete or there is an indication of a failure of measures taken in the exporting country (e.g. from a significant number of interceptions), PEQ may be an option for monitoring or regaining trust in the reliability of measures taken in the exporting country~~. | Under this section pest risk management options are being described, PEQ is an option as mentioned in paragraph 68. Text was deleted because refers to measures to be taken in case of non compliance, which do not correspond to include here | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 421. | 69 | Substantive | ~~In cases where knowledge about the pest risks is incomplete or there is an indication of a failure of measures taken in the exporting country (e.g. from a significant number of interceptions), PEQ may be an option for monitoring or regaining trust in the reliability of measures taken in the exporting country~~. | Under this section pest risk management options are being described, PEQ is an option as mentioned in paragraph 68. Text was deleted because refers to measures to be taken in case of non compliance, which do not correspond to include here | English | Ecuador, OIRSA, Belize, Costa Rica |
| 422. | 69 | Substantive | ~~In cases where knowledge about the pest risks is incomplete or there is an indication of a failure of measures taken in the exporting country (e.g. from a significant number of interceptions), PEQ may be an option for monitoring or regaining trust in the reliability of measures taken in the exporting country.~~ | This section is not relevant to soil and growing media and applies to viruses and diseases in plants (indexing). Propose deletion of this section. | English | United States of America |
| 423. | 70 | Editorial | ~~5~~2.4 **Prohibition** | rearrangement of numbering due to the comments in paragrap 38. | English | Singapore |
| 424. | 70 | Editorial | ~~5.4~~ 2.4 **Prohibition** | Restructuring | English | Thailand |
| 425. | 70 | Editorial | ~~5.4~~ 2.4 **Prohibition** | This section should be a sub section under Pest Risk Management Option | English | Malaysia |
| 426. | 70 | Editorial | ~~5.4~~ 2.4**Prohibition** | This section should be a sub section under Pest Risk Management Option | English | Korea, Republic of |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 427. | *70* | Editorial | **5.~~4~~5 Prohibition** | Renumbered due to new sub-section 5.1 insertion in paragraph 54. | English | Canada |
| 428. | *70* | Editorial | **~~5~~2.4 Prohibition** | This section should be a sub section under Pest Risk Management Option | English | Viet Nam |
| 429. | *70* | Substantive | **4.5~~5.4~~ Prohibition** | See US comment on paragraph 41 | English | United States of America |
| 430. | *71* | Editorial | In cases where the measures outlined in this standard are not applicable or feasibleï»¿ for some growing media (in particular soil), in combination with certain plants for planting, ~~the measures outlined in this standard are not applicable or feasible~~, or the measures ~~y~~ cannot provide sufficient protection, the entry of ~~the~~ consignments of plants for planting associated with~~containing~~ those particular growing media may be prohibited. | Rewording for better English and consistency with previous wording | English | EPPO, Algeria |
| 431. | *71* | Editorial | In cases where ~~for some growing media (in particular soil), in combination with certain plants for planting, the measures outlined in this standard are not applicable or feasible, or they cannot provide sufficient protection, the entry of the consignment of plants for planting containing those~~the risks associated with growing media cannot be managed to a sufficient level, then particular growing media may be prohibited. | clearer statement of issue being addressed | English | Australia |
| 432. | *71* | Editorial | In cases where the measures outlined in this standard are not applicable or feasible for some growing media (in particular soil), in combination with certain plants for planting, ~~the measures outlined in this standard are not applicable or feasible~~, or the measures ~~y~~ cannot provide sufficient protection, the entry of ~~the~~ consignments of plants for planting associated with~~containing~~ those particular growing media may be prohibited. | Rewording for better English and consistency with previous wording. | English | European Union |
| 433. | *71* | Substantive | In cases where for some growing media (in particular soil), in combination with certain plants for planting, the measures outlined in this standard are not applicable or feasible, or they cannot provide sufficient phytosanitary protection, or have not been implemented by the NPPO of the exporting country, the entry of the consignment of plants for planting containing those particular growing media may be prohibited by the NPPO of the importing country. | To introduce the concept of non-compliance into the standard (was in original EWG draft, but later removed). ***STFO and PM comments differ*** | English | United States of America |
| 434. | *71* | Technical | In cases where for some growing media (in particular soil), in combination with certain plants for planting, the measures outlined in this standard are not applicable or feasible, or they cannot provide sufficient phytosanitary protection, the entry of the consignment of plants for planting containing those particular growing media may be prohibited. | to be more specific | English | EPPO, Norway, Algeria |
| 435. | *71* | Technical | In cases where for some growing media (in particular soil), in combination with certain plants for planting, the measures outlined in this standard are not applicable or feasible, or | To be more specific. | English | European |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | they cannot provide sufficient phytosanitary protection, the entry of the consignment of plants for planting containing those particular growing media may be prohibited. | | | Union |
| 436. | *72* | Editorial | This ~~annex.~~ appendix was adopted by the Commission on Phytosanitary Measures in [Month 201-]. | Annex changed into appendix | English | Thailand, Malaysia |
| 437. | *72* | Editorial | This annex was adopted by the Commission on Phytosanitary Measures in [Month 201-]. | Annex changed to Appendix. | English | Nepal |
| 438. | *72* | Substantive | This ~~annex~~ appendix was adopted by the Commission on Phytosanitary Measures in [Month 201-]. | As the content of this document does not comprise of any requirements, it should be an appendix instead. | English | Singapore |
| 439. | *72* | Substantive | This ~~annex~~appendix was adopted by the Commission on Phytosanitary Measures in [Month 201-]. | Annex changed into appendix | English | Viet Nam |
| 440. | *72* | Technical | This ~~annex~~appendix was adopted by the Commission on Phytosanitary Measures in [Month 201-]. | Annex changed into appendix | English | Korea, Republic of |
| 441. | *73* | Editorial | The ~~annex.~~ appendix is a prescriptive part of the standard. | Annex changed into appendix | English | Thailand, Malaysia |
| 442. | *73* | Editorial | The ~~annex~~appendix is a prescriptive part of the standard. | Annex changed into appendix | English | Korea, Republic of |
| 443. | *73* | Editorial | The annex is a prescriptive part of the standard. | Annex changed to Appendix. | English | Nepal |
| 444. | *73* | Editorial | The ~~annex~~appendix is a prescriptive part of the standard. | Annex changed into appendix | English | Viet Nam |
| 445. | *73* | Substantive | ~~The annex is a prescriptive part of the standard.~~ | To change this "annex" into an "appendix" & hence there is no need for this sentence. There are no specific requirements required of an "annex" in this document and hence it should be an appendix instead. | English | Singapore |
| 446. | *74* | Editorial | **ANNEX 1~~a~~: Pest risks of various constituents of growing media** | Renumber the annex to account for deletion of Annex 1b under para. 77 | English | Canada |
| 447. | *74* | Substantive | **ANNEX 1a: Pest risks of various constituents of growing media** | 6 pest risk categories are described, which does not provide clear guidance in relation to pest risks of consituents of growing media. Moreover | English | Uruguay |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | See explanation | it is not clear the distinction amongst them (e.g differences between variable low and low-medium), that may cause confusion to NPPO because there is no a clear indication for each category. Categories should be better described and be associated with the corresponding comments (e.g. low pest risk when level of processing is high and high pest risk when level of processing is low, etc) | | |
| 448. | *74* | Substantive | **ANNEX 1a: Pest risks of various constituents of growing media**<br><br>See explanation | 6 pest risk categories are described, which does not provide clear guidance in relation to pest risks of consituents of growing media. Moreover it is not clear the distinction amongst them (e.g differences between variable low and low-medium), that may cause confusion to NPPO because there is no a clear indication for each category. Categories should be better described and be associated with the corresponding comments (e.g. low pest risk when level of processing is high and high pest risk when level of processing is low, etc) | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 449. | *74* | Substantive | ~~**ANNEX**~~**APPENDIX 1a: Pest risks of various constituents of growing media** | This table serves a good purpose to present the risk evaluation for adoption but there should be assurance that the risk levels had been technically assessed provided in the standard. Without supporting information, the table should be changed to an appendix or removed entirely. | English | Singapore |
| 450. | *74* | Substantive | **APPENDIX** ~~**ANNEX**~~ **1a: Pest risks of various constituents of growing media** | This Annex should be made into Appendix | English | Thailand, Malaysia |
| 451. | *74* | Substantive | **ANNEX 1a: Pest risks of various constituents of growing media**<br><br>Note: The table outlines the pest risk for growing media not previously used for planting and which have been handled and stored in a way that prevents contamination | This statement is too important to be left as a footnote, it should be a note under the title. Text mostly from para 76 | English | Australia |
| 452. | *74* | Substantive | **APPENDIX** ~~**ANNEX**~~ **1a: Pest risks of various constituents of growing media** | This Annex should be made into Appendix | English | Korea, Republic of |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 453. | *74* | Substantive | **ANNEX 1a:Relative, phytosanitary ~~Pest~~ risks of various components ~~constituents~~ of growing media**<br><br>There is a range of pest risk associated with the type of growing media in association with plants for planting, as broadly ranked below from lowest to highest pest risk (recognizing that these rankings may vary depending on specific circumstances): | More appropriate wording Global change to component. Suggest adding examples of treatments for each type of growing media. See US general comment. To match wording in Annex 1 of ISPM 36. This table would not be necessary if the standard would merely recommend that all media be heat treated or fumigated prior to use. But if the standard is kept as presented, the title should clarify that it refers to risk PRIOR to planting plants in the media (as it is stated in page 4 of the text). | English | United States of America |
| 454. | *74* | Substantive | ~~**ANNEX**~~ APPENDIX **1a: Pest risks of various constituents of growing media** | This is the regional comment made by the 14th APPPC Regional Workshop on Review of draft ISPMs. | English | Japan |
| 455. | *74* | Substantive | **ANNEX 1~~a~~: Relative ~~P~~pest risks of various constituents of growing media** | New wording required as risk levels are relative rather than absolute. | English | Canada |
| 456. | *74* | Substantive | **ANNEX 1a: Pest risks of various constituents of growing media** | The Annex should be made into Appendix. | English | Nepal |
| 457. | *74* | Substantive | ~~**ANNEX**~~**APPENDIX 1a: Pest risks of various constituents of growing media** | This Annex should be made into Appendix | English | Viet Nam |
| 458. | *74* | Technical | **ANNEX 1~~a~~: Pest risks of various constituents of growing media**<br><br>This table refers to growing media not previously used for planting and which have been handled and stored in a way that prevents contamination. | Addition for clarity | English | EPPO, Norway, Algeria |
| 459. | *74* | Technical | **APPENDIX~~ANNEX~~ 1a: Pest risks of various constituents of growing media** | Information contained in this annex is only refere nce information. | English | Uruguay |
| 460. | *74* | Technical | **APPENDIX~~ANNEX~~ 1a: Pest risks of various constituents of growing media** | Information contained in this annex is only refere nce information. | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 461. | *74* | Technical | **ANNEX 1a: Pest risks of various constituents of growing media**<br><br>Information contained in this annex is only reference information. | 6 pest risk categories are described, which does not provide clear guidance in relation to pest risks of consituents of growing media. Moreover it is not clear the distinction amongst them (e.g differences between variable low and low-medium), that may cause confusion to NPPO | English | Ecuador, OIRSA, Belize, Costa Rica |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td></td><td>because there is no a clear indication for each category. Categories should be better described and be associated with the corresponding comments (e.g. low pest risk when level of processing is high and high pest risk when level of processing is low, etc)</td><td></td><td></td></tr>
<tr><td>462.</td><td>74</td><td>Technical</td><td>ANNEX 1a: Pest risks of various constituents of growing media<br><br>This table refers to growing media not previously used for planting and which have been handled and stored in a way that prevents contamination.</td><td>Addition for clarity.</td><td>English</td><td>European Union</td></tr>
<tr><td>463.</td><td>75</td><td>Editorial</td><td>
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support pest survival</th><th>Comments</th></tr>
<tr><td>Baked clay pellets</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Pure clay</td><td>Low</td><td>No</td><td>n/a</td></tr>
<tr><td>Gravel, sand, silt</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers)</td><td>Low</td><td>No</td><td>Inert (but root knot and cyst nematodes can survive in rock wool)</td></tr>
<tr><td>Vermiculite, perlite, volcanic rock, zeolite, scoria</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Coconut fibres (coir/coco peat)</td><td>Variable low</td><td>Yes</td><td>Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts)</td></tr>
<tr><td>Paper</td><td>Low</td><td>Yes</td><td>High level of processing</td></tr>
</table>
</td><td>surely native earthworms can vector pests</td><td>English</td><td>Australia</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| Sawdust, wood shavings (excelsior) | Low–Medium | Yes | Size of particles and level of processing reduces the probability of pest survival after processing |
| Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use |
| Water | Low | Yes | Risk depends on source or treatment |
| Wood chips | Medium | Yes | Risk depends on particle size and level of processing |
| Cork | Variable low | Yes | Risk depends on level of processing |
| Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) |
| Sphagnum moss | Variable high | Yes | Risk depends on level of processing |
| Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) | Variable high | Yes | Risk is reduced if treated or from a clean non-infested source |
| Bark | High | Yes | Risk depends on source (potential to harbour forest pests) and degree |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | <table><tr><td></td><td></td><td></td><td>of processing or fermentation</td></tr><tr><td>Bio waste</td><td>High</td><td>Yes</td><td>Unprocessed waste from plant or animal sources related to human activities</td></tr><tr><td>Compost</td><td>High</td><td>Yes</td><td>Risk reduced if produced by an approved process; risk increased if material is from an unknown source</td></tr><tr><td>Humus</td><td>High</td><td>Yes</td><td>Decomposed plant matter</td></tr><tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr><tr><td>Tree fern slabs</td><td>High</td><td>Yes</td><td>Potential to harbour forest pests</td></tr><tr><td>Vermicompost (vermicast plus earthworms)</td><td>High</td><td>Yes</td><td>Some ~~non-native~~ earthworms may be vectors of pests</td></tr></table> | | | |
| 464. | *75* | Editorial | <table><tr><th>Composants de milieux de culture</th><th>Risque phytosanitaire[1]</th><th>Favorise la survie de l'organisme nuisible</th><th>Observations</th></tr><tr><td>Billes d'argile cuites</td><td>Faible</td><td>Non</td><td>Inerte</td></tr><tr><td>Argile pure</td><td>Faible</td><td>Non</td><td>s/o</td></tr><tr><td>Gravier, sable, limon</td><td>Faible</td><td>Non</td><td>Inerte</td></tr><tr><td>Milieu synthétique (par exemple, laine de verre, laine minérale, polystyrène, mousse florale, particules de plastique, polyéthylène, amidon stabilisé polymère,</td><td>Faible</td><td>Non</td><td>Inerte (mais les nématodes à galle des racines et les nématodes à kyste peuvent survivre dans de la laine</td></tr></table> | s/o: écrire en toutes lettres | Français | Gabon, Congo, DR* |

| Comm. no. | Para. no. | Comment type | Comment | | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|---|
| | | | polyuréthane, polymères hydrorétenteurs) | | | minérale) | | | |
| | | | Vermiculite, perlite, roche volcanique, zéolite, scories | Faible | Non | Inerte | | | |
| | | | Fibre de coco (tourbe de coco/coir) | Variable faible | Oui | Le risque dépend du degré de transformation (par exemple, des nématodes responsables de la maladie de l'anneau rouge ont été retrouvés dans l'enveloppe fibreuse de noix tombées) | | | |
| | | | Papier | Faible | Oui | Degré de transformation élevé | | | |
| | | | Sciure, planure de bois (fibre de bois) | Faible–moyen | Oui | La taille des particules et le degré de transformation font baisser la probabilité de survie des organismes nuisibles après transformation | | | |
| | | | Milieu de culture tissulaire (de type agar) | Faible | Oui | Stérilisé, notamment autoclavé, avant utilisation | | | |

| Comm. no. | Para. no. | Comment type | Comment | | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|---|
| | | | Eau | Faible | Oui | Le risque est fonction de la source ou du traitement | | | |
| | | | Copeaux de bois | Moyen | Oui | Le risque est fonction de la taille des particules et du degré de transformation | | | |
| | | | Liège | Variable faible | Oui | Le risque est fonction du degré de transformation | | | |
| | | | Tourbe | Variable faible | Oui | La tourbe est un habitat naturel des nématodes, qui se nourrissent principalement de bactéries et de champignons; le risque est plus faible lorsque l'origine n'a pas été exposée à l'agriculture (par exemple, tourbières certifiées) | | | |
| | | | Sphaigne | Variable élevé | Oui | Le risque est fonction du degré de transformation | | | |
| | | | Autre matériel végétal (par exemple, balles de riz/paillette, balles de céréales, parches, résidus de canne à sucre, marc de raisin, cabosses) | Variable élevé | Oui | Le risque est moins élevé si le substrat est traité ou s'il provient d'une source saine non infestée | | | |
| | | | Écorce | Élevé | Oui | Le risque est fonction de la | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td></td><td></td><td></td><td>source (potentiel d'abriter des ravageurs forestiers) et du degré de transformation ou de fermentation</td></tr>
<tr><td>Déchets biologiques</td><td>Élevé</td><td>Oui</td><td>Déchets d'origine végétale ou animale non transformés liés à des activités humaines</td></tr>
<tr><td>Compost</td><td>Élevé</td><td>Oui</td><td>Le risque est moins élevé si le compost est produit selon un processus approuvé; il est accru si sa provenance n'est pas connue</td></tr>
<tr><td>Humus</td><td>Élevé</td><td>Oui</td><td>Matière végétale décomposée</td></tr>
<tr><td>Terre</td><td>Élevé</td><td>Oui</td><td>Le risque peut être réduit avec un traitement</td></tr>
<tr><td>Plaques de fougère arborescente</td><td>Élevé</td><td>Oui</td><td>Abri potentiel de ravageurs forestiers</td></tr>
<tr><td>Vermicompost (fumier de vers de terre et vers de terre)</td><td>Élevé</td><td>Oui</td><td>Certains vers de terre non autochtones peuvent être vecteurs d'organismes nuisibles</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>465.</td><td>75</td><td>Substantive</td><td>
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support</th><th>Comments</th></tr>
</table>
</td><td>The lines should be reorganized by pest risk. The term "low" was deemed to imprecise in this context, and two extra grades of risk, "none" and</td><td>English</td><td>EPPO</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | <table><tr><td></td><td></td><td>**pest survival**</td><td></td></tr><tr><td>Baked clay pellets</td><td>none~~Low~~</td><td>No</td><td>Inert</td></tr><tr><td>Pure clay, gravel and sand</td><td>negligible~~Low~~</td><td>No</td><td>n/a</td></tr><tr><td>~~Gravel, sand, silt~~</td><td>~~Low~~</td><td>~~No~~</td><td>~~Inert~~</td></tr><tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers)</td><td>none~~Low~~</td><td>No</td><td>Inert ~~(but root knot and cyst nematodes can survive in rock wool)~~</td></tr><tr><td>Vermiculite, perlite, volcanic rock, zeolite, scoria</td><td>none~~Low~~</td><td>No</td><td>Inert</td></tr><tr><td>Coconut fibres (coir/coco peat)</td><td>Variable low</td><td>Yes</td><td>Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts)</td></tr><tr><td>Paper</td><td>Low</td><td>Yes</td><td>High level of processing</td></tr><tr><td>Sawdust, wood shavings (excelsior)</td><td>Lowâ€“Medium</td><td>Yes</td><td>Size of particles and level of processing reduces the probability of pest survival after processing</td></tr><tr><td>Tissue culture medium (agar-like)</td><td>Low</td><td>Yes</td><td>Autoclaved or otherwise sterilized before use</td></tr><tr><td>Water</td><td>Low</td><td>Yes</td><td>Risk depends on source or treatment</td></tr></table> | "negligible" were added for clarity, keeping in mind that this this table refers to growing media not previously used for planting and which have been handled and stored in a way that prevents contamination. | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| Wood chips | Medium | Yes | Risk depends on particle size and level of processing |
| Cork | Variable low | Yes | Risk depends on level of processing |
| Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) |
| Sphagnum moss | Variable high | Yes | Risk depends on level of processing |
| Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) | Variable high | Yes | Risk is reduced if treated or from a clean non-infested source |
| Bark | High | Yes | Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation |
| Bio waste | High | Yes | Unprocessed waste from plant or animal sources related to human activities |
| Compost | High | Yes | Risk reduced if produced by an approved process; risk increased if material is from an unknown source |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>Humus</td><td>High</td><td>Yes</td><td>Decomposed plant matter</td></tr>
<tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr>
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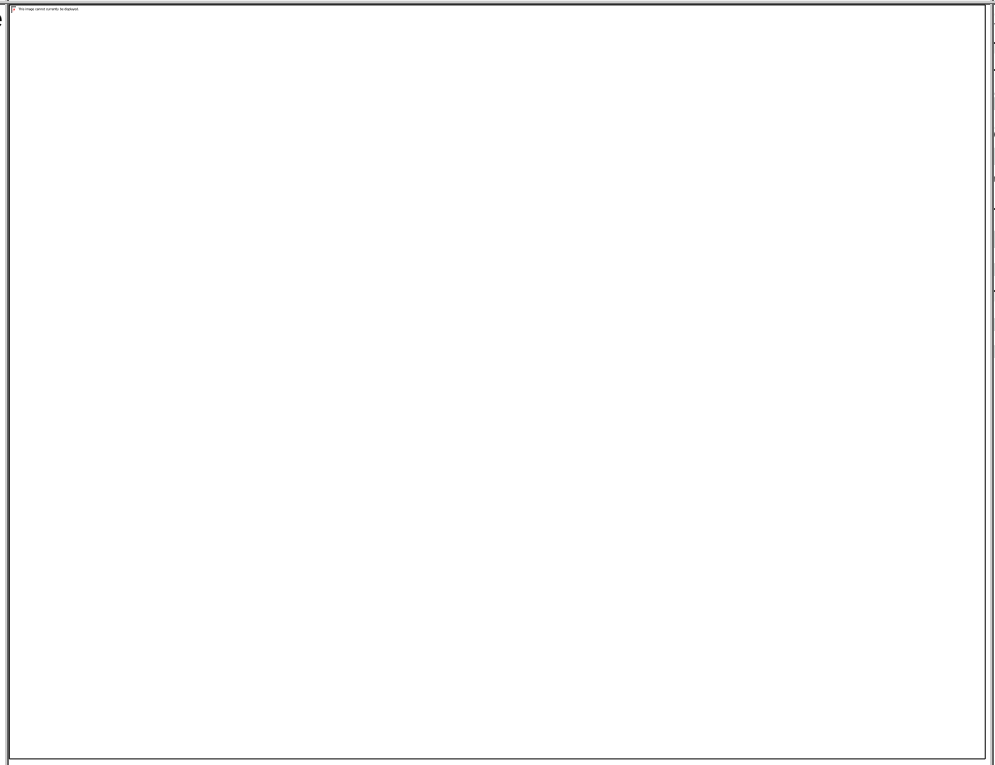
<tr><td>Baked clay pellets</td><td>~~Low~~</td><td>No</td><td>Inert</td></tr>
<tr><td>Pure clay</td><td>~~Low~~</td><td>No</td><td>n/a</td></tr>
<tr><td>Gravel, sand, silt</td><td>~~Low~~</td><td>No</td><td>Inert</td></tr>
<tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers)</td><td>~~Low~~</td><td>No</td><td>Inert (but root knot and cyst nematodes can survive in rock wool)</td></tr>
<tr><td>Vermiculite, perlite, volcanic rock, zeolite, scoria</td><td>~~Low~~</td><td>No</td><td>Inert</td></tr>
<tr><td>Coconut fibres (coir/coco peat)</td><td>~~Variable low~~</td><td>Yes</td><td>Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts)</td></tr>
<tr><td>Paper</td><td>~~Low~~</td><td>Yes</td><td>High level of processing</td></tr>
</table>
</td><td>Delete the second column, the level of pest risk should be assessed by the experts of each countries. The standard should not indicate the likelihood.</td><td>English</td><td>Thailand</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | Sawdust, wood shavings (excelsior) ~~Low–Medium~~ Yes Size of particles and level of processing reduces the probability of pest survival after processing<br>Tissue culture medium (agar-like) ~~Low~~ Yes Autoclaved or otherwise sterilized before use<br>Water ~~Low~~ Yes Risk depends on source or treatment<br>Wood chips ~~Medium~~ Yes Risk depends on particle size and level of processing<br>Cork ~~Variable low~~ Yes Risk depends on level of processing<br>Peat ~~Variable low~~ Yes Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs)<br>Sphagnum moss ~~Variable high~~ Yes Risk depends on level of processing<br>Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) ~~Variable high~~ Yes Risk is reduced if treated or from a clean non-infested source<br>Bark ~~High~~ Yes Risk depends on source (potential to harbour forest pests) and degree | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | <table><tr><td></td><td></td><td></td><td>of processing or fermentation</td></tr><tr><td>Bio waste</td><td>~~High~~</td><td>Yes</td><td>Unprocessed waste from plant or animal sources related to human activities</td></tr><tr><td>Compost</td><td>~~High~~</td><td>Yes</td><td>Risk reduced if produced by an approved process; risk increased if material is from an unknown source</td></tr><tr><td>Humus</td><td>~~High~~</td><td>Yes</td><td>Decomposed plant matter</td></tr><tr><td>Soil</td><td>~~High~~</td><td>Yes</td><td>Risk can be reduced if treated</td></tr><tr><td>Tree fern slabs</td><td>~~High~~</td><td>Yes</td><td>Potential to harbour forest pests</td></tr><tr><td>Vermicompost (vermicast plus earthworms)</td><td>~~High~~</td><td>Yes</td><td>Some non-native earthworms may be vectors of pests</td></tr></table> | | | |
| 467. | *75* | Substantive | <table><tr><th>Constituents of growing media</th><th>~~Pest risk~~ Probability of pest being present[1]</th><th>Support pest survival</th><th>Comments</th></tr><tr><td>Baked clay pellets</td><td>Low</td><td>~~No~~ Low</td><td>Inert</td></tr><tr><td>Pure clay</td><td>Low</td><td>~~No~~ Low</td><td>n/a</td></tr><tr><td>Gravel, sand, silt</td><td>Low</td><td>~~No~~ Low</td><td>Inert only if cleaned</td></tr><tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles,</td><td>Low</td><td>~~No~~ Low</td><td>Inert (but root knot and cyst nematodes can survive in rock wool)</td></tr></table> | The assessments of risk will be contentious. Given that this is a prescriptive part of the ISPM much more explantion needs to be provided about how the risk ratings were reached and the assumptions used. Specific example comments: Gravel, sand, silt: these are only inert and of a low risk if pure and mostly they are not 100% clean. Gravel is the easiest to clean due to structure and silt is really a type of soil. Pest risk column heading: column seems to be about the probability of pests being on or in the media not about risk (probability/potential for harm) as used in the IPPC. Risk column - The risk for these media are variable due to differences in processing, origin or treatment; indicating high or | English | Australia |

| Comm. no. | Para. no. | Comment type | Comment | | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|---|
| | | | polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers) | | | | low when the risk is variable is confusing. For example with variable high, is the risk high before or after processing? Or is it low after processing? It is not clear. sawdust - Processing of wood may reduce the pest risk of some timber pests, but it can also change the pest risk as it allows for the establishment a different ecosystem with a different set of fauna. For example, shaving/chipping increases the surface area available for fungi to sporalate and increased humidity allowing infestion/survival of other pests. In addition, pathogenic fungi and nematodes can remain in sawdust after production. entries 1-5: Many organisms would be capable of surving on/in these materials. They are not necessarily inert – indeed many of these substances provide protected surfaces/structures that will promote survival of organisms. Water: water is often contaminated with pests depending on its source and treatment woodchip - Processing of wood may reduce the pest risk of some timber pests, but it can alsochange the pest risk as it allows for the establishment a different ecosystem with a different set of fauna. For example, shaving/chipping increases the surface area available for fungi to sporalate and increased humidity allowing infestion/survival of other pests. Peat - Given the way the material is produced and harvested weed seeds are common. Should also define peat, ie sphagnum or sedge derived as different pest risk profiles for each commodity. tolerances for an non peat material should also be included as some commercial products may include soil scalpings depending on how the peat was harvested. Sphagnum moss - should specify whether the moss is living or dead, as living moss routinuing includes weed seeds and other biological risk material. Should there be a requirement for the sphagnum moss to be sterilised to ensure freedom of biologicval risk material. Sphagnum | | |
| | | | Vermiculite, perlite, volcanic rock, zeolite, scoria | Low | No Low | Inert | | | |
| | | | Coconut fibres (coir/coco peat) | Variable ~~low~~ | Yes | Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts) | | | |
| | | | Paper | Low | Yes | High level of processing | | | |
| | | | Sawdust, wood shavings (excelsior) | ~~Low - Medium~~variable | Yes | Size of particles and level of processing may reduce~~s~~ the probability of pest survival ~~after processing~~, however wood shavings can change te enironment to promote pest infestation | | | |
| | | | Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use | | | |
| | | | Water | Variable~~Low~~ | Yes | Risk depends on source or treatment | | | |
| | | | Wood chips | Variable~~Medium~~ | Yes | ~~Risk depends on particle size and level of processing~~Size of particles and the level of processing may reduce the probability of pest survival, however wood chipping can change the environment to promote pest infestation. | | | |
| | | | Cork | Variable ~~low~~ | Yes | Risk depends on level of processing | | | |
| | | | Peat | Variable ~~low~~ | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs). Weed seeds common. | | | |
| | | | Sphagnum moss | Variable ~~high~~ | Yes | Risk depends on level of processing , with weed seeds common | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) — Variable ~~high~~ — Yes — Risk is reduced if treated or from a clean non-infested source<br>Bark — High — Yes — Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation<br>Bio waste — High — Yes — Unprocessed waste from plant or animal sources related to human activities<br>Compost — High — Yes — Risk reduced if produced by an approved process; risk increased if material is from an unknown source<br>Humus — High — Yes — Decomposed plant matter<br>Soil — High — Yes — Risk can be reduced if treated<br>Tree fern slabs — High — Yes — Potential to harbour ~~forest~~ pests<br>Vermicompost (vermicast plus earthworms) — High — Yes — Some non-native earthworms may be vectors of pests | moss: Given the way the material is produced and harvested weed seeds are common Tree fern slabs: Many broad host range pests (not just forest) could be present depending on the production area etc Bio waste: risk would be highly variable depending on source | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td>468.</td><td>75</td><td>Substantive</td><td> 
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support pest survival</th><th>Comments</th></tr>
<tr><td>Baked clay pellets</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Pure clay</td><td>Low</td><td>No</td><td>n/a</td></tr>
<tr><td>Gravel, sand, silt</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch,</td><td>Low</td><td>No</td><td>Inert (but root knot and cyst nematodes can survive in rock wool)</td></tr>
</table></td><td>Suggest changing the column header "Pest risk" to "Relative phytosanitary risk". Suggest adding footnote to this column header "This is an indicative list because the PRA will determine the actual risk level." Suggest changing the column header "Constituents of growing media" to "Components of growing media" Suggest adding footnote to column 1 header "Not an exhaustive list" Clay, sand, and silt are not inert. They merely have a lower cation exchange capacity than organic material. Vermiculite and perlite are not inert either, but the heat of production renders them virtually sterile.</td><td>English</td><td>United States of America</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|---|
| | | | polyurethane, water absorbing polymers) | | | | | | |
| | | | Vermiculite, perlite, volcanic rock, zeolite, scoria | Low | No | Inert | | | |
| | | | Coconut fibres (coir/coco peat) | Variable low | Yes | Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts) | | | |
| | | | Paper | Low | Yes | High level of processing | | | |
| | | | Sawdust, wood shavings (excelsior) | Low Medium | Yes | Size of particles and level of processing reduces the probability of pest survival after processing | | | |
| | | | Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use | | | |
| | | | Water | Low | Yes | Risk depends on source or treatment | | | |
| | | | Wood chips | Medium | Yes | Risk depends on particle size and level of processing | | | |
| | | | Cork | Variable low | Yes | Risk depends on level of processing | | | |
| | | | Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) | | | |
| | | | Sphagnum moss | Variable high | Yes | Risk depends on level of processing | | | |
| | | | Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, | Variable | Yes | Risk is reduced if treated or from a clean non-infested | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>sugarcane refuse, grape marc, cocoa pods)</td><td>high</td><td></td><td>source</td></tr>
<tr><td>Bark</td><td>High</td><td>Yes</td><td>Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation</td></tr>
<tr><td>Bio waste</td><td>High</td><td>Yes</td><td>Unprocessed waste from plant or animal sources related to human activities</td></tr>
<tr><td>Compost</td><td>High</td><td>Yes</td><td>Risk reduced if produced by an approved process; risk increased if material is from an unknown source</td></tr>
<tr><td>Humus</td><td>High</td><td>Yes</td><td>Decomposed plant matter</td></tr>
<tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr>
<tr><td>Tree fern slabs</td><td>High</td><td>Yes</td><td>Potential to harbour forest pests</td></tr>
<tr><td>Vermicompost (vermicast plus earthworms)</td><td>High</td><td>Yes</td><td>Some non-native earthworms may be vectors of pests</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>469.</td><td>75</td><td>Substantive</td><td>
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support pest survival</th><th>Comments</th></tr>
<tr><td>Baked clay pellets</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Pure clay</td><td>Low</td><td>No</td><td>n/a</td></tr>
<tr><td>Gravel, sand, silt</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers)</td><td>Low</td><td>No</td><td>Inert (but root knot and cyst nematodes can survive in rock wool)</td></tr>
</table>
</td><td>Replace "Sphagnum" as other mosses may be used as growing media and replace by the term “non-viable moss to avoid confusion as a viable moss would be considered a plant. Biowaste: Remove the text that defines bio waste in the fourth column of the table as a definition is not needed in this table and insert new text describing the risk of bio waste. Delete the row related to Humus as this would be classified under compost and should therefore not have its own line in this table. Delete the reference to vermicast plus earthworms in the first column as Vermicompost does not generally include the actual worms. Delete the text related to natine earthworms and add new text in the Comments column to clarify what vermicompost may</td><td>English</td><td>Canada</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|---|
| | | | Vermiculite, perlite, volcanic rock, zeolite, scoria | Low | No | Inert | contain. | | |
| | | | Coconut fibres (coir/coco peat) | Variable low | Yes | Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts) | | | |
| | | | Paper | Low | Yes | High level of processing | | | |
| | | | Sawdust, wood shavings (excelsior) | Low–Medium | Yes | Size of particles and level of processing reduces the probability of pest survival after processing | | | |
| | | | Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use | | | |
| | | | Water | Low | Yes | Risk depends on source or treatment | | | |
| | | | Wood chips | Medium | Yes | Risk depends on particle size and level of processing | | | |
| | | | Cork | Variable low | Yes | Risk depends on level of processing | | | |
| | | | Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) | | | |
| | | | ~~Sphagnum moss~~ Non-viable moss | Variable high | Yes | Risk depends on level of processing | | | |
| | | | Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa | Variable high | Yes | Risk is reduced if treated or from a clean non-infested source | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>pods)</td><td></td><td></td><td></td></tr>
<tr><td>Bark</td><td>High</td><td>Yes</td><td>Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation</td></tr>
<tr><td>Bio waste</td><td>High</td><td>Yes</td><td>~~Unprocessed waste from plant or animal sources related to human activities~~ Risk depends on source and processing of material.</td></tr>
<tr><td>Compost</td><td>High</td><td>Yes</td><td>Risk reduced if produced by an approved process; risk increased if material is from an unknown source</td></tr>
<tr><td>~~Humus~~</td><td>~~High~~</td><td>~~Yes~~</td><td>~~Decomposed plant matter~~</td></tr>
<tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr>
<tr><td>Tree fern slabs</td><td>High</td><td>Yes</td><td>Potential to harbour forest pests</td></tr>
<tr><td>Vermicompost ~~(vermicast plus earthworms)~~</td><td>High</td><td>Yes</td><td>~~Some non-native earthworms may be vectors of pests~~ May include remains of undigested organic material</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>470.</td><td>75</td><td>Substantive</td><td>
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support pest survival</th><th>Comments</th></tr>
<tr><td>Baked clay pellets</td><td>none~~Low~~</td><td>No</td><td>Inert</td></tr>
<tr><td>Pure clay, gravel and sand</td><td>negligible~~Low~~</td><td>No</td><td>n/a</td></tr>
<tr><td>~~Gravel, sand, silt~~</td><td>~~Low~~</td><td>~~No~~</td><td>~~Inert~~</td></tr>
<tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene,</td><td>none~~Low~~</td><td>No</td><td>Inert ~~(but root knot and cyst nematodes can survive in rock wool)~~</td></tr>
</table>
</td><td>The lines should be reorganized by pest risk. The term "low" was deemed to imprecise in this context, and two extra grades of risk, "none" and "negligible" were added for clarity, keeping in mind that this this table refers to growing media not previously used for planting and which have been handled and stored in a way that prevents contamination.</td><td>English</td><td>European Union</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | polymer stabilized starch, polyurethane, water absorbing polymers) | | | |
| | | | Vermiculite, perlite, volcanic rock, zeolite, scoria | none~~Low~~ | No | Inert |
| | | | Coconut fibres (coir/coco peat) | Variable low | Yes | Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts) |
| | | | Paper | Low | Yes | High level of processing |
| | | | Sawdust, wood shavings (excelsior) | Lowâ€“Medium | Yes | Size of particles and level of processing reduces the probability of pest survival after processing |
| | | | Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use |
| | | | Water | Low | Yes | Risk depends on source or treatment |
| | | | Wood chips | Medium | Yes | Risk depends on particle size and level of processing |
| | | | Cork | Variable low | Yes | Risk depends on level of processing |
| | | | Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) |
| | | | Sphagnum moss | Variable high | Yes | Risk depends on level of processing |
| | | | Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa | Variable high | Yes | Risk is reduced if treated or from a clean non-infested source |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>pods)</td><td></td><td></td><td></td></tr>
<tr><td>Bark</td><td>High</td><td>Yes</td><td>Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation</td></tr>
<tr><td>Bio waste</td><td>High</td><td>Yes</td><td>Unprocessed waste from plant or animal sources related to human activities</td></tr>
<tr><td>Compost</td><td>High</td><td>Yes</td><td>Risk reduced if produced by an approved process; risk increased if material is from an unknown source</td></tr>
<tr><td>Humus</td><td>High</td><td>Yes</td><td>Decomposed plant matter</td></tr>
<tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr>
<tr><td>Tree fern slabs</td><td>High</td><td>Yes</td><td>Potential to harbour forest pests</td></tr>
<tr><td>Vermicompost (vermicast plus earthworms)</td><td>High</td><td>Yes</td><td>Some non-native earthworms may be vectors of pests</td></tr>
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</td><td></td><td></td><td></td></tr>
<tr><td>471.</td><td>75</td><td>Substantive</td><td>
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support pest survival</th><th>Comments</th></tr>
<tr><td>Baked clay pellets</td><td>none~~Low~~</td><td>No</td><td>Inert</td></tr>
<tr><td>Pure clay, gravel and sand</td><td>negligible~~Low~~</td><td>No</td><td>n/a</td></tr>
<tr><td>~~Gravel, sand, silt~~</td><td>~~Low~~</td><td>~~No~~</td><td>~~Inert~~</td></tr>
<tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers)</td><td>none~~Low~~</td><td>No</td><td>Inert ~~(but root knot and cyst nematodes can survive in rock wool)~~</td></tr>
<tr><td>Vermiculite, perlite, volcanic rock, zeolite, scoria</td><td>none~~Low~~</td><td>No</td><td>Inert</td></tr>
<tr><td>Coconut fibres (coir/coco peat)</td><td>Variable low</td><td>Yes</td><td>Risk depends on level of processing (e.g. red ring</td></tr>
</table>
</td><td>The lines should be reorganized by pest risk. The term "low" was deemed to imprecise in this context, and two extra grades of risk, "none" and "negligible" were added for clarity, keeping in mind that this this table refers to growing media not previously used for planting and which have been handled and stored in a way that prevents contamination. Risk of sphagnum moss is similar to peat</td><td>English</td><td>Norway</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | |

| | | | |
|---|---|---|---|
| | | | nematode has been found in the husks of fallen nuts) |
| Paper | Low | Yes | High level of processing |
| Sawdust, wood shavings (excelsior) | Lowâ€“Medium | Yes | Size of particles and level of processing reduces the probability of pest survival after processing |
| Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use |
| Water | Low | Yes | Risk depends on source or treatment |
| Wood chips | Medium | Yes | Risk depends on particle size and level of processing |
| Cork | Variable low | Yes | Risk depends on level of processing |
| Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) |
| Sphagnum moss | Variable low~~high~~ | Yes | Risk depends on level of processing |
| Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) | Variable high | Yes | Risk is reduced if treated or from a clean non-infested source |
| Bark | High | Yes | Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation |
| Bio waste | High | Yes | Unprocessed waste from plant or animal sources related to human |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td></td><td></td><td></td><td>activities</td></tr>
<tr><td>Compost</td><td>High</td><td>Yes</td><td>Risk reduced if produced by an approved process; risk increased if material is from an unknown source</td></tr>
<tr><td>Humus</td><td>High</td><td>Yes</td><td>Decomposed plant matter</td></tr>
<tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr>
<tr><td>Tree fern slabs</td><td>High</td><td>Yes</td><td>Potential to harbour forest pests</td></tr>
<tr><td>Vermicompost (vermicast plus earthworms)</td><td>High</td><td>Yes</td><td>Some non-native earthworms may be vectors of pests</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>472.</td><td>75</td><td>Technical</td><td>
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support pest survival</th><th>Comments</th></tr>
<tr><td>Baked clay pellets</td><td>Low</td><td>No</td><td>Inert (?)</td></tr>
<tr><td>Pure clay</td><td>Medium~~Low~~</td><td>No</td><td>n/a ? Depends on the horizon</td></tr>
<tr><td>~~Gravel, sand~~, silt</td><td>Medium~~Low~~</td><td>No</td><td>Depends on the horizon~~Inert~~</td></tr>
<tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers)</td><td>Low</td><td>No</td><td>Inert (but root knot and cyst nematodes can survive in rock wool)</td></tr>
<tr><td>Vermiculite, perlite, volcanic rock, zeolite, scoria</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Coconut fibres (coir/coco peat)</td><td>Variable low ?</td><td>Yes</td><td>Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts)</td></tr>
<tr><td>Paper</td><td>Low</td><td>Yes</td><td>High level of processing</td></tr>
<tr><td>Sawdust, wood shavings (excelsior)</td><td>Low–Medium</td><td>Yes</td><td>Size of particles and level of processing reduces the</td></tr>
</table>
</td><td>~~EWG RU~~ : The comment "not applicable" in the collumn "comments" of the line "pure clay" does not make sense and needs to be precised. The words "variable low" and "variable high" call for precision. The word "inert" would gain from having a definition.</td><td>English</td><td>EPPO</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | |

| | | | | |
|---|---|---|---|---|
| | | | probability of pest survival after processing | |
| Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use | |
| Water | Low | Yes | Risk depends on source or treatment | |
| Wood chips | Medium | Yes | Risk depends on particle size and level of processing | |
| Cork | Variable low (?) | Yes | Risk depends on level of processing | |
| Peat | Variable low (?) | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) | |
| Sphagnum moss | Variable high (?) | Yes | Risk depends on level of processing | |
| Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) | Variable high (?) | Yes | Risk is reduced if treated or from a clean non-infested source | |
| Bark | High | Yes | Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation | |
| Bio waste | High | Yes | Unprocessed waste from plant or animal sources related to human activities | |
| Compost | High | Yes | Risk reduced if produced by an approved process; risk increased if material is from an unknown source | |
| Humus | High | Yes | Decomposed plant matter | |
| Soil | High | Yes | Risk can be reduced if treated | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
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<tr><td>Vermicompost (vermicast plus earthworms)</td><td>High</td><td>Yes</td><td>Some non-native earthworms may be vectors of pests</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>473.</td><td>75</td><td>Technical</td><td>
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support pest survival</th><th>Comments</th></tr>
<tr><td>Baked clay pellets</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Pure clay</td><td>Low</td><td>No</td><td>n/a</td></tr>
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<tr><td>Tissue culture medium (agar-like)</td><td>Low</td><td>Yes</td><td>Autoclaved or otherwise sterilized before use</td></tr>
<tr><td>Water</td><td>Low</td><td>Yes</td><td>Risk depends on source or treatment</td></tr>
<tr><td>Wood chips</td><td>Medium</td><td>Yes</td><td>Risk depends on particle size</td></tr>
</table>
</td><td>Compost Row: What is relevant is how the growing medium was produced and not its approval Vermicompost Row: to clarify, they may or not be non native.</td><td>English</td><td>Uruguay</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | <table><tr><td></td><td></td><td></td><td>and level of processing</td></tr><tr><td>Cork</td><td>Variable low</td><td>Yes</td><td>Risk depends on level of processing</td></tr><tr><td>Peat</td><td>Variable low</td><td>Yes</td><td>Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs)</td></tr><tr><td>Sphagnum moss</td><td>Variable high</td><td>Yes</td><td>Risk depends on level of processing</td></tr><tr><td>Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods)</td><td>Variable high</td><td>Yes</td><td>Risk is reduced if treated or from a clean non-infested source</td></tr><tr><td>Bark</td><td>High</td><td>Yes</td><td>Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation</td></tr><tr><td>Bio waste</td><td>High</td><td>Yes</td><td>Unprocessed waste from plant or animal sources related to human activities</td></tr><tr><td>Compost</td><td>High</td><td>Yes</td><td>Risk can be reduced depending on~~if produced by an approved~~ the production process ; ~~risk increased if material is from an unknown source~~</td></tr><tr><td>~~H~~umus</td><td>High</td><td>Yes</td><td>Decomposed plant matter</td></tr><tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr><tr><td>Tree fern slabs</td><td>High</td><td>Yes</td><td>Potential to harbour forest pests</td></tr><tr><td>Vermicompost (vermicast plus earthworms)</td><td>High</td><td>Yes</td><td>Some ~~non-native~~ earthworms may be vectors of pests</td></tr></table> | | | |
| 474. | *75* | Technical | <table><tr><td>**Constituents of growing media**</td><td>**Pest risk**[1]</td><td>**Support pest**</td><td>**Comments**</td></tr></table> | Compost Row: What is relevant is how the growing medium was produced and not its approval Vermicompost Row: to clarify, they may | English | COSAVE, Paraguay, Chile, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | or not be non native. | | Argentina, Peru, Brazil |

| | | survival | |
|---|---|---|---|
| Baked clay pellets | Low | No | Inert |
| Pure clay | Low | No | n/a |
| Gravel, sand, silt | Low | No | Inert |
| Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers) | Low | No | Inert (but root knot and cyst nematodes can survive in rock wool) |
| Vermiculite, perlite, volcanic rock, zeolite, scoria | Low | No | Inert |
| Coconut fibres (coir/coco peat) | Variable low | Yes | Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts) |
| Paper | Low | Yes | High level of processing |
| Sawdust, wood shavings (excelsior) | Low–Medium | Yes | Size of particles and level of processing reduces the probability of pest survival after processing |
| Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use |
| Water | Low | Yes | Risk depends on source or treatment |
| Wood chips | Medium | Yes | Risk depends on particle size and level of processing |
| Cork | Variable low | Yes | Risk depends on level of processing |
| Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | |

| | | | |
|---|---|---|---|
| | | | the origin has had no agricultural exposure (e.g. certified bogs) |
| Sphagnum moss | Variable high | Yes | Risk depends on level of processing |
| Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) | Variable high | Yes | Risk is reduced if treated or from a clean non-infested source |
| Bark | High | Yes | Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation |
| Bio waste | High | Yes | Unprocessed waste from plant or animal sources related to human activities |
| Compost | High | Yes | Risk can be reduced depending on ~~if produced by an approved~~ the production process ; ~~risk increased if material is from an unknown source~~ |
| ~~H~~umus | High | Yes | Decomposed plant matter |
| Soil | High | Yes | Risk can be reduced if treated |
| Tree fern slabs | High | Yes | Potential to harbour forest pests |
| Vermicompost (vermicast plus earthworms) | High | Yes | Some ~~non-native~~ earthworms may be vectors of pests |

| | | | |
|---|---|---|---|
| 475. | *75* | Technical | |

| **Constituents of growing media** | **Pest risk**[1] | **Support pest survival** | **Comments** |
|---|---|---|---|
| Baked clay pellets | Low | No | Inert |
| Pure clay | Low | No | n/a |

| | | | |
|---|---|---|---|
| ~~From the experience in the region organisms~~ such as nematodes, fungi, molluscs and bacteria have been found in sand, gravel and silt . | English | Suriname, Jamaica, Trinidad and Tobago, Barbados |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | <table><tr><td>Gravel, sand, silt</td><td>medium~~Low~~</td><td>yes~~No~~</td><td>Inert</td></tr><tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers)</td><td>Low</td><td>No</td><td>Inert (but root knot and cyst nematodes can survive in rock wool)</td></tr><tr><td>Vermiculite, perlite, volcanic rock, zeolite, scoria</td><td>Low</td><td>No</td><td>Inert</td></tr><tr><td>Coconut fibres (coir/coco peat)</td><td>Variable low</td><td>Yes</td><td>Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts)</td></tr><tr><td>Paper</td><td>Low</td><td>Yes</td><td>High level of processing</td></tr><tr><td>Sawdust, wood shavings (excelsior)</td><td>Low–Medium</td><td>Yes</td><td>Size of particles and level of processing reduces the probability of pest survival after processing</td></tr><tr><td>Tissue culture medium (agar-like)</td><td>Low</td><td>Yes</td><td>Autoclaved or otherwise sterilized before use</td></tr><tr><td>Water</td><td>Low</td><td>Yes</td><td>Risk depends on source or treatment</td></tr><tr><td>Wood chips</td><td>Medium</td><td>Yes</td><td>Risk depends on particle size and level of processing</td></tr><tr><td>Cork</td><td>Variable low</td><td>Yes</td><td>Risk depends on level of processing</td></tr><tr><td>Peat</td><td>Variable low</td><td>Yes</td><td>Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs)</td></tr><tr><td>Sphagnum moss</td><td>Variable high</td><td>Yes</td><td>Risk depends on level of processing</td></tr></table> | | | |

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<table>
<tr><td>Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods)</td><td>Variable high</td><td>Yes</td><td>Risk is reduced if treated or from a clean non-infested source</td></tr>
<tr><td>Bark</td><td>High</td><td>Yes</td><td>Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation</td></tr>
<tr><td>Bio waste</td><td>High</td><td>Yes</td><td>Unprocessed waste from plant or animal sources related to human activities</td></tr>
<tr><td>Compost</td><td>High</td><td>Yes</td><td>Risk reduced if produced by an approved process; risk increased if material is from an unknown source</td></tr>
<tr><td>Humus</td><td>High</td><td>Yes</td><td>Decomposed plant matter</td></tr>
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</table>
</td><td>Compost Row: What is relevant is how the growing medium was produced and not its approval Vermicompost Row: to clarify, they may or not be non native.</td><td>English</td><td>Ecuador, OIRSA, Belize, Costa Rica</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|---|
| | | | Vermiculite, perlite, volcanic rock, zeolite, scoria | Low | No | Inert | | | |
| | | | Coconut fibres (coir/coco peat) | Variable low | Yes | Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts) | | | |
| | | | Paper | Low | Yes | High level of processing | | | |
| | | | Sawdust, wood shavings (excelsior) | Low–Medium | Yes | Size of particles and level of processing reduces the probability of pest survival after processing | | | |
| | | | Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use | | | |
| | | | Water | Low | Yes | Risk depends on source or treatment | | | |
| | | | Wood chips | Medium | Yes | Risk depends on particle size and level of processing | | | |
| | | | Cork | Variable low | Yes | Risk depends on level of processing | | | |
| | | | Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) | | | |
| | | | Sphagnum moss | Variable high | Yes | Risk depends on level of processing | | | |
| | | | Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) | Variable high | Yes | Risk is reduced if treated or from a clean non-infested source | | | |
| | | | Bark | High | Yes | Risk depends on source (potential to harbour forest pests) and degree of processing | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
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<table>
<tr><td></td><td></td><td></td><td>or fermentation</td></tr>
<tr><td>Bio waste</td><td>High</td><td>Yes</td><td>Unprocessed waste from plant or animal sources related to human activities</td></tr>
<tr><td>Compost</td><td>High</td><td>Yes</td><td>Risk can be reduced depending on ~~if produced by an approved~~ the production process ; ~~risk increased if material is from an unknown source~~</td></tr>
<tr><td>~~H~~umus</td><td>High</td><td>Yes</td><td>Decomposed plant matter</td></tr>
<tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr>
<tr><td>Tree fern slabs</td><td>High</td><td>Yes</td><td>Potential to harbour forest pests</td></tr>
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</table>
</td><td>~~From the~~ experience in the Caribbean region, organisms such as nematodes, fungi, molluscs and bacteria have been found in sand, gravel and silt .</td><td>English</td><td>Saint Kitts And Nevis</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| | | | husks of fallen nuts) | |
| Paper | Low | Yes | High level of processing | |
| Sawdust, wood shavings (excelsior) | Low–Medium | Yes | Size of particles and level of processing reduces the probability of pest survival after processing | |
| Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use | |
| Water | Low | Yes | Risk depends on source or treatment | |
| Wood chips | Medium | Yes | Risk depends on particle size and level of processing | |
| Cork | Variable low | Yes | Risk depends on level of processing | |
| Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) | |
| Sphagnum moss | Variable high | Yes | Risk depends on level of processing | |
| Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) | Variable high | Yes | Risk is reduced if treated or from a clean non-infested source | |
| Bark | High | Yes | Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation | |
| Bio waste | High | Yes | Unprocessed waste from plant or animal sources related to human activities | |

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<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
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<tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr>
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<tr><td>Vermicompost (vermicast plus earthworms)</td><td>High</td><td>Yes</td><td>Some non-native earthworms may be vectors of pests</td></tr>
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</table>

| Comm. no. | Para. no. | Comment type | Comment | | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | probability of pest survival after processing | | | |
| | | | Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use | | | |
| | | | Water | Low | Yes | Risk depends on source or treatment | | | |
| | | | Wood chips | Medium | Yes | Risk depends on particle size and level of processing | | | |
| | | | Cork | Variable low | Yes | Risk depends on level of processing | | | |
| | | | Peat | Variable low | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs) | | | |
| | | | Sphagnum moss | Variable high | Yes | Risk depends on level of processing | | | |
| | | | Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) | Variable high | Yes | Risk is reduced if treated or from a clean non-infested source | | | |
| | | | Bark | High | Yes | Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation | | | |
| | | | Bio waste | High | Yes | Unprocessed waste from plant or animal sources related to human activities | | | |
| | | | Compost | High | Yes | Risk reduced if produced by an approved process; risk increased if material is from an unknown source | | | |
| | | | Humus | High | Yes | Decomposed plant matter | | | |
| | | | Soil | High | Yes | Risk can be reduced if treated | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
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<tr><td>479.</td><td>75</td><td>Technical</td><td>
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support pest survival</th><th>Comments</th></tr>
<tr><td>Baked clay pellets</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Pure clay</td><td>Low</td><td>No</td><td><s>n/a</s> Inert</td></tr>
<tr><td>Gravel, sand, silt</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers)</td><td>Low</td><td>No</td><td>Inert (but root knot and cyst nematodes can survive in rock wool)</td></tr>
<tr><td>Vermiculite, perlite, volcanic rock, zeolite, scoria</td><td>Low</td><td>No</td><td>Inert</td></tr>
<tr><td>Coconut fibres (coir/<s>coco peat</s>)</td><td>Variable low</td><td>Yes</td><td>Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts)</td></tr>
<tr><td>Paper</td><td>Low</td><td>Yes</td><td>High level of processing</td></tr>
<tr><td>Sawdust, wood shavings (excelsior)</td><td>Low–Medium</td><td>Yes</td><td>Size of particles and level of processing reduces the probability of pest survival after processing</td></tr>
<tr><td>Tissue culture medium (agar-like)</td><td>Low</td><td>Yes</td><td>Autoclaved or otherwise sterilized before use</td></tr>
<tr><td>Water</td><td>Low</td><td>Yes</td><td>Risk depends on source or treatment</td></tr>
</table>
</td><td>The table would have better flow if the constituents were listed according to risk ranking (from low to high). Remove n/a and replace by inert in the Comments column for Pure clay to better describe this specific constituant of growing media. The term coco peat should be avoided and therefore deleted from column 1 when referring to coconut fibres because it causes confusion as could be considered a mix of coir and peat). Only the term “coir” should be kept for Coconut fibres. Add wording beside peat (first column) for clarity and delete the first portion of the text related to peat under the fourth column as this is not needed and not always the case.</td><td>English</td><td>Canada</td></tr>
</table>

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>Wood chips</td><td>Medium</td><td>Yes</td><td>Risk depends on particle size and level of processing</td></tr>
<tr><td>Cork</td><td>Variable low</td><td>Yes</td><td>Risk depends on level of processing</td></tr>
<tr><td>Peat (excluding peat soil)</td><td>Variable low</td><td>Yes</td><td>~~Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters~~; risk is lower where the origin has had no agricultural exposure (e.g. certified bogs)</td></tr>
<tr><td>Sphagnum moss</td><td>Variable high</td><td>Yes</td><td>Risk depends on level of processing</td></tr>
<tr><td>Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods)</td><td>Variable high</td><td>Yes</td><td>Risk is reduced if treated or from a clean non-infested source</td></tr>
<tr><td>Bark</td><td>High</td><td>Yes</td><td>Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation</td></tr>
<tr><td>Bio waste</td><td>High</td><td>Yes</td><td>Unprocessed waste from plant or animal sources related to human activities</td></tr>
<tr><td>Compost</td><td>High</td><td>Yes</td><td>Risk reduced if produced by an approved process; risk increased if material is from an unknown source</td></tr>
<tr><td>Humus</td><td>High</td><td>Yes</td><td>Decomposed plant matter</td></tr>
<tr><td>Soil</td><td>High</td><td>Yes</td><td>Risk can be reduced if treated</td></tr>
<tr><td>Tree fern slabs</td><td>High</td><td>Yes</td><td>Potential to harbour forest pests</td></tr>
<tr><td>Vermicompost (vermicast plus earthworms)</td><td>High</td><td>Yes</td><td>Some non-native earthworms may be vectors of pests</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>480.</td><td>75</td><td>Technical</td><td>
<table>
<tr><th>Constituents of growing media</th><th>Pest risk[1]</th><th>Support pest survival</th><th>Comments</th></tr>
</table>
</td><td>The comment "not applicable" in the collumn "comments" of the line "pure clay" does not make sense and needs to be precised. The words "variable low" and "variable high" call for</td><td>English</td><td>European Union</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|---|
| | | | Baked clay pellets | Low | No | Inert (?) | precision. The word "inert" would gain from having a definition. | | |
| | | | Pure clay | Low | No | n/a ? | | | |
| | | | Gravel, sand, silt | Low | No | Inert (?) | | | |
| | | | Synthetic media (e.g. glass wool, rock wool, polystyrene, floral foam, plastic particles, polyethylene, polymer stabilized starch, polyurethane, water absorbing polymers) | Low | No | Inert (but root knot and cyst nematodes can survive in rock wool) | | | |
| | | | Vermiculite, perlite, volcanic rock, zeolite, scoria | Low | No | Inert | | | |
| | | | Coconut fibres (coir/coco peat) | Variable low (?) | Yes | Risk depends on level of processing (e.g. red ring nematode has been found in the husks of fallen nuts) | | | |
| | | | Paper | Low | Yes | High level of processing | | | |
| | | | Sawdust, wood shavings (excelsior) | Low–Medium | Yes | Size of particles and level of processing reduces the probability of pest survival after processing | | | |
| | | | Tissue culture medium (agar-like) | Low | Yes | Autoclaved or otherwise sterilized before use | | | |
| | | | Water | Low | Yes | Risk depends on source or treatment | | | |
| | | | Wood chips | Medium | Yes | Risk depends on particle size and level of processing | | | |
| | | | Cork | Variable low (?) | Yes | Risk depends on level of processing | | | |
| | | | Peat | Variable low (?) | Yes | Peat is a natural habitat for nematodes, mostly bacterial and fungal eaters; risk is lower where | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | |

| | | | |
|---|---|---|---|
| | | | the origin has had no agricultural exposure (e.g. certified bogs) |
| Sphagnum moss | Variable high (?) | Yes | Risk depends on level of processing |
| Other plant material (e.g. rice hulls/chaff, grain hulls, coffee hulls, sugarcane refuse, grape marc, cocoa pods) | Variable high (?) | Yes | Risk is reduced if treated or from a clean non-infested source |
| Bark | High | Yes | Risk depends on source (potential to harbour forest pests) and degree of processing or fermentation |
| Bio waste | High | Yes | Unprocessed waste from plant or animal sources related to human activities |
| Compost | High | Yes | Risk reduced if produced by an approved process; risk increased if material is from an unknown source |
| Humus | High | Yes | Decomposed plant matter |
| Soil | High | Yes | Risk can be reduced if treated |
| Tree fern slabs | High | Yes | Potential to harbour forest pests |
| Vermicompost (vermicast plus earthworms) | High | Yes | Some non-native earthworms may be vectors of pests |

| | | | | | | |
|---|---|---|---|---|---|---|
| 481. | *75* | Technical | **Composants de milieux de culture** | **Risque phytosanitaire**[1] **Favorise la survie de l'organisme nuisible** **Observations** | Pour plus d'interprétation | Français | Burundi |

| | | | |
|---|---|---|---|
| Billes d'argile cuites | Faible | Non | Inerte |
| Argile pure | Faible | Non | L'écrire en toutes lettres ~~s/o~~ |
| Gravier, sable, limon | Faible | Non | Inerte |

| Comm. no. | Para. no. | Comment type | Comment | | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|---|
| | | | Milieu synthétique (par exemple, laine de verre, laine minérale, polystyrène, mousse florale, particules de plastique, polyéthylène, amidon stabilisé polymère, polyuréthane, polymères hydrorétenteurs) | Faible | Non | Inerte (mais les nématodes à galle des racines et les nématodes à kyste peuvent survivre dans de la laine minérale) | | | |
| | | | Vermiculite, perlite, roche volcanique, zéolite, scories | Faible | Non | Inerte | | | |
| | | | Fibre de coco (tourbe de coco/coir) | Variable faible | Oui | Le risque dépend du degré de transformation (par exemple, des nématodes responsables de la maladie de l'anneau rouge ont été retrouvés dans l'enveloppe fibreuse de noix tombées) | | | |
| | | | Papier | Faible | Oui | Degré de transformation élevé | | | |
| | | | Sciure, planure de bois (fibre de bois) | Faible–moyen | Oui | La taille des particules et le degré de transformation font baisser la probabilité de survie des organismes nuisibles après transformation | | | |
| | | | Milieu de culture tissulaire (de type agar) | Faible | Oui | Stérilisé, notamment autoclavé, avant utilisation | | | |
| | | | Eau | Faible | Oui | Le risque est fonction de la source ou du traitement | | | |
| | | | Copeaux de bois | Moyen | Oui | Le risque est fonction de la taille des particules et du degré de transformation | | | |
| | | | Liège | Variable faible | Oui | Le risque est fonction du degré de transformation | | | |
| | | | Tourbe | Variable faible | Oui | La tourbe est un habitat naturel des nématodes, qui se nourrissent principalement de bactéries et de champignons; le | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | <table><tr><td></td><td></td><td></td><td>risque est plus faible lorsque l'origine n'a pas été exposée à l'agriculture (par exemple, tourbières certifiées)</td></tr><tr><td>Sphaigne</td><td>Variable élevé</td><td>Oui</td><td>Le risque est fonction du degré de transformation</td></tr><tr><td>Autre matériel végétal (par exemple, balles de riz/paillette, balles de céréales, parches, résidus de canne à sucre, marc de raisin, cabosses)</td><td>Variable élevé</td><td>Oui</td><td>Le risque est moins élevé si le substrat est traité ou s'il provient d'une source saine non infestée</td></tr><tr><td>Écorce</td><td>Élevé</td><td>Oui</td><td>Le risque est fonction de la source (potentiel d'abriter des ravageurs forestiers) et du degré de transformation ou de fermentation</td></tr><tr><td>Déchets biologiques</td><td>Élevé</td><td>Oui</td><td>Déchets d'origine végétale ou animale non transformés liés à des activités humaines</td></tr><tr><td>Compost</td><td>Élevé</td><td>Oui</td><td>Le risque est moins élevé si le compost est produit selon un processus approuvé; il est accru si sa provenance n'est pas connue</td></tr><tr><td>Humus</td><td>Élevé</td><td>Oui</td><td>Matière végétale décomposée</td></tr><tr><td>Terre</td><td>Élevé</td><td>Oui</td><td>Le risque peut être réduit avec un traitement</td></tr><tr><td>Plaques de fougère arborescente</td><td>Élevé</td><td>Oui</td><td>Abri potentiel de ravageurs forestiers</td></tr><tr><td>Vermicompost (fumier de vers de terre et vers de terre)</td><td>Élevé</td><td>Oui</td><td>Certains vers de terre non autochtones peuvent être vecteurs d'organismes nuisibles</td></tr></table> | | | |
| 482. | *76* | Substantive | Footnote 1 ~~For growing media not previously used for planting and which have been handled and stored in a way that prevents contamination~~. | this information should be given as a note under the title of the Annex, as it is too important to be left in a footnote. Also Annex 1b has a note of similar significance under its title, before the table | English | Australia |
| 483. | *76* | Substantive | Footnote 1 This annex assumes that the ~~For~~ growing media was not previously used for planting and ~~which have been~~was handled and stored in a way that prevents contamination. | Simpler, clearer statement. | English | United States of |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | America |
| 484. | *76* | Technical | ~~Footnote 1 For growing media not previously used for planting and which have been handled and stored in a way that prevents contamination.~~ | Added before the table (very important note) | English | EPPO, Norway, Algeria |
| 485. | *76* | Technical | Footnote 1 For growing media not previously used for planting and which have been handled and stored in a way that prevents contamination.<br><br>This Annex considers the risk posed by different constituents of growing media, but not in association with plants for planting. For pest risk assessment, the pest risk posed by growing media in association with plants for planting should be assessed. | We propose to add this new paragraph after paragraph 76 to clarify that both growing media and plants for planting should be evaluated together when assessing pest risk | English | Uruguay |
| 486. | *76* | Technical | Footnote 1 For growing media not previously used for planting and which have been handled and stored in a way that prevents contamination.<br><br>This Annex considers the risk posed by different constituents of growing media, but not in association with plants for planting. For pest risk assessment, the pest risk posed by growing media in association with plants for planting should be assessed. | We propose to add this new paragraph after paragraph 76 to clarify that both growing media and plants for planting should be evaluated together when assessing pest risk | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 487. | *76* | Technical | Footnote 1 For growing media not previously used for planting and which have been handled and stored in a way that prevents contamination.<br><br>This Appendix considers the risk posed by different constituents of growing media, but not in association with plants for planting. For pest risk assessment, the pest risk posed by growing media in association with plants for planting should be assessed. | We propose to add this new paragraph after paragraph 76 to clarify that both growing media and plants for planting should be evaluated together when assessing pest risk | English | Ecuador, OIRSA, Belize, Costa Rica |
| 488. | *76* | Technical | Footnote 1 For growing media not previously used for planting and which have been handled and stored in a way that prevents contamination (e.g. freedom from soil). | Add an example of contamination to provide clarity. | English | Canada |
| 489. | *76* | Technical | ~~Footnote 1 For growing media not previously used for planting and which have been handled and stored in a way that prevents contamination.~~ | Added before the table (very important note) | English | European Union |
| 490. | *77* | Editorial | **ANNEX 1b: Combinations of ~~G~~growing media and other measures ~~associated with plants~~ that result in ~~may be considered low~~ negligible pest risk** | For consistency with [39] and [79], and added clarity (it is not the growing media in itself that results in low risk). | English | EPPO, Norway, Algeria |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 491. | 77 | Editorial | **ANNEX 1b: Examples of combinations of ~~G~~growing media with other measures ~~associated with plants that~~which result in ~~may be considered low~~ negligible pest risk of the growing medium associated with the plant** | For consistency with [39] and [79], and added clarity (it is not the growing media in itself that results in low risk). | English | European Union |
| 492. | 77 | Substantive | **APPENDIX ~~ANNEX~~ 1b: Growing media associated with plants that may be considered low pest risk** | This Annex should be made into Appendix | English | Thailand, Malaysia |
| 493. | 77 | Substantive | **APPENDIX~~ANNEX~~ 1b: Growing media associated with plants that may be considered low pest risk** | This Annex should be made into Appendix | English | Korea, Republic of |
| 494. | 77 | Substantive | ~~**ANNEX 1b: Growing media associated with plants that may be considered low pest risk**~~ | Suggest deleting Annexes 1a and 1b (first three columns). 1b is outside the scope of the standard, and doesn't add information to the standard. Redundant because information in 1b is already covered in 1a. See US proposed new table in paragraph 75. | English | United States of America |
| 495. | 77 | Substantive | **~~ANNEX~~ APPENDIX 1b: Growing media associated with plants that may be considered low pest risk** | This is the regional comment made by the 14th APPPC Regional Workshop on Review of draft ISPMs. | English | Japan |
| 496. | 77 | Substantive | ~~**ANNEX 1b: Growing media associated with plants that may be considered low pest risk**~~ | Annex 1b and the associated tables should be deleted from the standard as they are not all inclusive. Many of the measures mentioned in this annex may be related to systems approaches, which have now been addressed under Section 5. The text on treatment of water has been moved to now section 5.2 and the text on prevention of colonization by the relevant pest has been moved to a new Section 5.1. The rest of the information covered under Annex 1b is already captured elsewhere in the draft text. | English | Canada |
| 497. | 77 | Substantive | **ANNEX 1b: Growing media associated with plants that may be considered low pest risk** | The Annex should be made into Appendix. | English | Nepal |
| 498. | 77 | Substantive | **~~ANNEX~~APPENDIX 1b: Growing media associated with plants that may be considered low pest risk** | This Annex should be made into Appendix | English | Viet Nam |
| 499. | 78 | Substantive | ~~**Note: These tables describe only the pest risk associated with the growing medium, not with the plants.**~~ | See US comment in paragraph 77 | English | United States of America |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 500. | *78* | Substantive | ~~**Note: These tables describe only the pest risk associated with the growing medium, not with the plants.**~~ | Delete the note above Table 1 and 2 as both tables are being deleted with the deletion of annex 1b - see comment in paragraph 77. | English | Canada |
| 501. | *78* | Technical | ~~**Note: These tables describe only the pest risk associated with the growing medium, not with the plants.**~~<br><br>**Examples of combinations of growing media with other measures which result in negligible pest risk of the growing medium associated with the plant. These combinations do not affect potential pest risk associated with the plants themselves.** | this is a proposed clarification of the note and of what the table actually presents. | English | EPPO, Norway, Algeria |
| 502. | *78* | Technical | ~~**Note: These tables describe only the pest risk associated with the growing medium, not with the plants.**~~ | This paragraph is inconsistent with Title of Annex 1b | English | Uruguay |
| 503. | *78* | Technical | ~~**Note: These tables describe only the pest risk associated with the growing medium, not with the plants.**~~ | This paragraph is inconsistent with Title of Annex 1b | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |
| 504. | *78* | Technical | **Note: Th~~i~~ese ~~s~~ table~~s~~ describe~~s~~ only the pest risk associated with the growing medium, not with the plants.** | See comment on para 82. | English | European Union |
| 505. | *79* | Substantive | **Table 1: Combinations of growing medium and other measures that ~~result in negligible~~ are effective for managing pest risk** | See US comment on paragraph 77. If this table is not deleted, suggest this rewording. | English | United States of America |
| 506. | *79* | Substantive | ~~**Table 1: Combinations of growing medium and other measures that result in negligible pest risk**~~ | Delete Table 1 in line with deletion of annex 1b as per comment in paragraph 77. | English | Canada |
| 507. | *79* | Technical | ~~**Table 1: Combinations of growing medium and other measures that result in negligible pest risk**~~ | The title of the table is now given in the heading for annex 1b | English | EPPO, Norway, Algeria |
| 508. | *79* | Technical | ~~**Table 1: Combinations of growing medium and other measures that result in negligible pest risk**~~ | The title of the table is now given in the heading for annex 1b | English | European Union |
| 509. | *80* | Editorial | **Growing** \| **Water/nutrients** \| **Other measures** \| **Examples** | ~~Usual term~~ | English | EPPO |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | **medium** | | | |
| | | | Water | Water or water-based nutrient solution | Sterilized, treated or filtered water may be required | Plants rooted in water |
| | | | Tissue culture medium | N/A (incorporated in sterile medium) | Maintained in aseptic conditions | Tissue cultured plants transported in closed containers |
| | | | Inert material that is not capable of supporting pest growth (e.g. perlite) | Sterilized water-based nutrient solution | Maintained in conditions to prevent pest infestation ~~colonization~~ | Plants for hydroponic cultivation where the absence of pests can be verified |
| | | | Growing medium that has been sterilized (e.g. by heat to a specified temperature for a specified duration) | Pest free (sterilized, treated or filtered) water supply | Maintained in conditions to prevent pest infestation ~~colonization~~ | Plants grown from seed in modules under protected conditions |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 510. | *80* | Editorial | **Milieu de culture** / **Eau/nutriments** / **Autres mesures** / **Exemples**<br>Eau / Eau ou solution aqueuse nutritive / Il peut être nécessaire de stériliser, de traiter ou de filtrer l'eau / Végétaux enracinés dans l'eau<br>Milieu de culture tissulaire / SO (incorporés dans un milieu stérile) / Maintien dans des conditions aseptiques / Végétaux en culture tissulaire transportés dans des conteneurs fermés<br>Matière inerte impropre à la croissance d'organismes nuisibles (par exemple, la perlite) / Solution aqueuse nutritive stérilisée / Maintien dans des conditions propres à prévenir une colonisation par des organismes nuisibles / Végétaux destinés à la culture hydroponique, où l'absence d'organismes nuisibles peut être vérifiée<br>Milieu de culture stérilisé (par exemple, / Approvisionnement en eau exempt d'organismes nuisibles (stérilisé, traité ou filtré) / Maintien dans des conditions propres à prévenir une colonisation par des organismes nuisibles / Végétaux cultivés à partir de semences dans des modules, dans un environnement | SO: écrire en toutes lettres | Français | Gabon, Congo, DR* |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>à une température spécifique pendant une durée déterminée)</td><td></td><td></td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>511.</td><td>80</td><td>Editorial</td><td>
<table>
<tr><th>Growing medium</th><th>Water/nutrients</th><th>Other measures</th><th>Examples</th></tr>
<tr><td>Water</td><td>Water or water-based nutrient solution</td><td>Sterilized, treated or filtered water may be required</td><td>Plants rooted in water</td></tr>
<tr><td>Tissue culture medium</td><td>N/A (incorporated in sterile medium)</td><td>Maintained in aseptic conditions</td><td>Tissue cultured plants transported in closed containers</td></tr>
<tr><td>Inert material that is not capable of supporting pest growth (e.g. perlite)</td><td>Sterilized water-based nutrient solution</td><td>Maintained in conditions to prevent pest infestation ~~colonization~~</td><td>Plants for hydroponic cultivation where the absence of pests can be verified</td></tr>
<tr><td>Growing medium</td><td>Pest free (sterilized,</td><td>Maintained in conditions to</td><td>Plants grown from seed in modules under protected conditions</td></tr>
</table>
</td><td>Usual term</td><td>English</td><td>European Union</td></tr>
</table>

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>that has been sterilized (e.g. by heat to a specified temperature for a specified duration)</td><td>treated or filtered) water supply</td><td>prevent pest infestation ~~colonization~~</td><td></td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>512.</td><td>80</td><td>Editorial</td><td>
<table>
<tr><th>Growing medium</th><th>Water/nutrients</th><th>Other measures</th><th>Examples</th></tr>
<tr><td>Water</td><td>Water or water-based nutrient solution</td><td>Sterilized, treated or filtered water may be required</td><td>Plants rooted in water</td></tr>
<tr><td>Tissue culture medium</td><td>N/A (incorporated in sterile medium)</td><td>Maintained in aseptic conditions</td><td>Tissue cultured plants transported in closed containers</td></tr>
<tr><td>Inert material that is not capable of supporting pest growth (e.g. perlite)</td><td>Sterilized water-based nutrient solution</td><td>Maintained in conditions to prevent pest infestation ~~colonization~~</td><td>Plants for hydroponic cultivation where the absence of pests can be verified</td></tr>
<tr><td>Growing</td><td>Pest free</td><td>Maintained in</td><td>Plants grown from seed in modules under protected</td></tr>
</table>
</td><td>~~Usual term~~</td><td>English</td><td>Algeria</td></tr>
</table>

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>medium that has been sterilized (e.g. by heat to a specified temperature for a specified duration)</td><td>(sterilized, treated or filtered) water supply</td><td>conditions to prevent pest infestation ~~colonization~~</td><td>conditions</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>513.</td><td>80</td><td>Substantive</td><td>
<table>
<tr><th>Growing medium</th><th>Water/nutrients</th><th>Other measures</th><th>Examples</th></tr>
<tr><td>Water</td><td>Water or water-based nutrient solution</td><td>Sterilized, treated or filtered water may be required</td><td>Plants rooted in water</td></tr>
<tr><td>Tissue culture medium</td><td>N/A (incorporated in sterile medium)</td><td>Maintained in aseptic conditions</td><td>Tissue cultured plants transported in closed containers</td></tr>
<tr><td>Inert material that is not capable of supporti</td><td>Sterilized water-based nutrient solution</td><td>Maintained in conditions to prevent pest colonization</td><td>Plants for hydroponic cultivation where the absence of pests can be verified</td></tr>
</table>
</td><td>See US comment on paragraph 77</td><td>English</td><td>United States of America</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | growth (e.g. perlite) | | | |
| | | | Growing medium that has been sterilized (e.g. by heat to a specified temperature for a specified duration) | Pest free (sterilized, treated or filtered) water supply | Maintained in conditions to prevent pest colonization | Plants grown from seed in modules under protected conditions |
| 514. | 80 | Substantive | ~~Growing medium~~ | ~~Water/nutrients~~ | ~~Other measures~~ | ~~Examples~~ |
| | | | ~~Water~~ | ~~Water or water-based nutrient solution~~ | ~~Sterilized, treated or filtered water may be required~~ | ~~Plants rooted in water~~ |
| | | | ~~Tissue culture medium~~ | ~~N/A (incorporated in sterile medium)~~ | ~~Maintained in aseptic conditions~~ | ~~Tissue cultured plants transported in closed containers~~ |
| | | | ~~Inert material~~ | ~~Sterilized water-based nutrient~~ | ~~Maintained in conditions to~~ | ~~Plants for hydroponic cultivation where the absence of pests can be verified~~ |

Delete text contained in the table as per comment in pararaph 77.

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | ~~that is not capable of supporting pest growth (e.g. perlite)~~ \| ~~solution~~ \| ~~prevent pest colonization~~ \| | | | |
| | | | ~~Growing medium that has been sterilized (e.g. by heat to a specified temperature for a specified duration)~~ \| ~~Pest free (sterilized, treated or filtered) water supply~~ \| ~~Maintained in conditions to prevent pest colonization~~ \| ~~Plants grown from seed in modules under protected conditions~~ | | | |
| 515. | *80* | Technical | **Growing medium** \| **Water/nutrients** \| **~~Other~~ M~~m~~easures** \| **Examples**<br>Water \| Water or water-based nutrient solution \| Sterilized, treated or filtered water may be required \| Plants rooted in water<br>Tissue culture medium \| N/A (incorporated in sterile medium) \| Maintained in aseptic conditions \| Tissue cultured plants transported in closed containers<br>Inert material that is not capable \| Sterilized water-based nutrient solution \| Maintained in conditions to prevent pest colonization \| Plants for hydroponic cultivation where the absence of pests can be verified | The word "other" does not make sense here | English | EPPO, Algeria |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | of supporting pest growth (e.g. perlite) | | | |
| | | | Growing medium that has been sterilized (e.g. by heat to a specified temperature for a specified duration) | Pest free (sterilized, treated or filtered) water supply | Maintained in conditions to prevent pest colonization | Plants grown from seed in modules under protected conditions |
| 516. | *80* | Technical | **Growing medium** | **Water/nutrients** | **~~Other~~ M~~m~~easures** | **Examples** |
| | | | Water | Water or water-based nutrient solution | Sterilized, treated or filtered water may be required | Plants rooted in water |
| | | | Tissue culture medium | N/A (incorporated in sterile medium) | Maintained in aseptic conditions | Tissue cultured plants transported in closed containers |
| | | | Inert material that is not capable of supportin | Sterilized water-based nutrient solution | Maintained in conditions to prevent pest colonization | Plants for hydroponic cultivation where the absence of pests can be verified |

The word "other" does not make sense here | English | European Union

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>g pest growth (e.g. perlite)</td><td></td><td></td><td></td></tr>
<tr><td>Growing medium that has been sterilized (e.g. by heat to a specified temperature for a specified duration)</td><td>Pest free (sterilized, treated or filtered) water supply</td><td>Maintained in conditions to prevent pest colonization</td><td>Plants grown from seed in modules under protected conditions</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>517.</td><td>80</td><td>Technical</td><td>
<table>
<tr><th>Milieu de culture</th><th>Eau/nutriments</th><th>Autres mesures</th></tr>
<tr><td>Eau</td><td>Eau ou solution aqueuse nutritive</td><td>Il peut être nécessaire de stériliser, de traiter ou de filtrer l'eau</td></tr>
<tr><td>Milieu de culture tissulaire</td><td>SO (incorporés dans un milieu stérile)<br>. SO, l'écrire en toutes lettres</td><td>Maintien dans des conditions aseptiques</td></tr>
<tr><td>Matière inerte impropre à la croissance d'organismes nuisibles</td><td>Solution aqueuse nutritive stérilisée</td><td>Maintien dans des conditions propres à prévenir une colonisation par des organismes nuisibles</td></tr>
</table>
</td><td>Eviter autres interprétations
<table>
<tr><th>Exemples</th></tr>
<tr><td>Végétaux enracinés dans l'eau</td></tr>
<tr><td>Végétaux en culture tissulaire transportés dans des conteneurs fermés</td></tr>
<tr><td>Végétaux destinés à la culture hydroponique, où l'absence d'organismes nuisibles peut être vérifiée</td></tr>
</table>
</td><td>Français</td><td>Burundi</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | (par exemple, la perlite) | | | |
| | | | Milieu de culture stérilisé (par exemple, chauffé à une température spécifique pendant une durée déterminée) / Approvisionnement en eau exempt d'organismes nuisibles (stérilisé, traité ou filtré) / Maintien dans des conditions propres à prévenir une colonisation par des organismes nuisibles | Végétaux cultivés à partir de semences dans des modules, dans un environnement protégé | | |
| 518. | 81 | Substantive | ~~Table 2: Combinations of growing medium and other measures that may result in low risk for a specific pest~~ | table combined with the first table of annex 1B: the table did not give any additional precise information or guidance | English | EPPO, Norway, Algeria |
| 519. | 81 | Substantive | ~~Table 2: Combinations of growing medium and other measures that may result in low risk for a specific pest~~ | See US comment on paragraph 75 | English | United States of America |
| 520. | 81 | Substantive | ~~Table 2: Combinations of growing medium and other measures that may result in low risk for a specific pest~~ | Table combined with the first table of annex 1B: the table did not give any additional precise information or guidance. | English | European Union |
| 521. | 81 | Technical | ~~Table 2: Combinations of growing medium and other measures that may result in low risk for a specific pest~~ | Delete Table 2 as per comment in paragraph 77. | English | Canada |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td>522.</td><td>82</td><td>Substantive</td><td>Table deleted</td><td>See 81</td><td>English</td><td>EPPO, Norway, Algeria</td></tr>
<tr><td>523.</td><td>82</td><td>Substantive</td><td><table><tr><th>Growing medium</th><th>Water/nutrients</th><th>Other measures</th><th>Examples</th></tr><tr><td>Treated growing medium (e.g. fumigated or drenched with an appropriate chemical treatment)</td><td>Clean water supply or if pest is likely to be transmitted in water, appropriately sterilized, treated or filtered water supply</td><td>Prevention of colonization by the relevant pest (e.g. pest free area, pest free place of production, protected conditions, prevention of transmission by wind, grown on benches separated from contact with soil)</td><td>Plants in pots in growing medium treated with an insecticide to kill a specific insect pest and grown in protected conditions</td></tr></table></td><td>See US comment on paragraph 75</td><td>English</td><td>United States of America</td></tr>
<tr><td>524.</td><td>82</td><td>Substantive</td><td><table><tr><th>~~Growing medium~~</th><th>~~Water/nutrients~~</th><th>~~Other measures~~</th><th>~~Examples~~</th></tr><tr><td>~~Treated growing medium (e.g. fumigated or~~</td><td>~~Clean water supply or if pest is likely to be transmitted in water, appropriately~~</td><td>~~Prevention of colonization by the relevant pest (e.g. pest free area, pest free place of~~</td><td>~~Plants in pots in growing medium treated with an insecticide to kill a specific insect pest and grown in protected conditions~~</td></tr></table></td><td>~~Delete text contained in the table.~~ Please see comment in paragraph 77.</td><td>English</td><td>Canada</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | ~~drenched with an appropriate chemical treatment~~ ) ~~sterilized, treated or filtered water supply~~ ~~production, protected conditions, prevention of transmission by wind, grown on benches separated from contact with soil)~~ | | | |
| 525. | *82* | Substantive | Table deleted | See 81 | English | European Union |
| 526. | *85* | Editorial | **APPENDIX 2~~1~~: Types of plants for planting in international trade and their commonly used growing media** | Renumbering. Change to APPENDIX 2 | English | Thailand |
| 527. | *85* | Editorial | **APPENDIX 1: Types of plants for planting in international trade and their commonly used growing media** | Renumbering. Change to APPENDIX 2 | English | Malaysia |
| 528. | *85* | Editorial | **APPENDIX 1: Types of plants for planting in international trade and their commonly used growing media** | Renumbering. Change to APPENDIX 2 | English | Korea, Republic of |
| 529. | *85* | Editorial | **APPENDIX ~~1~~2: Types of plants for planting in international trade and their commonly used growing media** | Renumbering. Change to APPENDIX 2 | English | Viet Nam |
| 530. | *85* | Substantive | **APPENDIX 1: Examples~~Types~~ of plants for planting in international trade and their commonly associated~~used~~ growing media** | Clearer title The table title suggests that media and soil “commonly used in international trade” are acceptable. Permitting such materials may explain the much higher incidence of non-native forest pathogens established in other regions of the world. | English | United States of America |
| 531. | *86* | Substantive | **Plant type** \| **Growing media** \| **Comments** | The title of table is "Type of plants for planting in international trade and their commonly used growing media". So, the first row is not | English | Thailand |

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | ~~Unrooted cuttings~~ | ~~None~~ | | necessary because it's not use growing media. | | |
| | | | Plants rooted in water or water-based nutrient solutions | Water | Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media. | | | |
| | | | Tissue cultured plants | Sterile, agar-like | Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar. | | | |
| | | | Epiphytic plants | Tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock | Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media. | | | |
| | | | Rooted herbaceous cuttings | Various (including peat, coco peat, synthetic media, sphagnum moss) | Rooted herbaceous cuttings are generally rooted and moved in soil-free growing media that may be contained in peat-pots or coco-pots. The roots are tender and the growing media cannot be removed without injuring the plants. The growing cycle for these plants is generally very short. | | | |
| | | | Plants grown from seed | Various (including peat, vermiculite, perlite) | Annuals and biennials are generally grown from seed in growing media and moved as rooted in growing media. | | | |
| | | | Potted greenhouse plants | Various (including synthetic media, | Potted greenhouse plants are generally grown exclusively in greenhouses under controlled conditions and in soil-free growing media. | | | |

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | | vermiculite, perlite, peat, coco peat) | | | | |
| | | | Ornamental and flowering houseplants | Various (including synthetic media, vermiculite, perlite, coco peat) | The plants may be field grown in soil, grown as containerized nursery stock, or grown as potted greenhouse plants in soil-free growing media. | | | |
| | | | Liners, whips | Various (including peat, vermiculite) or soil as a contaminant | These young plants are generally rooted in soil or in soil-free growing media in containers or trays. | | | |
| | | | Dormant bulbs and tubers, tuberous roots and herbaceous perennial roots | Soil, peat (*Lilium*) or none (*Tulipa*) | Bulbs, tubers (including corms and rhizomes), tuberous roots and herbaceous perennial roots are generally propagated and grown in fields but shipped dormant and free from growing media. Certain bulbs, such as lilies, are very difficult to ship completely free from soil. | | | |
| | | | Bare root nursery stock | Soil, none | Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system. | | | |
| | | | Artificially dwarfed nursery stock | Soil | The plant roots are typically very difficult to wash free from soil. The plants may be transplanted to soil-free growing media and grown in greenhouses using integrated risk mitigation measures in an effort to minimize the pest risks associated with them. | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>Trees and shrubs with soil</td><td>Soil</td><td>Older trees and shrubs, including specimen trees, are often moved in the nursery trade as dug trees or “ball and burlap”. This material includes a large volume of soil.</td></tr>
<tr><td>Turf or grass sod</td><td>Soil</td><td>Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests.</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>532.</td><td>86</td><td>Substantive</td><td>
<table>
<tr><th>Plant type</th><th>Growing media</th><th>Comments</th></tr>
<tr><td>Unrooted cuttings</td><td>None</td><td>-Unrooted cuttings are often packed in media to keep them in good condition</td></tr>
<tr><td>Plants rooted in water or water-based nutrient solutions</td><td>Water</td><td>Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media.</td></tr>
<tr><td>Tissue cultured plants</td><td>Sterile, agar-like</td><td>Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar.</td></tr>
<tr><td>Epiphytic plants</td><td>Tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock</td><td>Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media.</td></tr>
<tr><td>Rooted herbaceous cuttings</td><td>Various (including peat, coco peat, synthetic media, sphagnum</td><td>Rooted herbaceous cuttings are generally rooted and moved in soil-free growing media that may be contained in peat-pots or coco-pots. The roots are tender and the growing media cannot be removed without injuring the plants. The growing cycle for these plants is generally very short.</td></tr>
</table>
</td><td>need to highlight this</td><td>English</td><td>Australia</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | | moss) | | | | |
| | | | Plants grown from seed | Various (including peat, vermiculite, perlite) | Annuals and biennials are generally grown from seed in growing media and moved as rooted in growing media. | | | |
| | | | Potted greenhouse plants | Various (including synthetic media, vermiculite, perlite, peat, coco peat) | Potted greenhouse plants are generally grown exclusively in greenhouses under controlled conditions and in soil-free growing media. | | | |
| | | | Ornamental and flowering houseplants | Various (including synthetic media, vermiculite, perlite, coco peat) | The plants may be field grown in soil, grown as containerized nursery stock, or grown as potted greenhouse plants in soil-free growing media. | | | |
| | | | Liners, whips | Various (including peat, vermiculite) or soil as a contaminant | These young plants are generally rooted in soil or in soil-free growing media in containers or trays. | | | |
| | | | Dormant bulbs and tubers, tuberous roots and herbaceous perennial roots | Soil, peat (*Lilium*) or none (*Tulipa*) | Bulbs, tubers (including corms and rhizomes), tuberous roots and herbaceous perennial roots are generally propagated and grown in fields but shipped dormant and free from growing media. Certain bulbs, such as lilies, are very difficult to ship completely free from soil. | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>Bare root nursery stock</td><td>Soil, none</td><td>Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system.</td></tr>
<tr><td>Artificially dwarfed nursery stock</td><td>Soil</td><td>The plant roots are typically very difficult to wash free from soil. The plants may be transplanted to soil-free growing media and grown in greenhouses using integrated risk mitigation measures in an effort to minimize the pest risks associated with them.</td></tr>
<tr><td>Trees and shrubs with soil</td><td>Soil</td><td>Older trees and shrubs, including specimen trees, are often moved in the nursery trade as dug trees or “ball and burlap”. This material includes a large volume of soil.</td></tr>
<tr><td>Turf or grass sod</td><td>Soil</td><td>Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests.</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>533.</td><td>86</td><td>Technical</td><td>
<table>
<tr><th>Plant type</th><th>Growing media</th><th>Comments</th></tr>
<tr><td>Unrooted cuttings, some bulbs (Tulipa) and some bare root nursery stock</td><td>None</td><td></td></tr>
<tr><td>Plants rooted in water or water-based nutrient solutions</td><td>Water</td><td>Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media.</td></tr>
<tr><td>Tissue cultured plants</td><td>Sterile, agar-like</td><td>Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar.</td></tr>
<tr><td>Epiphytic plants</td><td>Tree fern slabs, bark, ~~wood,~~</td><td>Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, ~~wood,~~ sphagnum moss, volcanic cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media.</td></tr>
</table>
</td><td>~~Wood~~ is not mentionned in annex 1A and has other ISPMs focusing speciically on it. The other modifications are added to group the plants and plant material that are mooved without growing media.</td><td>English</td><td>EPPO</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | | sphagnum moss, volcanic cinder, rock | | | | |
| | | | Rooted herbaceous cuttings | Various (including peat, coco peat, synthetic media, sphagnum moss) | Rooted herbaceous cuttings are generally rooted and moved in soil-free growing media that may be contained in peat-pots or coco-pots. The roots are tender and the growing media cannot be removed without injuring the plants. The growing cycle for these plants is generally very short. | | | |
| | | | Plants grown from seed | Various (including peat, vermiculite, perlite) | Annuals and biennials are generally grown from seed in growing media and moved as rooted in growing media. | | | |
| | | | Potted greenhouse plants | Various (including synthetic media, vermiculite, perlite, peat, coco peat) | Potted greenhouse plants are generally grown exclusively in greenhouses under controlled conditions and in soil-free growing media. | | | |
| | | | Ornamental and flowering houseplants | Various (including synthetic media, vermiculite, perlite, coco peat) | The plants may be field grown in soil, grown as containerized nursery stock, or grown as potted greenhouse plants in soil-free growing media. | | | |
| | | | Liners, whips | Various (including peat, vermiculite | These young plants are generally rooted in soil or in soil-free growing media in containers or trays. | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td></td><td>) or soil as a contaminant</td><td></td></tr>
<tr><td>Dormant bulbs and tubers, tuberous roots and herbaceous perennial roots</td><td>Soil, peat (Lilium) ~~or none (Tulipa)~~</td><td>Bulbs, tubers (including corms and rhizomes), tuberous roots and herbaceous perennial roots are generally propagated and grown in fields but shipped dormant and free from growing media. Certain bulbs, such as lilies, are very difficult to ship completely free from soil.</td></tr>
<tr><td>Bare root nursery stock</td><td>Soil~~, none~~</td><td>Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system.</td></tr>
<tr><td>Artificially dwarfed nursery stock</td><td>Soil</td><td>The plant roots are typically very difficult to wash free from soil. The plants may be transplanted to soil-free growing media and grown in greenhouses using integrated risk mitigation measures in an effort to minimize the pest risks associated with them.</td></tr>
<tr><td>Trees and shrubs with soil</td><td>Soil</td><td>Older trees and shrubs, including specimen trees, are often moved in the nursery trade as dug trees or â€œball and burlapâ€• . This material includes a large volume of soil.</td></tr>
<tr><td>Turf or grass sod</td><td>Soil</td><td>Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests.</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>534.</td><td>86</td><td>Technical</td><td>
<table>
<tr><th>Plant type</th><th>Growing media</th><th>Comments</th></tr>
<tr><td>Unrooted cuttings</td><td>None</td><td></td></tr>
<tr><td>Plants rooted in water or water-based nutrient solutions</td><td>Water</td><td>Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media.</td></tr>
</table>
</td><td>~~This type of~~ bulbs can be shipped in inert substrate</td><td>English</td><td>Uruguay</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | Tissue cultured plants / Sterile, agar-like / Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar.<br>Epiphytic plants / Tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock / Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media.<br>Rooted herbaceous cuttings / Various (including peat, coco peat, synthetic media, sphagnum moss) / Rooted herbaceous cuttings are generally rooted and moved in soil-free growing media that may be contained in peat-pots or coco-pots. The roots are tender and the growing media cannot be removed without injuring the plants. The growing cycle for these plants is generally very short.<br>Plants grown from seed / Various (including peat, vermiculite, perlite) / Annuals and biennials are generally grown from seed in growing media and moved as rooted in growing media.<br>Potted greenhouse plants / Various (including synthetic media, vermiculite, perlite, peat, coco peat) / Potted greenhouse plants are generally grown exclusively in greenhouses under controlled conditions and in soil-free growing media.<br>Ornamental and flowering houseplants / Various (including synthetic media, / The plants may be field grown in soil, grown as containerized nursery stock, or grown as potted greenhouse plants in soil-free growing media. | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | | | |

| | | |
|---|---|---|
| | vermiculite, perlite, coco peat) | |
| Liners, whips | Various (including peat, vermiculite) or soil as a contaminant | These young plants are generally rooted in soil or in soil-free growing media in containers or trays. |
| Dormant bulbs and tubers, tuberous roots and herbaceous perennial roots | Soil, peat (*Lilium*) or none (*Tulipa*) | Bulbs, tubers (including corms and rhizomes), tuberous roots and herbaceous perennial roots are generally propagated and grown in fields but shipped dormant and free from growing media. ~~Certain bulbs, such as lilies, are very difficult to ship completely free from soil.~~ |
| Bare root nursery stock | Soil, none | Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system. |
| Artificially dwarfed nursery stock | Soil | The plant roots are typically very difficult to wash free from soil. The plants may be transplanted to soil-free growing media and grown in greenhouses using integrated risk mitigation measures in an effort to minimize the pest risks associated with them. |
| Trees and shrubs with soil | Soil | Older trees and shrubs, including specimen trees, are often moved in the nursery trade as dug trees or “ball and burlap”. This material includes a large volume of soil. |
| Turf or grass sod | Soil | Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests. |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| 535. | *86* | Technical | | This type of bulbs can be shipped in inert substrate | English | COSAVE, Paraguay, Chile, Argentina, |

| Plant type | Growing media | Comments |
|---|---|---|
| Unrooted | None | |

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | cuttings | | | | | Peru, Brazil |
| | | | Plants rooted in water or water-based nutrient solutions | Water | Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media. | | | |
| | | | Tissue cultured plants | Sterile, agar-like | Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar. | | | |
| | | | Epiphytic plants | Tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock | Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media. | | | |
| | | | Rooted herbaceous cuttings | Various (including peat, coco peat, synthetic media, sphagnum moss) | Rooted herbaceous cuttings are generally rooted and moved in soil-free growing media that may be contained in peat-pots or coco-pots. The roots are tender and the growing media cannot be removed without injuring the plants. The growing cycle for these plants is generally very short. | | | |
| | | | Plants grown from seed | Various (including peat, vermiculite, perlite) | Annuals and biennials are generally grown from seed in growing media and moved as rooted in growing media. | | | |
| | | | Potted greenhouse plants | Various (including synthetic media, | Potted greenhouse plants are generally grown exclusively in greenhouses under controlled conditions and in soil-free growing media. | | | |

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | | vermiculite, perlite, peat, coco peat) | | | | |
| | | | Ornamental and flowering houseplants | Various (including synthetic media, vermiculite, perlite, coco peat) | The plants may be field grown in soil, grown as containerized nursery stock, or grown as potted greenhouse plants in soil-free growing media. | | | |
| | | | Liners, whips | Various (including peat, vermiculite) or soil as a contaminant | These young plants are generally rooted in soil or in soil-free growing media in containers or trays. | | | |
| | | | Dormant bulbs and tubers, tuberous roots and herbaceous perennial roots | Soil, peat (*Lilium*) or none (*Tulipa*) | Bulbs, tubers (including corms and rhizomes), tuberous roots and herbaceous perennial roots are generally propagated and grown in fields but shipped dormant and free from growing media. ~~Certain bulbs, such as lilies, are very difficult to ship completely free from soil.~~ | | | |
| | | | Bare root nursery stock | Soil, none | Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system. | | | |
| | | | Artificially dwarfed nursery stock | Soil | The plant roots are typically very difficult to wash free from soil. The plants may be transplanted to soil-free growing media and grown in greenhouses using integrated risk mitigation measures in an effort to minimize the pest risks associated with them. | | | |
| | | | Trees and | Soil | Older trees and shrubs, including specimen trees, are often moved in the | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>shrubs with soil</td><td></td><td>nursery trade as dug trees or “ball and burlap”. This material includes a large volume of soil.</td></tr>
<tr><td>Turf or grass sod</td><td>Soil</td><td>Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests.</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>536.</td><td>86</td><td>Technical</td><td>
<table>
<tr><th>Plant type</th><th>Growing media</th><th>Comments</th></tr>
<tr><td>Unrooted cuttings</td><td>None</td><td></td></tr>
<tr><td>Plants rooted in water or water-based nutrient solutions</td><td>Water</td><td>Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media.</td></tr>
<tr><td>Tissue cultured plants</td><td>Sterile, agar-like</td><td>Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar.</td></tr>
<tr><td>Epiphytic plants</td><td>Tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock</td><td>Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media.</td></tr>
<tr><td>Rooted herbaceous cuttings</td><td>Various (including peat, coco peat, synthetic media, sphagnum moss)</td><td>Rooted herbaceous cuttings are generally rooted and moved in soil-free growing media that may be contained in peat-pots or coco-pots. The roots are tender and the growing media cannot be removed without injuring the plants. The growing cycle for these plants is generally very short.</td></tr>
<tr><td>Plants grown</td><td>Various</td><td>Annuals and biennials are generally grown from seed in growing media and</td></tr>
</table>
</td><td>This type of bulbs are not generally cultivated in fields and can be shiped in an inert substrate</td><td>English</td><td>Ecuador, OIRSA, Belize, Costa Rica</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | from seed | (including peat, vermiculite, perlite) | moved as rooted in growing media. | | | |
| | | | Potted greenhouse plants | Various (including synthetic media, vermiculite, perlite, peat, coco peat) | Potted greenhouse plants are generally grown exclusively in greenhouses under controlled conditions and in soil-free growing media. | | | |
| | | | Ornamental and flowering houseplants | Various (including synthetic media, vermiculite, perlite, coco peat) | The plants may be field grown in soil, grown as containerized nursery stock, or grown as potted greenhouse plants in soil-free growing media. | | | |
| | | | Liners, whips | Various (including peat, vermiculite) or soil as a contaminant | These young plants are generally rooted in soil or in soil-free growing media in containers or trays. | | | |
| | | | Dormant bulbs and tubers, tuberous roots and herbaceous perennial roots | Soil, peat (*Lilium*) or none (*Tulipa*) | Bulbs, tubers (including corms and rhizomes), tuberous roots and herbaceous perennial roots are generally propagated and grown in fields but shipped dormant and free from growing media. ~~Certain bulbs, such as lilies, are very difficult to ship completely free from soil.~~ | | | |
| | | | Bare root nursery stock | Soil, none | Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil | | | |

<table>
<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td></td><td></td><td>and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system.</td></tr>
<tr><td>Artificially dwarfed nursery stock</td><td>Soil</td><td>The plant roots are typically very difficult to wash free from soil. The plants may be transplanted to soil-free growing media and grown in greenhouses using integrated risk mitigation measures in an effort to minimize the pest risks associated with them.</td></tr>
<tr><td>Trees and shrubs with soil</td><td>Soil</td><td>Older trees and shrubs, including specimen trees, are often moved in the nursery trade as dug trees or “ball and burlap”. This material includes a large volume of soil.</td></tr>
<tr><td>Turf or grass sod</td><td>Soil</td><td>Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests.</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>537.</td><td>86</td><td>Technical</td><td>
<table>
<tr><th>Plant type</th><th>Growing media</th><th>Comments</th></tr>
<tr><td>Unrooted cuttings</td><td>None</td><td>Often packed in growing media to keep in good condition.</td></tr>
<tr><td>Plants rooted in water or water-based nutrient solutions</td><td>Water</td><td>Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media.</td></tr>
<tr><td>Tissue cultured plants</td><td>Sterile, agar-like</td><td>Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar.</td></tr>
<tr><td>Epiphytic plants</td><td>Tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock</td><td>Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media.</td></tr>
<tr><td>Rooted</td><td>Various</td><td>Rooted herbaceous cuttings are generally rooted and moved in soil-free</td></tr>
</table>
</td><td>Unrooted cuttings: comment should highlight that unrooted cuttings are often packed in media to keep them in good condition Rooted herbacious cuttings: delete sentence or explain significance of short growing cycle. Potted greenhouse plants: delete as it is uncorrect to claim that greenhouse plants are generally grown in soil-free media.</td><td>English</td><td>Australia</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | herbaceous cuttings | (including peat, coco peat, synthetic media, sphagnum moss) | growing media that may be contained in peat-pots or coco-pots. are tender and the growing media cannot be removed without in plants. ~~The growing cycle for these plants is generally very short~~. | The roots uring the | | |
| | | | Plants grown from seed | Various (including peat, vermiculite , perlite) | Annuals and biennials are generally grown from seed in growing moved as rooted in growing media. | media and | | |
| | | | ~~Potted greenhouse plants~~ | ~~Various (including synthetic media, vermiculite , perlite, peat, coco peat)~~ | ~~Potted greenhouse plants are generally grown exclusively in gre under controlled conditions and in soil-free growing media.~~ | ~~enhouses~~ | | |
| | | | Ornamental and flowering houseplants | Various (including synthetic media, vermiculite , perlite, coco peat) | The plants may be field grown in soil, grown as containerized nu or grown as potted greenhouse plants in soil-free growing media. | rsery stock, | | |
| | | | Liners, whips | Various (including peat, vermiculite ) or soil as a contamina nt | These young plants are generally rooted in soil or in soil-free gro media in containers or trays. | wing | | |
| | | | Dormant bulbs and tubers, | Soil, peat (*Lilium*) or none | Bulbs, tubers (including corms and rhizomes), tuberous roots an herbaceous perennial roots are generally propagated and grown but shipped dormant and free from growing media. Certain bulbs, | d in fields such as | | |

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<tr><th>Comm. no.</th><th>Para. no.</th><th>Comment type</th><th>Comment</th><th>Explanation</th><th>Language</th><th>Country</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>tuberous roots and herbaceous perennial roots</td><td>(Tulipa)</td><td>lilies, are very difficult to ship completely free from soil.</td></tr>
<tr><td>Bare root nursery stock</td><td>Soil, none</td><td>Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system.</td></tr>
<tr><td>Artificially dwarfed nursery stock</td><td>Soil</td><td>The plant roots are typically very difficult to wash free from soil. The plants may be transplanted to soil-free growing media and grown in greenhouses using integrated risk mitigation measures in an effort to minimize the pest risks associated with them.</td></tr>
<tr><td>Trees and shrubs with soil</td><td>Soil</td><td>Older trees and shrubs, including specimen trees, are often moved in the nursery trade as dug trees or “ball and burlap”. This material includes a large volume of soil.</td></tr>
<tr><td>Turf or grass sod</td><td>Soil</td><td>Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests.</td></tr>
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</td><td></td><td></td><td></td></tr>
<tr><td>538.</td><td>86</td><td>Technical</td><td>
<table>
<tr><th>Plant type</th><th>Growing media</th><th>Comments</th></tr>
<tr><td>Unrooted cuttings</td><td>None</td><td></td></tr>
<tr><td>Plants rooted in water or water-based nutrient solutions</td><td>Water</td><td>Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media.</td></tr>
<tr><td>Tissue cultured plants</td><td>Sterile, agar-like</td><td>Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar.</td></tr>
<tr><td>Epiphytic plants</td><td>Tree fern slabs,</td><td>Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, wood, sphagnum moss, volcanic</td></tr>
</table>
</td><td>Delete Lilium or Tulipa as this would imply that these are the only types of bulbs shipped. Suggestion to exclude examples. Delete the last sentence (Certain bulbs,... from soil) as this statement is not appropriate as it is related to procedure rather than actual risk.</td><td>English</td><td>Canada</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | | bark, wood, sphagnum moss, volcanic cinder, rock | cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media. | | | |
| | | | Rooted herbaceous cuttings | Various (including peat, coco peat, synthetic media, sphagnum moss) | Rooted herbaceous cuttings are generally rooted and moved in soil-free growing media that may be contained in peat-pots or coco-pots. The roots are tender and the growing media cannot be removed without injuring the plants. The growing cycle for these plants is generally very short. | | | |
| | | | Plants grown from seed | Various (including peat, vermiculite, perlite) | Annuals and biennials are generally grown from seed in growing media and moved as rooted in growing media. | | | |
| | | | Potted greenhouse plants | Various (including synthetic media, vermiculite, perlite, peat, coco peat) | Potted greenhouse plants are generally grown exclusively in greenhouses under controlled conditions and in soil-free growing media. | | | |
| | | | Ornamental and flowering houseplants | Various (including synthetic media, vermiculite, perlite, coco peat) | The plants may be field grown in soil, grown as containerized nursery stock, or grown as potted greenhouse plants in soil-free growing media. | | | |
| | | | Liners, whips | Various (including peat, | These young plants are generally rooted in soil or in soil-free growing media in containers or trays. | | | |

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<table>
<tr><td></td><td>vermiculite) or soil as a contaminant</td><td></td></tr>
<tr><td>Dormant bulbs and tubers, tuberous roots and herbaceous perennial roots</td><td>Soil, peat or none~~(Lilium) or none (Tulipa)~~</td><td>Bulbs, tubers (including corms and rhizomes), tuberous roots and herbaceous perennial roots are generally propagated and grown in fields but shipped dormant and free from growing media. ~~Certain bulbs, such as lilies, are very difficult to ship completely free from soil.~~</td></tr>
<tr><td>Bare root nursery stock</td><td>Soil, none</td><td>Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system.</td></tr>
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<tr><td>Turf or grass sod</td><td>Soil</td><td>Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests.</td></tr>
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</td><td></td><td></td><td></td></tr>
<tr><td>539.</td><td>86</td><td>Technical</td><td>
<table>
<tr><th>Plant type</th><th>Growing media</th><th>Comments</th></tr>
<tr><td>Unrooted cuttings, some bulbs (Tulipa) and some bare root nursery stoc</td><td>None</td><td></td></tr>
</table>
</td><td>~~Wood~~ is not mentioned in annex 1A and has other ISPMs focusing specifically on it. The other modifications are added to group the plants and plant material that are moved without growing media.</td><td>English</td><td>European Union</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | k | | | | | |
| | | | Plants rooted in water or water-based nutrient solutions | Water | Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media. | | | |
| | | | Tissue cultured plants | Sterile, agar-like | Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar. | | | |
| | | | Epiphytic plants | Tree fern slabs, bark, ~~wood,~~ sphagnum moss, volcanic cinder, rock | Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, ~~wood,~~ sphagnum moss, volcanic cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media. | | | |
| | | | Rooted herbaceous cuttings | Various (including peat, coco peat, synthetic media, sphagnum moss) | Rooted herbaceous cuttings are generally rooted and moved in soil-free growing media that may be contained in peat-pots or coco-pots. The roots are tender and the growing media cannot be removed without injuring the plants. The growing cycle for these plants is generally very short. | | | |
| | | | Plants grown from seed | Various (including peat, vermiculite, perlite) | Annuals and biennials are generally grown from seed in growing media and moved as rooted in growing media. | | | |
| | | | Potted greenhouse plants | Various (including synthetic media, vermiculite | Potted greenhouse plants are generally grown exclusively in greenhouses under controlled conditions and in soil-free growing media. | | | |

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | | , perlite, peat, coco peat) | | | | |
| | | | Ornamental and flowering houseplants | Various (including synthetic media, vermiculite, perlite, coco peat) | The plants may be field grown in soil, grown as containerized nursery stock, or grown as potted greenhouse plants in soil-free growing media. | | | |
| | | | Liners, whips | Various (including peat, vermiculite) or soil as a contaminant | These young plants are generally rooted in soil or in soil-free growing media in containers or trays. | | | |
| | | | Dormant bulbs and tubers, tuberous roots and herbaceous perennial roots | Soil, peat (*Lilium*) ~~ornone (*Tulipa*)~~ | Bulbs, tubers (including corms and rhizomes), tuberous roots and herbaceous perennial roots are generally propagated and grown in fields but shipped dormant and free from growing media. Certain bulbs, such as lilies, are very difficult to ship completely free from soil. | | | |
| | | | Bare root nursery stock | Soil~~, none~~ | Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system. | | | |
| | | | Artificially dwarfed nursery stock | Soil | The plant roots are typically very difficult to wash free from soil. The plants may be transplanted to soil-free growing media and grown in greenhouses using integrated risk mitigation measures in an effort to minimize the pest risks associated with them. | | | |
| | | | Trees and | Soil | Older trees and shrubs, including specimen trees, are often moved in the | | | |

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<table>
<tr><td>shrubs with soil</td><td></td><td>nursery trade as dug trees or â€œball and burlapâ€• . This material includes a large volume of soil.</td></tr>
<tr><td>Turf or grass sod</td><td>Soil</td><td>Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests.</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>540.</td><td>86</td><td>Translation</td><td>
<table>
<tr><th>Tipo de planta</th><th>Medio de crecimiento</th><th>Observaciones</th></tr>
<tr><td>Esquejes sin enraizar</td><td>Ninguno</td><td></td></tr>
<tr><td>Plantas enraizadas en agua o en una solución acuosa de nutrientes</td><td>Agua</td><td>Algunas plantas pueden cultivarse, a partir de esquejes, en agua o en soluciones acuosas de nutrientes, con o sin medios de crecimiento sintéticos.</td></tr>
<tr><td>Plantas cultivadas en medio de cultivo tisular</td><td>Estéril, de tipo agar</td><td>La producción de plantas cultivadas en medio de cultivo tisular está asociada con medios de crecimiento estériles de tipo agar. Pueden transportarse en contenedores asépticos sellados o ex agar.</td></tr>
<tr><td>Plantas epífitas</td><td>Losas de helechos arborescentes, corteza, madera, musgo esfagnáceo, ceniza volcánica, roca</td><td>Las plantas epífitas, como las bromelias y las orquídeas, se transportan a menudo asociadas con losas de helechos arborescentes, corteza, madera, musgo esfagnáceo, ceniza volcánica, roca, etc. Estos materiales no son verdaderos medios de crecimiento, sino que se utilizan generalmente con fines de soporte y ornamentación.</td></tr>
<tr><td>Esquejes herbáceos enraizados</td><td>Diversos medios (en particular: turba, turba de coco,</td><td>Los esquejes herbáceos enraizados generalmente se enraízan y transportan en medios de crecimiento libres de suelo; como recipiente pueden utilizarse macetas de turba o de coco. Las raíces son delicadas y los medios de crecimiento no pueden eliminarse sin dañar a las plantas. El ciclo de crecimiento de estas plantas es generalmente muy corto.</td></tr>
</table>
</td><td>Término más usado en español</td><td>Español</td><td>El Salvador</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | | medios sintéticos, musgo esfagnáceo) | | | | |
| | | | Plantas cultivadas a partir de semillas | Diversos medios (en particular: turba, vermiculita y perlita) | Las plantas anuales y bienales se cultivan generalmente, a partir de semillas, en medios de crecimiento y se transportan enraizadas en los medios de crecimiento. | | | |
| | | | Plantas de invernadero en maceta | Diversos medios (en particular: medios sintéticos, vermiculita, perlita, turba, turba de coco) | Las plantas de invernadero en maceta por lo general se cultivan exclusivamente en invernaderos en condiciones controladas y en medios de crecimiento libres de suelo. | | | |
| | | | Plantas de interior ornamentales y floridas | Diversos medios (en particular: medios sintéticos, vermiculita, perlita, turba de coco) | Las plantas se pueden cultivar en suelo (en el campo), en contenedores (en viveros) o en maceta (en invernaderos), en medios de crecimiento libres de suelo. | | | |
| | | | Plántulas, plantones | Diversos medios (en particular: turba, vermiculita) o suelo como | Estas plantas jóvenes generalmente están enraizadas en suelo o en un medio de crecimiento libre de suelo, en contenedores o bandejas. | | | |

<table>
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<tr><td></td><td></td><td></td><td>
<table>
<tr><td></td><td>contaminante</td><td></td><td></td></tr>
<tr><td>Bulbos y tubérculos, raíces tuberosas y raíces perennes herbáceas en estado latente</td><td>Suelo, turba (Lilium) o ninguno (Tulipa)</td><td>Los bulbos, los tubérculos (incluidos los cormos y rizomas), las raíces tuberosas y las raíces perennes herbáceas generalmente se propagan y cultivan en campos de cultivo, pero se transportan en estado latente y sin medios de crecimiento. Algunos bulbos, como los lirios, son muy difíciles de transportar completamente libres de suelo.</td><td></td></tr>
<tr><td>Plantas de vivero a raíz desnuda</td><td>Suelo, ninguno</td><td>La raíz desnuda es una técnica de arboricultura que consiste en excavar un árbol o arbusto cultivado en el campo con el fin de inducir un estado latente. La planta de vivero se puede sacudir para eliminar parte del suelo, o se puede lavar para liberarla de todo resto de suelo y medios de crecimiento. El tamaño de la planta y la estructura de su raíz, así como el tipo de suelo, influyen en gran medida en la facilidad para eliminar el suelo del sistema radicular.</td><td></td></tr>
<tr><td>Plantas de vivero con desarrollo frenado artificialmente</td><td>Suelo</td><td>Suele ser muy difícil lavar las raíces de estas plantas para eliminar el suelo. Las plantas se pueden trasplantar a medios de crecimiento libres de suelo y cultivarse en invernaderos utilizando medidas integradas de mitigación del riesgo con el fin de reducir al mínimo los riesgos de plagas asociados a las mismas.</td><td></td></tr>
<tr><td>Árboles y arbustos con suelo</td><td>Suelo</td><td>Los árboles y arbustos más viejos, en particular los árboles singulares, a menudo se trasladan en el sector de los viveros como árboles excavados o “en cepellón con arpillera”. Estos productos contienen un gran volumen de suelo.</td><td></td></tr>
<tr><td>Tapetes~~Tepes~~ de césped [pasto en rollo]</td><td>Suelo</td><td>Los tapetes ~~tepes~~ de césped contienen un gran volumen de suelo y constituyen una vía potencial para muchas plagas del suelo.</td><td></td></tr>
</table>
</td><td></td><td></td></tr>
<tr><td>541.</td><td>86</td><td>Translation</td><td>
<table>
<tr><th>Plant type</th><th>Growing media</th><th>Comments</th></tr>
</table>
</td><td>The French version of the draft standard uses the terms ‘Tourbe ou gazon en plaques’. The term “tourbe” should be avoided because it</td><td>English</td><td>Canada</td></tr>
</table>

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | Unrooted cuttings | None | | causes confusion with other synonyms (e.g. peat, moss) also used in this standard. Therefore, delete the French term "tourbe" and replace it by "gazon" in both columns. | | |
| | | | Plants rooted in water or water-based nutrient solutions | Water | Some plants may be grown from cuttings in water or in water-based nutrient solutions, with or without synthetic growing media. | | | |
| | | | Tissue cultured plants | Sterile, agar-like | Tissue cultured plants are produced in association with sterile agar-like growing media. They may be shipped in sealed aseptic containers or ex-agar. | | | |
| | | | Epiphytic plants | Tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock | Epiphytic plants, such as bromeliads and orchids, are often shipped in association with tree fern slabs, bark, wood, sphagnum moss, volcanic cinder, rock and so forth. These materials are generally intended for support and ornamentation rather than being true growing media. | | | |
| | | | Rooted herbaceous cuttings | Various (including peat, coco peat, synthetic media, sphagnum moss) | Rooted herbaceous cuttings are generally rooted and moved in soil-free growing media that may be contained in peat-pots or coco-pots. The roots are tender and the growing media cannot be removed without injuring the plants. The growing cycle for these plants is generally very short. | | | |
| | | | Plants grown from seed | Various (including peat, vermiculite, perlite) | Annuals and biennials are generally grown from seed in growing media and moved as rooted in growing media. | | | |
| | | | Potted greenhouse plants | Various (including synthetic | Potted greenhouse plants are generally grown exclusively in greenhouses under controlled conditions and in soil-free growing media. | | | |

| Comm. no. | Para. no. | Comment type | Comment | | | Explanation | Language | Country |
|---|---|---|---|---|---|---|---|---|
| | | | | media, vermiculite, perlite, peat, coco peat) | | | | |
| | | | Ornamental and flowering houseplants | Various (including synthetic media, vermiculite, perlite, coco peat) | The plants may be field grown in soil, grown as containerized nursery stock, or grown as potted greenhouse plants in soil-free growing media. | | | |
| | | | Liners, whips | Various (including peat, vermiculite) or soil as a contaminant | These young plants are generally rooted in soil or in soil-free growing media in containers or trays. | | | |
| | | | Dormant bulbs and tubers, tuberous roots and herbaceous perennial roots | Soil, peat (*Lilium*) or none (*Tulipa*) | Bulbs, tubers (including corms and rhizomes), tuberous roots and herbaceous perennial roots are generally propagated and grown in fields but shipped dormant and free from growing media. Certain bulbs, such as lilies, are very difficult to ship completely free from soil. | | | |
| | | | Bare root nursery stock | Soil, none | Bare root is a technique of arboriculture whereby a field grown tree or shrub is dug up in order to put it into a dormant state. The nursery stock may be shaken to remove some of the soil, or it may be washed free from all soil and growing media. The size and root structure of the plant and the type of soil has a large impact on the ability to remove soil from the root system. | | | |
| | | | Artificially dwarfed nursery stock | Soil | The plant roots are typically very difficult to wash free from soil. The plants may be transplanted to soil-free growing media and grown in greenhouses using integrated risk mitigation measures in an effort to minimize the pest risks associated with them. | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | Trees and shrubs with soil / Soil / Older trees and shrubs, including specimen trees, are often moved in the nursery trade as dug trees or “ball and burlap”. This material includes a large volume of soil.<br>~~Turf or grass sod~~ / Soil / Turf or grass sod contains a large volume of soil and is a potential pathway for many soil pests.<br>**Gazon** ou gazon en plaques / Soil / Le **gazon** et le gazon en plaques contiennent de grandes quantités de terre et constituent une filière potentielle pour de nombreux ravageurs souterrains. | | | |
| 542. | 89 | Editorial | **APPENDIX 3~~2~~:** Indicative list of pests that may be of concern with respect to the movement of growing media ~~accompanying~~in association with plants for planting | - Renumbering. Change to APPENDIX 3. - Consistent | English | Thailand |
| 543. | 89 | Editorial | **APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media ~~accompanying~~ associated with plants for planting | -Renumbering. Change to APPENDIX 3 -Clearer meaning | English | Malaysia |
| 544. | 89 | Editorial | **APPENDIX ~~2~~3:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting | Renumbering. Change to APPENDIX 3 | English | Viet Nam |
| 545. | 89 | Substantive | ~~**APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting~~ | Present appendix 2 not very useful and could be deleted . (no refernce to it in the main body of text) Instead of having an "indicative list" there should be a more complete tabulation on higher taxonomic levels, which may be complemented by some common examples (PWN, cyst- and root knot nematodes). Nematodes: There are in a world perspective many more nematodes that are regulated, and listed by the different RPPO:s, i.e.regulated endoparasitic nematodes (species in families Anguinidae, Hoplolaimidae, Pratylenchidae and Heteroderidae) and regulated ectoparasites in the family Longidoridae). PWN, cyst- and root knot nematodes are some common examples. | English | EPPO, Norway |
| 546. | 89 | Substantive | ~~**APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting~~ | This list is not needed, is incomplete, it mixes different taxonomic entities, it includes pests that are not likely to be associated with plants for planting, it is confusing | English | Uruguay |
| 547. | 89 | Substantive | ~~**APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting~~ | This list is not needed, is incomplete, it mixes different taxonomic entities, it includes pests that are not likely to be associated with plants for | English | COSAVE, Paraguay, |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | planting, it is confusing | | Chile, Argentina, Peru, Brazil |
| 548. | 89 | Substantive | ~~**APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting~~ | This list is not needed, is incomplete, it mixes different taxonomic entities, it includes pests that are not likely to be associated with plants for planting, it is confusing | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |
| 549. | 89 | Substantive | ~~**APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting~~ | Depending on the circumstance, nearly any plant pest could be present in frowing media. This brief table does not help or add anything to the standard. | English | Australia |
| 550. | 89 | Substantive | ~~**APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting~~ (delete) | This table is not comprehensive.. Especially if growing media is recognized as a pathway of fruit flies, this may cause interruptions of existing trades because pathway of fruit flies are prohibited by many countries. | English | Korea, Republic of |
| 551. | 89 | Substantive | **APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting | The table should include major soil pathogens, such as Fusarium, Phytophthora, Pythium, Rhizoctonia solani, Sclerotium rolfsii, Verticillium and Sclerotinia. Bacteria, such as Erwinia and Psuedomonas. Arthropod list should include ants, larvae of Coleoptera and Lepidoptera, acarid mites, and fungus gnats. | English | United States of America |
| 552. | 89 | Substantive | ~~**APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting~~ | Delete Appendix 2 - This table is incomplete and could be misleading because pests of concern are not the same in every country. It should be replaced with a new sentence at the end of paragraph12. | English | Canada |
| 553. | 89 | Substantive | ~~**APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting~~ | Present appendix 2 is not very useful and could be deleted (no reference to it in the main body of text). Instead of having an "indicative list" there should be a more complete tabulation on higher taxonomic levels, which may be complemented by some common examples (PWN, cyst- and root knot nematodes). Nematodes: There are in a world perspective many more nematodes that | English | European Union |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | | are regulated, and listed by the different RPPOs, i.e. regulated endoparasitic nematodes (species in families Anguinidae, Hoplolaimidae, Pratylenchidae and Heteroderidae) and regulated ectoparasites (in the family Longidoridae). PWN, cyst- and root knot nematodes are some common examples. | | |
| 554. | 89 | Technical | ~~**APPENDIX 2:** Indicative list of pests that may be of concern with respect to the movement of growing media accompanying plants for planting~~ | Delete whole appendix. Not refered to in body text of standard, nor is the information provided in sufficient detail to be useful. If retained, the definition of organism should be extended to the level of Arthropoda as this taxonomic level is more appropriate that including individual taxa. | English | Australia |
| 555. | 89 | Translation | **APÉNDICE 2: Lista** ~~Relación~~ indicativa de plagas que pueden ser objeto de preocupación con respecto al movimiento de los medios de crecimiento que acompañan a las plantas para plantar | Término más común | Español | El Salvador |
| 556. | 90 | Substantive | ~~**Bacteria and phytoplasmas**~~<br>• ~~*Agrobacterium*~~<br>• ~~*Ralstonia*~~<br>• ~~*Streptomyces*~~<br>~~**Fungi**~~<br>• ~~*Tilletia*~~<br>~~***Phytophthora* and other oomycetes**~~<br>• ~~*Synchytrium*~~<br>~~**Nematodes**~~<br>• ~~*Bursaphelenchus*~~ | This list is not needed, is incomplete, it mixes different taxonomic entities, it includes pests that are not likely to be associated with plants for planting, it is confusing | English | Uruguay |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • ~~Cyst nematodes, root knot nematodes~~<br>~~**Viruses and virus-like organisms transmitted via nematode vectors**~~<br>~~**Insects and mites**~~<br>• ~~*Anastrepha*~~<br>• ~~*Diabrotica*~~<br>• ~~*Rhagoletis*~~<br>• ~~Agromyzidae~~<br>• ~~Other fruit flies~~<br>• ~~Thrips (below ground part of life cycle)~~<br>• ~~Bark beetles~~<br>~~**Molluscs**~~<br>~~**Plants (beyond the intended plant)**~~<br>• ~~Seeds and other propagules~~ | | | |
| 557. | *90* | Substantive | ~~**Bacteria and phytoplasmas**~~<br>• ~~*Agrobacterium*~~<br>• ~~*Ralstonia*~~ | This list is not needed, is incomplete, it mixes different taxonomic entities, it includes pests that are not likely to be associated with plants for planting, it is confusing | English | COSAVE, Paraguay, Chile, Argentina, Peru, Brazil |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • ~~*Streptomyces*~~<br>~~**Fungi**~~<br>• ~~*Tilletia*~~<br>~~***Phytophthora* and other oomycetes**~~<br>• ~~*Synchytrium*~~<br>~~**Nematodes**~~<br>• ~~*Bursaphelenchus*~~<br>• ~~Cyst nematodes, root knot nematodes~~<br>~~**Viruses and virus-like organisms transmitted via nematode vectors**~~<br>~~**Insects and mites**~~<br>• ~~*Anastrepha*~~<br>• ~~*Diabrotica*~~<br>• ~~*Rhagoletis*~~<br>• ~~Agromyzidae~~<br>• ~~Other fruit flies~~<br>• ~~Thrips (below ground part of life cycle)~~ | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • ~~Bark beetles~~<br>~~**Molluscs**~~<br>~~**Plants (beyond the intended plant)**~~<br>• ~~Seeds and other propagules~~ | | | |
| 558. | *90* | Substantive | ~~**Bacteria and phytoplasmas**~~<br>• ~~*Agrobacterium*~~<br>• ~~*Ralstonia*~~<br>• ~~*Streptomyces*~~<br>~~**Fungi**~~<br>• ~~*Tilletia*~~<br>~~***Phytophthora* and other oomycetes**~~<br>• ~~*Synchytrium*~~<br>~~**Nematodes**~~<br>• ~~*Bursaphelenchus*~~<br>• ~~Cyst nematodes, root knot nematodes~~<br>~~**Viruses and virus-like organisms transmitted via nematode vectors**~~<br>~~**Insects and mites**~~ | This list is not needed, is incomplete, it mixes different taxonomic entities, it includes pests that are not likely to be associated with plants for planting, it is confusing | English | Ecuador, Mexico, OIRSA, Belize, Costa Rica |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • ~~*Anastrepha*~~<br>• ~~*Diabrotica*~~<br>• ~~*Rhagoletis*~~<br>• ~~Agromyzidae~~<br>• ~~Other fruit flies~~<br>• ~~Thrips (below ground part of life cycle)~~<br>• ~~Bark beetles~~<br>~~**Molluscs**~~<br>~~**Plants (beyond the intended plant)**~~<br>• ~~Seeds and other propagules~~ | | | |
| 559. | *90* | Substantive | ~~**Bacteria and phytoplasmas**~~<br>• ~~*Agrobacterium*~~<br>• ~~*Ralstonia*~~<br>• ~~*Streptomyces*~~<br>~~**Fungi**~~ | Delete. Depending on circumstances, nearly any plant pest could be present in growing media. Appendix does not help nor add anything to standard, nor is it refered to in body of text. The information is also too vague and does not provide enough detail to be useful. This appendix is also not referred to in the text body. | English | Australia |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • ~~*Tilletia*~~<br>~~***Phytophthora* and other oomycetes***~~<br>• ~~*Synchytrium*~~<br>~~**Nematodes**~~<br>• ~~*Bursaphelenchus*~~<br>• ~~Cyst nematodes, root knot nematodes~~<br>~~**Viruses and virus-like organisms transmitted via nematode vectors**~~<br>~~**Insects and mites**~~<br>• ~~*Anastrepha*~~<br>• ~~*Diabrotica*~~<br>• ~~*Rhagoletis*~~<br>• ~~Agromyzidae~~<br>• ~~Other fruit flies~~<br>• ~~Thrips (below ground part of life cycle)~~<br>• ~~Bark beetles~~<br>~~**Molluscs**~~<br>~~**Plants (beyond the intended plant)**~~ | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • ~~Seeds and other propagules~~ | | | |
| 560. | 90 | Substantive | **Bacteria and phytoplasmas**<br>• *Agrobacterium*<br>• *Ralstonia*<br>• *Streptomyces*<br>**Fungi**<br>• *Tilletia*<br>***Phytophthora* and other oomycetes**<br>• *Synchytrium*<br>**Nematodes**<br>• *Bursaphelenchus*<br>• Cyst nematodes, root knot nematodes<br>**Viruses and virus-like organisms transmitted via nematode vectors** | None of the nematodes listed are virus vectors, should consider adding nematode examples that vector viruses. Also add viruses vectored in the soi by fungi. | English | United States of America |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | **Insects and mites**<br>• *Anastrepha*<br>• *Diabrotica*<br>• *Rhagoletis*<br>• Agromyzidae<br>• Other fruit flies<br>• Thrips (below ground part of life cycle)<br>• Bark beetles<br>**Molluscs**<br>**Plants (beyond the intended plant)**<br>• Seeds and other propagules | | | |
| 561. | 90 | Substantive | **Bacteria and phytoplasmas**<br>• *Agrobacterium* | Because Synchytrium is not a member of oomycetes but a member of Fungi. Phytophthora is a member of oomycetes. | English | Japan |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • *Ralstonia*<br>• *Streptomyces*<br>**Fungi**<br>• *Tilletia*<br>• *Synchytrium*<br>~~***Phytophthora*** **~~and other oomycetes~~** Oomycetes<br>• ~~*Synchytrium*~~ *Phytophthora*<br>**Nematodes**<br>• *Bursaphelenchus*<br>• Cyst nematodes, root knot nematodes<br>**Viruses and virus-like organisms transmitted via nematode vectors**<br>**Insects and mites**<br>• *Anastrepha*<br>• *Diabrotica*<br>• *Rhagoletis*<br>• Agromyzidae | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • Other fruit flies<br>• Thrips (below ground part of life cycle)<br>• Bark beetles<br>**Molluscs**<br>**Plants (beyond the intended plant)**<br>• Seeds and other propagules | | | |
| 562. | 90 | Substantive | ~~**Bacteria and phytoplasmas**~~<br>• ~~*Agrobacterium*~~<br>• ~~*Ralstonia*~~<br>• ~~*Streptomyces*~~<br>~~**Fungi**~~<br>• ~~*Tilletia*~~<br>~~***Phytophthora* and other oomycetes**~~<br>• ~~*Synchytrium*~~<br>~~**Nematodes**~~<br>• ~~*Bursaphelenchus*~~ | Delete the whole table. Please see comment in paragraph 89. | English | Canada |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • ~~Cyst nematodes, root knot nematodes~~<br>~~**Viruses and virus-like organisms transmitted via nematode vectors**~~<br>~~**Insects and mites**~~<br>• ~~*Anastrepha*~~<br>• ~~*Diabrotica*~~<br>• ~~*Rhagoletis*~~<br>• ~~Agromyzidae~~<br>• ~~Other fruit flies~~<br>• ~~Thrips (below ground part of life cycle)~~<br>• ~~Bark beetles~~<br>~~**Molluscs**~~<br>~~**Plants (beyond the intended plant)**~~<br>• ~~Seeds and other propagules~~ | | | |
| 563. | *90* | Technical | table deleted | see [89] | English | EPPO, Norway |
| 564. | *90* | Technical | **Bacteria and phytoplasmas** | Fusarium is easy to spread associate with growing media. The both genus of Phytophthora and Synchytrium are belong to Oomycetes and are easy to associate with growing media. | English | China |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • *Agrobacterium* | | | |
| | | | • *Ralstonia* | | | |
| | | | • *Streptomyces* | | | |
| | | | **Fungi** | | | |
| | | | • *Tilletia*<br>• Fusarium | | | |
| | | | ***Phytophthora* and other oomycetes** | | | |
| | | | • *Synchytrium*<br>• Phytophthora<br>• Synchytrium | | | |
| | | | **Nematodes** | | | |
| | | | • *Bursaphelenchus* | | | |
| | | | • Cyst nematodes, root knot nematodes | | | |
| | | | **Viruses and virus-like organisms transmitted via nematode vectors** | | | |
| | | | **Insects and mites** | | | |
| | | | • *Anastrepha* | | | |
| | | | • *Diabrotica* | | | |
| | | | • *Rhagoletis* | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • Agromyzidae<br>• Other fruit flies<br>• Thrips (below ground part of life cycle)<br>• Bark beetles<br>**Molluscs**<br>**Plants (beyond the intended plant)**<br>• Seeds and other propagules | | | |
| 565. | 90 | Technical | **Bacteria and phytoplasmas**<br>• *Agrobacterium*<br>• *Ralstonia*<br>• *Streptomyces*<br>**Fungi**<br>• *Tilletia*<br>***Phytophthora* and other oomycetes**<br>• *Synchytrium*<br>**Nematodes** | Fungi can also disseminate viruses | English | NEPPO |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • *Bursaphelenchus*<br>• Cyst nematodes, root knot nematodes<br>**Viruses and virus-like organisms transmitted via nematode and other vectors**<br>**Insects and mites**<br>• *Anastrepha*<br>• *Diabrotica*<br>• *Rhagoletis*<br>• Agromyzidae<br>• Other fruit flies<br>• Thrips (below ground part of life cycle)<br>• Bark beetles<br>**Molluscs**<br>**Plants (beyond the intended plant)**<br>• Seeds and other propagules | | | |
| 566. | 90 | Technical | **Bactéries et phytoplasmes**<br>• Agrobactérie | pour un meilleur classement | Français | Mauritania |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • *Ralstonia*<br>• *Streptomyces*<br>**Champignons,Bigarrure et autres oomycètes**<br>• *Tilletia*<br>~~**Bigarrure et autres oomycètes**~~<br>• *Synchytrium*<br>**Nématodes**<br>• *Bursaphelenchus*<br>• Nématodes à kyste, nématodes à galle des racines<br>**Virus et organismes pseudoviraux transmis par les nématodes**<br>**Insectes et acariens**<br>• *Anastrepha*<br>• *Diabrotica*<br>• *Rhagoletis*<br>• Agromyzidae<br>• Autres mouches des fruits | | | |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • Thrips (sous terre pendant une partie du cycle biologique)<br>• Scolytes<br>**Mollusques**<br>**Végétaux (autres que le végétal concerné)**<br>• Semences et propagules | | | |
| 567. | *90* | Technical | table deleted | See [89]. | English | European Union |
| 568. | *90* | Technical | **Bacteria and phytoplasmas**<br>• *Agrobacterium*<br>• *Ralstonia*<br>• *Streptomyces*<br>**Fungi**<br>• *Tilletia*<br>***Phytophthora* and other oomycetes**<br>• *Synchytrium*<br>**Nematodes**<br>• *Bursaphelenchus* | Because other organisms can transmit virus, for example some fungi as Olpidium spp. | English | Morocco |

| Comm. no. | Para. no. | Comment type | Comment | Explanation | Language | Country |
|---|---|---|---|---|---|---|
| | | | • Cyst nematodes, root knot nematodes | | | |
| | | | **Viruses and virus-like organisms transmitted via nematode** and other **vectors** | | | |
| | | | **Insects and mites** | | | |
| | | | • *Anastrepha* | | | |
| | | | • *Diabrotica* | | | |
| | | | • *Rhagoletis* | | | |
| | | | • Agromyzidae | | | |
| | | | • Other fruit flies | | | |
| | | | • Thrips (below ground part of life cycle) | | | |
| | | | • Bark beetles | | | |
| | | | **Molluscs** | | | |
| | | | **Plants (beyond the intended plant)** | | | |
| | | | • Seeds and other propagules | | | |