Reconciliation report for 2021-018_Draft_Annex1_ISPM23_FieldInspection_eng.docx (2021-018_Draft_Annex1_ISPM23_FieldInspection_eng.docx)

Summary

Title	2024 First consultation: Draft annex to ISPM 23 (Guidelines for inspection) on field inspection (2021-018) (Id 1625)
Description	
Start Date	1 7 2024 2:27 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	In Progress

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
1. Concept of field inspection					
29	Field inspection may be required as a phytosanitary measure with the aim of reducing, directly or indirectly, the pest risk associated with the international movement of plants. However, it should be required only if technically justified according to a pest risk analysis or a comparable examination and evaluation of available scientific information. Field inspection may also be used in ~~voluntary export inspection programmes in~~ exporting countries and in certification programmes for the production of plants for planting for export.	P	*Category : SUBSTANTIVE* **(363) Japan (17 9 2024 4:29 午後)** Japan proposes deletion of this phrase as field inspection not based on import requirements could be required by export country.	O	
5. Other considerations for field inspection					
50	the specific objectives of the field ~~inspection~~inspection (as described section 7.2).	P	*Category : EDITORIAL* **(357) Japan (17 9 2024 3:59 午後)** Refer to the relavant section.	O	
6.3 Visual examination for pests and conformity with other phytosanitary requirements					
76	**6.3 ~~Visual examination for~~ Detection of pests and conformity with other phytosanitary requirements**	P	*Category : EDITORIAL* **(365) Japan (17 9 2024 4:40 午後)** Edit the title to match the titles of two subsections.	O	
7.3 Circumstances when field inspection may be used					
107	In some circumstances, equivalent measures, such as sampling from a consignment and laboratory testing, may be more suitable than field inspection to provide assurance that plants are free from the target pest, or visual examination of plants in the field may not be sufficient to confirm presence or absence of the pest. Examples of such circumstances include the following:	P	*Category : EDITORIAL* **(358) Japan (17 9 2024 4:07 午後)** Clarify the sentence.	O	
7.4 Field-inspection methods					

118	When selecting the method for a field inspection, section 5 and section 6.3.1 of this annex should be taken into account and the phytosanitary import requirements of the importing country should be ~~taken into account~~met. The field-inspection method should be designed to detect the target regulated pest. The method should be reviewed as necessary to take account of experience gained and new technical developments. The method may include one or more of the following:	P	*Category : SUBSTANTIVE* **(360) Japan (17 9 2024 4:14 午後)** When a field inspection is part of the import requirements, the method of a filed inspection should be selected to meet the import requirements. The original text "import requirements should be considered" could be misunderstood as if the exporting country could choose a method that does not meet the import requirements.	O	
8. Field inspection outcome					
125	**8. Field inspection outcome**	C	*Category : EDITORIAL* **(375) Japan (20 9 2024 5:16 午後)** Since section 8 (Field inspection outcome) and section 9 (Documentation) are part of the field inspection process, they would be better to include in section 7.1 (The field-inspection process).	O	
127	If the target pest is detected or conformity with phytosanitary requirements is not verified, further actions should be ~~taken~~taken under the responsibility of the NPPO. These actions may be determined by the nature of the findings, considering the pest or other objectives, and the circumstances.	P	*Category : SUBSTANTIVE* **(359) Japan (17 9 2024 4:10 午後)** To clarify further actions should be taken under the responsibility of the NPPO of the exporting country in the event that target pest is detected as a result of field inspection.	O	
9. Documentation					
129	National plant protection organizations should develop official documentation for conducting field inspections and managing or accessing inspection records and outcomes. Documentation is necessary for phytosanitary certification for consignments derived from the plants and essential for promoting consistency, improving the interpretation and reliability of results, and facilitating the audit and verification of field-inspection activities.	P	*Category : SUBSTANTIVE* **(361) Japan (17 9 2024 4:17 午後)** Documents for managing the records and results of field inspections are essential to confirm whether the import requirements of the importing country are met for issuing phytosanitary certificates, not only be used for auditing or veryfing the results of field inspections.	O	
130	The NPPO, or entities authorized to conduct field inspection on behalf of the NPPO, should retain all records about each field inspection for as long as is needed to allow trace-back from a non-compliant consignment or to facilitate the later review of results if necessary. Such records should be made available for audit by the NPPO, or entities authorized to conduct audits on behalf of the NPPO, and to the NPPO of an importing country on request. 10. Review of field inspection	P	*Category : SUBSTANTIVE* **(362) Japan (17 9 2024 4:20 午後)** Japan proposes adding a section on review of the effectiveness of field inspection by importing country. The importing country may conduct monitoring during import inspection to verify the effectiveness and conformity of field inspections , for example, when a target pest for field inspection was repeatedly detected from imported	O	

	In addition to section 2.6 of the core text of this standard, monitoring by the importing country may be conducted in order to review the validity of the field inspections system as appropriate (e.g. when a non-compliance is identified).		consignments. This may be applied before auditing by the importing country in the exporting country.		
Potential implementation issues					
139	This section is not part of the standard. The Standards Committee in May 2016 requested the Secretariat to gather information on any potential implementation issues related to this draft. Please provide details and proposals on how to address these potential implementation issues.	C	*Category : SUBSTANTIVE* **(364) Japan (17 9 2024 4:34 午後)** In relateion to paragraph 73 of section 6.1 (Examination of relevant documents), Japan considers it useful to provide examples of the records that ensure traceability for implementation. Examples of the records that ensure to keep traceability include: — the request form of the field inspection (e.g. name of plants, variety, destination country, producer, number of plants) — the map of the field — the report of the inspection results — the records of storage until export (e.g. the document for the plants, such as seeds, regarding the storage in suitable period until export after field inspection that ensure not to be reinfected by pest)	O	

Reconciliation report for 2021-010_Draft_ISPM_26_eng.docx (2021-010_Draft_ISPM_26_eng.docx)

Summary

Title	2024 First consultation:Draft revision of ISPM 26 (Establishment and maintenance of pest free areas for fruit flies(Tephritidae) (Id 1624)
Description	Draft revision of ISPM 26 (Establishment and maintenance of pest free areas for fruit flies (Tephritidae)) (2021-010)
Start Date	1 7 2024 2:20 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	In Progress

Participants

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
BACKGROUND					
56	Areas initially free from fruit flies may remain naturally free from fruit flies as a result of the presence of physical barriers or climatic conditions, or they may be maintained free through movement restrictions and related measures (even though fruit flies have the potential to establish there). Areas where fruit flies are present may be made free by an eradication programme (ISPM 9 (*Guidelines for pest eradication programmes*)). ~~ISPM 4 provides general guidance on the establishment of pest free areas.~~	P	*Category : EDITORIAL* **(583) Japan (19 9 2024 4:34 午後)** To avoid duplication with paragraph 55.	O	
5.6 Official declaration of the fruit fly pest free area					
116	When the pest status is determined as absent in accordance with ISPM 8 (including when the pest has been eradicated in accordance with ISPM 9), the NPPO of the exporting country should make an official declaration that the area is free from the target fruit ~~fly~~fly as appropriate. All internal management procedures and measures to maintain the FF-PFA (see ISPM 4 and section 6) should be in place before any declaration is made.	P	*Category : SUBSTANTIVE* **(580) Japan (19 9 2024 4:25 午後)** When there is no inquiry from importing countries, an official declaration of the FF-PFA may not be made.	O	
6.2 Surveillance for maintaining the fruit fly pest free area					
125	After declaring the FF-PFA, the surveillance programme should be continued at a level assessed as providing sufficient confidence that the FF-PFA is being maintained. Regular technical reports on the surveillance activities should be generated (e.g. monthly in countries where fruit flies are endemic). The requirements for this surveillance are essentially the same as for the establishment of the FF-PFA (see section 5.2 and Annex 1).	P	*Category : EDITORIAL* **(585) Japan (19 9 2024 4:49 午後)**	O	
7.3 Withdrawal					
154	If the target fruit fly becomes established in the ~~FF-PFA~~ FF-PFA, or a part of it,	P	*Category : SUBSTANTIVE*	O	

	and if eradication is no longer pursued, the NPPO of the exporting country should withdraw the FF-PFA status from the ~~area~~ area, or the part of it, and notify both stakeholders domestically and the NPPOs of importing countries, the latter in accordance with ISPM 17.		**(581) Japan (19 9 2024 4:27 午後)** There may be a case that only a part of the FF-PFA would be withdrawed the FF-PFA status.		
2. Fruit fly host-sampling procedures					
186	the effect of host fruit maturity on infestation,	P	*Category : SUBSTANTIVE* **(582) Japan (19 9 2024 4:29 午後)** Regarding fruit fly hosts, the effect of maturity is only taken into account for fruits.	O	
3. Handling of samples and identification of species					
203	~~The NPPO of the exporting country should have in place, or have ready access to, adequate infrastructure and trained personnel to identify immature stages or emerged adults of the target fruit fly in a timely manner, preferably within 48 hours.~~	P	*Category : EDITORIAL* **(584) Japan (19 9 2024 4:39 午後)** To avoid duplication with paragraph 99.	O	
2.1 Determination of the pest status upon detection					
223	If the detection of the target fruit fly could constitute a breeding population that is not transient (i.e. one of the other “present” categories described in ISPM 8), a delimiting survey should be implemented immediately after the detection. The delimiting survey may include placement of additional traps, an increased ~~trap-examination rate~~ frequency of trap examination and host sampling.	P	*Category : TECHNICAL* **(586) Japan (19 9 2024 4:53 午後)** It is unclear what trap-examination rate means. It sould be clarified that the delimiting survey may include an increased frequency of trap examination.	O	
2.2 Suspension of fruit fly pest free area status					
225	**2.2 Suspension or withdrawal of fruit fly pest free area status**	P	*Category : EDITORIAL* **(587) Japan (19 9 2024 4:55 午後)** Add "withdrawal" to the section title because this section includes withdrawal of FF-PFA.	O	
1. Establishment of an eradication area					
246	The eradication area should cover the infested area. In addition, where necessary a buffer zone should be established ~~in accordance with this standard and~~ as determined by delimiting surveys, taking into account the factors listed in section 5.1 of the core text of this standard.	P	*Category : EDITORIAL* **(588) Japan (19 9 2024 4:58 午後)** As "in accordance with this standard" is covered in "in section 5.1 of the core text of this standard.", the duplication should be removed.	O	
2.1 Production					
312	During the production period within the eradication area, the NPPO of the exporting country may require the application of control measures to avoid infestation, such as mechanical and cultural ~~controls~~controls (e.g., removal and destruction of host material, soil disturbance(ground swamping and ploughing), etc.), soil chemical treatment, insecticide bait application technique, bait stations, male annihilation technique, mass trapping, sterile insect technique and biological control.	P	*Category : SUBSTANTIVE* **(589) Japan (19 9 2024 5:12 午後)** The current ISPM 26 Annex 3 lists mechanical and cultural control measures at the production stage, such as removal and disposal of host material, use of resistant varieties, bagging, selection, field sanitation management, and burial in the ground. Add them as examples. Also soil fumigation would be added.	O	

Reconciliation report for 2018-019_DP_M_mali.docx (2018-019_DP_M_mali.docx)

Summary

Title	2024 consultation: Draft annex to ISPM 27: Meloidogyne mali. (2018-019) (Id 1627)
Description	
Start Date	1 7 2024 2:38 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	Overdue

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
1. Pest information					
48	The root-knot nematode genus *Meloidogyne* comprises at present more than 100 formally described species. All species are endoparasitic and some are well known for their negative impact on crops worldwide ~~(Karssen,~~ (Karssen *et al.* ~~Wesemael and Moens~~, 2013).	P	*Category : EDITORIAL* **(131) Japan (17 9 2024 12:03 午後)**	O	
49	A relatively small number of the described species are known to parasitize trees and shrubs (Jepson, 1987). One such species is *Meloidogyne mali* Itoh, Ohshima and Ichinohe, 1969 – a species described from *Malus domestica* (apple) in Japan (Itoh, Ohshima and Ichinohe, 1969). *Meloidogyne* ~~*M.*~~ *mali* is a polyphagous and economically important pest species that induces large root galls on host plants, affecting the ability of the plant to take up water and nutrients from the soil. It was added to the European and Mediterranean Plant Protection Organization's *List of pests recommended for regulation as quarantine pests* (EPPO A2 List: EPPO, n.d.(a)) in 2017.	P	*Category : EDITORIAL* **(133) Japan (17 9 2024 12:07 午後)** If the scientific name comes at the beginning of the sentence, the genus name should not be omitted.	O	
49	A relatively small number of the described species are known to parasitize trees and shrubs (Jepson, 1987). One such species is *Meloidogyne mali* Itoh, Ohshima and Ichinohe, 1969 – a species described from *Malus domestica* (apple) in Japan ~~(Itoh,~~ (Itohet *et al.* ~~Ohshima and Ichinohe~~, 1969). *M. mali* is a polyphagous and economically important pest species that induces large root galls on host plants, affecting the ability of the plant to take up water and nutrients from the soil. It was added to the European and Mediterranean Plant Protection Organization's *List of pests recommended for regulation as quarantine pests* (EPPO A2 List: EPPO, n.d.(a)) in 2017.	P	*Category : EDITORIAL* **(132) Japan (17 9 2024 12:05 午後)**	O	
50	~~*M.*~~ *Meloidogyne* *mali* is widely distributed in Japan, where the stunting and severe decline of infected trees in orchards has been reported (Nyczepir and Halbrendt, 1993). It has been recorded parasitizing a large number of host trees, shrubs and	P	*Category : EDITORIAL* **(134) Japan (17 9 2024 12:07 午後)**	O	

	herbaceous plants, as listed in the EPPO (2017) pest risk analysis for *M. mali*. To date, very little information is available on yield losses in cultivated plants. As this is an emerging pest on many tree and ornamental plant hosts, the economic impacts of the loss of these hosts in natural environments have also not yet been established.~~ ~~ The following examples, however, may provide an indication of the impact:				
52	*Malus domestica* (apple): ~~*M.*~~ *Meloidogyne mali* is described as one of the most damaging nematodes for apples in northern Japan, causing the stunting and severe decline of trees in orchards ~~(Itoh,~~ (Itoh *et al.*~~Ohshima~~, 1969; Nyczepir and ~~Ichinohe~~Halbrendt, 1993). *Meloidogyne* ~~, 1969; Nyczepir and Halbrendt, 1993).~~ ~~*M.*~~ *mali* reduces apple tree growth by 15–43% and fruit yield is reduced on heavily infested trees (Nyczepir and Halbrendt, 1993).	P	*Category : EDITORIAL* **(135) Japan (17 9 2024 12:09 午後)**	O	
54	~~*M.*~~ *Meloidogyne mali* has sedentary endoparasitic habits. Males are common, as *M. mali* is a sexually reproducing nematode (Janssen *et al.*, 2017). In Japan, the life cycle of *M. mali* on *Maluspumila* has been observed to last 18–22 weeks, with one generation per year (Sakurai *et al.*, 1973; Inagaki, 1978). The development from egg masses to second-stage ~~(J2)~~ juveniles (J2s) in those egg masses takes approximately two weeks. Further generations in the growing season may develop, depending on the temperature and the presence of perennial host plants; this is also reported for the related species *M. ardenensis*. Egg-laying females of *M. mali* (and *M. ardenensis*) have been observed in the Kingdom of the Netherlands in early March, which may indicate that overwintering of young females is possible (G. Karssen, personal communication, 2024). It has also been suspected that *M. mali* overwinters within the roots of infested plants, although the developmental stage at which this occurs is not yet known (Ahmed *et al.*, 2013).	P	*Category : EDITORIAL* **(136) Japan (17 9 2024 12:19 午後)**	O	
55	*M. mali* shares geographical areas and hosts with ~~five~~ four other species of *Meloidogyne* for which it could be confused on the basis of its morphology: *M. ardenensis* in Europe (on *Quercus robur* (Subbotin, Palomares-Rius and Castillo, 2021)), *M. camelliae* in ~~Japan and Thailand~~Japan (on *Solanum lycopersicum* (Subbotin, Palomares-Rius and Castillo, 2021)), *M. paramali* in Japan (on *Acer palmatum* (Gu *et al.*, 2023)), and *M. suginamiensis* in Japan (on *Acer* sp., *Morus* sp., *Prunus* sp., *Ulmus* sp. (Toida and Yaegashi, 1984; Brown, Dalmasso and Trudgill, 1993; Subbotin, Palomares-Rius and Castillo, 2021))~~ and *M. vitis* in Japan (on *Vitis vinifera* (Yang et al., 2021))~~.	P	*Category : TECHNICAL* **(289) Japan (24 9 2024 11:23 午前)** Meloidogyne vitis is not distributed in Japan, so the description "M. vitis in Japan (on Vitis vinifera (Yang et al., 2021)) " is incorrect. Meloidogyne mali is not distributed in Thailand.	O	
55	*M. mali* shares geographical areas and hosts with five species of *Meloidogyne* for which it could be confused on the basis of its morphology: *M. ardenensis* in Europe (on *Quercus robur* (Subbotin, Palomares-Rius and Castillo, 2021)), *M. camelliae* in Japan and Thailand (on *Solanum lycopersicum* (Subbotin, Palomares-Rius and Castillo, 2021)), *M. paramali* in Japan (on *Acer palmatum* (Gu *et al.*, 2023)), *M. suginamiensis* in Japan (on *Acer* sp., *Morus* sp., *Prunus* sp.,	P	*Category : TECHNICAL* **(291) Japan (24 9 2024 11:29 午前)** Brown, Dalmasso and Trudgill, 1993 does not provide any information on the distribution of M. suginamiensis in Japan.	O	

	Ulmus sp. (Toida and Yaegashi, 1984; ~~Brown, Dalmasso and Trudgill, 1993;~~ Subbotin, Palomares-Rius and Castillo, 2021)) and *M. vitis* in Japan (on *Vitis vinifera* (Yang *et al.*, 2021)).				
55	~~*M.*~~ *Meloidogyne mali* shares geographical areas and hosts with five species of *Meloidogyne* for which it could be confused on the basis of its morphology: *M. ardenensis* in Europe (on *Quercus robur* ~~(Subbotin,~~ (Subbotin *et al* ~~Palomares-Rius and Castillo~~, 2021)), *M. camelliae* in Japan and Thailand (on *Solanum lycopersicum* ~~(Subbotin,~~ (Subbotin *et al* ~~Palomares-Rius and Castillo~~, 2021)), *M. paramali* in Japan (on *Acer palmatum* (Gu *et al.*, 2023)), *M. suginamiensis* in Japan (on *Acer* sp., *Morus* sp., *Prunus* sp., *Ulmus* sp. (Toida and Yaegashi, 1984; Brown, Dalmasso and Trudgill, 1993; ~~Subbotin,~~ Subbotin *et al* ~~Palomares-Rius and Castillo~~, 2021)) and *M. vitis* in Japan (on *Vitis vinifera* (Yang *et al.*, 2021)).	P	*Category : EDITORIAL* **(290) Japan (24 9 2024 11:24 午前)**	O	
3.1 Hosts and symptoms					
63	~~*M.*~~ *Meloidogyne mali* induces galls up to 0.5 cm in diameter on young roots (Figure 1); however, on older roots these galls become larger (1–2 cm in diameter; Figure 2). These large galls are typical for *M. mali* (see also the original description of *M. mali* in Itoh, Ohshima and Ichinohe (1969) and Palmisano and Ambrogioni (2000)).	P	*Category : EDITORIAL* **(138) Japan (17 9 2024 12:28 午後)**	O	
65	The principal hosts of *M. mali* are *Malus* spp. (ornamental apple species), *Ulmus* spp. (elms) and *Morus* spp. (mulberry). It has also been recorded parasitizing a wide range of other plants, including trees, shrubs and herbaceous plants, such as *Acer* spp. (Japanese maple), *Apium graveolens* (celery), *Arctium lappa* (greater burdock), *Castanea crenata* (Japanese chestnut), *Cucumis sativus* ~~(cucumber) and~~ (cucumber), *Euonymus fortunei* (wintercreeper) and *Lagerstroemia indica* (Indian crape myrtle) (EPPO, 2017, n.d.(b)).	P	*Category : EDITORIAL* **(139) Japan (17 9 2024 12:29 午後)**	O	
3.2 Extraction					
67	Above-ground symptoms of heavily infested plants include stunting and yellowing, while below ground typical root galls are found (Figure 1 and Figure 2). Laboratory analysis is performed from a sample of 0.5–1 kg soil or growing media mixed with the roots from 3–5 host plants. To detect the presence of nematodes, it is necessary to extract nematodes from roots (all life stages possibly recovered), soil or growing media (only motile males and ~~J2 juveniles~~ J2s recovered). For all type of samples a modified Baermann funnel method (e.g. a Whitehead tray), can be used for nematode extraction (EPPO, 2013). Root galls, if present, are analysed using a dissecting microscope. These galls may have associated egg masses. If galls with egg masses are observed, mature swollen females, males and ~~J2 juveniles~~ J2s can be obtained. Mature females can be isolated from the roots by dissecting the root tissue under a dissecting microscope with transmitted light. They should be transferred using a pipette, fine forceps (or tweezers) or a fine paint brush to a 0.9% NaCl solution in order to avoid possible osmotic disruption in tap	P	*Category : EDITORIAL* **(140) Japan (17 9 2024 12:31 午後)**	O	

	water. Alternatively, enzymatic digestion of roots with cellulase and pectinase can be used for the recovery of sedentary stages (females and ~~third- (J3)~~ third-stage juveniles (J3s) and ~~fourth- (J4) stage juveniles)~~ fourth-stage juveniles (J4s)) and eggs (Araya ~~and Caswell-Chen~~*et al.*, 1993). Males and ~~J2 juveniles~~ J2s can be obtained from plant tissues or soil by suitable extraction techniques (see, for example, EPPO (2013)).				
68	Specimens suspected of belonging to the genus *Meloidogyne* may be distinguished based on their morphology. Second-stage juveniles of *M. mali* (and other *Meloidogyne* spp.) are relatively small in length and differ from other plant-parasitic nematodes by having a delicate stylet with distinct basal knobs, the lip region being slightly set off from the body, and the metacorpus and plates being relatively large, distinct and oval-shaped. The tail is typically conoid and slim, with a prominent hyaline region. The body of adult males is vermiform and much longer than the ~~J2 juveniles~~J2s, with a sclerotized cephalic framework set off from the body, a large and distinct stylet and a pair of spicules near to the terminus.	P	*Category : EDITORIAL* **(141) Japan (17 9 2024 12:33 午後)**	O	
4. Identification					
70	~~*M. mali* can be identified solely based on morphology; however, a~~It is very difficult to identify *M. mali* solely based on morphological methods; A combination of ~~morphological, biochemical~~ morphological methods and biochemical or molecular biology methods is required for identification to species level. ~~would further support diagnosis.~~	P	*Category : TECHNICAL* **(270) Japan (18 9 2024 8:14 午前)** It is difficult to accurately identify root-knot nematode species, including M. mali, based on morphological characteristics alone. If there are any literature or information on simple molecular biology methods that do not require sequencing, such information should be added here.	O	
4.1 Preparation of material					
72	As with other species of plant-parasitic nematodes, morphological observation should be carried out on as many adult and juvenile specimens as possible, with a recommended minimum of at least one female and ten ~~J2 juveniles~~ J2s to confirm diagnosis. There are numerous published methods for fixing and processing nematode specimens for study, summarized in Manzanilla-López ~~and Marbán-Mendoza~~ (2012). Processing of nematodes in anhydrous glycerol is recommended, as important taxonomic features can be obscured if specimens are not cleared sufficiently.	P	*Category : EDITORIAL* **(143) Japan (17 9 2024 12:34 午後)**	O	
4.2 Identification using morphological characteristics					
82	Differential interference contrast is recommended for observing and identifying specimens mounted (in fixative) on microscope slides. A complete key has been published on the genus *Meloidogyne* by Jepson (1987) and updated by ~~Subbotin,~~ Subbotin *et al.* ~~Palomares-Rius and Castillo~~ (2021). This protocol presents the main morphological and morphometric characteristics to assist with discrimination between similar species, but, as noted above, identification to species level should be confirmed by molecular or biochemical methods (EPPO, 2018).	P	*Category : EDITORIAL* **(144) Japan (17 9 2024 12:35 午後)**	O	

4.2.1	Morphological characteristics of Meloidogyne spp.				
84	Sedentary females are annulated, pearly white and globular to pear-shaped, 400–1300 µm long and 300–700 µm wide. The stylet is dorsally curved, 10–25 µm long, with rounded to ovoid stylet knobs set off to sloping posteriorly. The males are vermiform, annulated, slightly tapering anteriorly, bluntly rounded posteriorly, 700–2000 µm long and 25–45 µm wide. The stylet is 13–30 µm long, with stylet knobs that are variable in shape. The ~~J2 juveniles~~ J2s are vermiform, annulated, tapering at both ends, 250–700 µm long and 12–18 µm wide, with the tail length 15–100 µm and the hyaline tail part 5–30 µm in length. Both males and ~~J2 juveniles~~ J2s have lateral fields with four incisures (EPPO, 2018).	P	*Category : EDITORIAL* **(145) Japan (17 9 2024 12:36 午後)**	O	
4.2.2	Morphology and morphometrics of Meloidogyne mali				
86	The following descriptions have been amended from ~~Itoh, Ohshima and Ichinohe~~ Itoh *et al.* (1969), Palmisano and Ambrogioni (2000), ~~Gu,~~ Gu *et al.*~~Fang and Liu~~ (2020) and Ahmed *et al*. (2013) (cited in EPPO, 2018).	P	*Category : EDITORIAL* **(146) Japan (17 9 2024 12:37 午後)**	O	
92	Body length is reported to typically range from 390 to 450 µm (but with certain populations reported to have a range of 362–507 µm ~~(Gu,~~ (Gu *et al*~~Fang and Liu~~, 2020)). This species has a short tail (23–39 µm) and short hyaline tail part (4–12 µm). The stylet knobs are small and rounded and slope slightly posteriorly. The hemizonid is positioned posterior to the excretory pore in contrast to the condition in males. The tail is conical and usually ends in a finely pointed tip. The hyaline tail part is clearly delimited anteriorly with a few cuticular constrictions typically present (Figure 3 and Figure 7) (EPPO, 2018).	P	*Category : EDITORIAL* **(292) Japan (24 9 2024 11:35 午前)**	O	
94	~~*M.*~~ *Meloidogyne mali* is morphologically close to five other species of *Meloidogyne* that share some hosts and areas of distribution (section 1): *M. ardenensis*, *M. camelliae*, *M. paramali*, *M. suginamiensis* and *M. vitis*. It differs from these species by having a finely pointed tail terminus in ~~J2 juveniles~~J2s (Figure 3, Figure 7 and Figure 8), while the tail tips are broadly rounded in *M. ardenensis*, *M. camelliae* and *M. suginamiensis* (Figure 7), the tail in *M. paramali* ~~J2 juveniles~~ J2s has a finely rounded to broadly pointed (never sharply pointed) terminus and a shorter hyaline region, and the tail in *M. vitis* ~~J2 juveniles~~ J2s is longer with a variable terminus (Figure 8) (EPPO, 2018; Yang *et al*., 2021; Gu *et al*., 2023). In addition, ~~J2 juveniles~~ J2s of *M. camelliae* have a longer body length and an anterior position of the hemizonid in relation to the excretory pore.	P	*Category : EDITORIAL* **(148) Japan (17 9 2024 12:48 午後)**	O	
95	The star-shaped perineal pattern of *M. camelliae* allows an easy separation from *M. mali*, *M. ardenensis*, *M. paramali*, *M. suginamiensis* and *M. vitis* (Figure 9). The female perineal pattern of *M. vitis* differs from *M. mali* in that there is typically a moderately high dorsal arch, and there are no lateral lines in the lateral field (Figure 9) (Yang *et al*., 2021). ~~*M. paramali* has a similar perineal pattern to *M. mali* and can be distinguished from the latter by the distinct lateral fields (Figure 9) (Gu *et al*., 2023).~~	P	*Category : TECHNICAL* **(149) Japan (17 9 2024 12:49 午後)** Regarding the perineal pattern of M. mali, Itoh et al. (1969) states that "Lateral fields clearly marked with single or double incisures." On the other hand, Gu et al. (2023) states about M. paramali, "Perineal patterns were oval or irregular, with distinct lateral lines." These references indicate that both species have distinct lateral lines, so	O	

			the description in para 95 "M. paramali can be distinguished from M. mali by having distinct lateral bands." is incorrect.		
96	Some of the morphological and morphometric characters that can be used to differentiate the ~~females~~females (Figure 9), males (Figure ~~10)~~ 9) and ~~J2 juveniles~~ J2s (Figure 8) of *M. mali*, *M. ardenensis*, *M. camelliae*, *M. paramali*, *M. suginamiensis* and *M. vitis* are summarized in Table 1.	P	*Category : EDITORIAL* **(150) Japan (17 9 2024 12:51 午後)**	O	
148	~~23–39~~ 30–34 (31)	P	*Category : EDITORIAL* **(151) Japan (17 9 2024 12:52 午後)**	O	
155	4–12 (8)	C	*Category : TECHNICAL* **(152) Japan (17 9 2024 12:54 午後)** The scientific evidence for the measurement of J2 hyaline tail part is unclear. The reference Itoh et al. (1969) does not include any measurement values of the J2 hyaline tail part. If the data was quoted from another source, this should be stated.	O	
156	10–13 (12)	C	*Category : TECHNICAL* **(153) Japan (17 9 2024 12:55 午後)** The scientific evidence for the J2 hyaline tail part measurement is unclear. The reference de A. Santos (1968) does not include any measurement values of the J2 hyaline tail part. If the data was quoted from another source, this should be stated.	O	
159	3–5 (4)	C	*Category : EDITORIAL* **(154) Japan (17 9 2024 12:56 午後)** The scientific evidence for mean length of the J2 hyaline tail part is unclear. The reference Toida and Yaegashi (1984) does not show mean length of the J2 hyaline tail part. If the data was quoted from another source, this should be stated.	O	
180	*M. mali*: Itoh, Y., Ohshima, Y. & Ichinohe, M. 1969. A root-knot nematode, *Meloidogyne mali* n. sp. on apple-tree from Japan (Tylenchida: Heteroderidae). *Applied Entomology and Zoology*, ~~4~~4(4): 194–202. https://doi.org/10.1303/aez.4.194	P	*Category : EDITORIAL* **(155) Japan (17 9 2024 12:57 午後)**	O	
181	*M. ardenensis:* de A. Santos, M.S.N. 1968. *Meloidogyne ardenensis* n. sp. (Nematoda: Heteroderidae), a new British species of root-knot nematode. *Nematologica (1967)*, ~~13~~13(4): 593–598. https://doi.org/10.1163/187529267X00418	P	*Category : EDITORIAL* **(156) Japan (17 9 2024 12:59 午後)** This literature should be added to 8. References.	O	
182	*M. camelliae*: Golden, A.M. 1979. Description of *Meloidogyne camelliae* n. sp. and *M. querciana* n. sp. (Nematoda: ~~Meloidogynidae)~~ Meloidogynidae), with SEM and host-range observations. *Journal of Nematology*, ~~11~~11(2): 175–189. https://journals.flvc.org/jon/article/view/65150	P	*Category : EDITORIAL* **(157) Japan (17 9 2024 1:00 午後)** This literature should be added to 8. References.	O	
184	*M. suginamiensis*: Toida, Y. & Yaegashi, T. 1984. Description of *Meloidogyne suginamiensis* n. sp. (Nematoda: Meloidogynidae) from mulberry in Japan. *Japanese Journal of Nematology*, ~~12~~14: 49–57.	P	*Category : EDITORIAL* **(158) Japan (17 9 2024 1:01 午後)**	O	

4.3 Identification using molecular methods					
187	This section provides information regarding molecular methods that enable the identification of *M. mali* from isolated nematodes at any life stage. *Meloidogyne* ~~*M.*~~ *mali* cannot be identified solely on the basis of molecular or biochemical methods.	P	*Category : EDITORIAL* **(159) Japan (17 9 2024 1:03 午後)**	O	
4.3.2 DNA barcoding					
196	Ribosomal (r)RNA-based molecular barcoding remains a powerful tool for *M. mali* delimitation ~~(Gu,~~ (Gu *et al.*~~Fang and Liu~~, 2020). Several genomic regions have been directly sequenced from isolated nematodes for the purpose of species identification of *M. mali* and differentiation of different *Meloidogyne* species (EPPO, 2016). These regions include the 18S small subunit (SSU), internal transcribed spacers (ITS), the 28S large subunit (LSU) of ribosomal DNA, and the cytochrome c oxidase I (COI) mitochondrial DNA region (Holterman *et al*., 2009; Ahmed *et al*., 2013). In *M. mali*, COI sequences are more homogeneous than rRNA sequences; COI gene sequencing is also the most efficient method for DNA barcoding. A single gene can be used for DNA barcoding, but several genes used together give a more reliable identification. The targeted region is amplified by PCR and the amplicons are sequenced either directly or after they are cloned. A protocol for DNA barcoding based on COI, SSU and LSU is described in Appendix 5 of EPPO (2016) and can be used to support the identification of *M. mali*.	P	*Category : EDITORIAL* **(161) Japan (17 9 2024 1:04 午後)**	O	
197	Reference to reliable, curated databases for DNA sequencing, such as EPPO-Q-bank (https://qbank.eppo.int/nematodes/), should be made (Bonants, Edema and Robert, 2013; EPPO, 2018). Other sources of reference sequences may be used, such as GenBank (https://www.ncbi.nlm.nih.gov/genbank/: sequence MT406757 for the LSU barcode of *M. mali*).	P	*Category : EDITORIAL* **(162) Japan (17 9 2024 1:05 午後)**	O	
4.4 Identification using a biochemical method: isozyme electrophoresis					
216	Isozymes are very useful for the identification of root-knot nematodes and are therefore usually included in the descriptions of new *Meloidogyne* species. In particular, the isozymes esterase (EST; EC 3.1.1.1) and malate dehydrogenase (MDH; EC 1.1.1.37) are commonly used for the identification of young egg-laying *Meloidogyne* females. This life stage is used because it has the highest protein content. The advantages of the isozyme electrophoresis method are that it is relatively simple, cheap and fast (within four hours, a complete run can be performed, including preparation and staining). It can also detect species mixtures easily when individual females are used. For most described *Meloidogyne* species, the isozymes patterns are available (see ~~Subbotin,~~ Subbotin *et al.*~~Palomares-Rius and Castillo~~, 2021). The disadvantage of this method is the need for young egg-laying females; this stage is not always available. It can be overcome by first culturing a particular *Meloidogyne* species, but this is time-consuming (taking 6 to	P	*Category : EDITORIAL* **(163) Japan (17 9 2024 1:06 午後)**	O	

	12 weeks).				
219	The species-specific phenotype of *Meloidogyne javanica*, with relative mobility (Rm) values of 1.0, 1.25 and 1.4 (Figure 11), should be used as a standard control in each gel. The EST and MDH isozyme pattern for *M. mali* can be compared with the isozyme data of Carneiro *et al*. (2000), Esbenshade and Triantaphyllou (1985) and ~~Subbotin~~Subbotin *et al*.~~,~~ (2021). *Meloidogyne* ~~Palomares-Rius and Castillo (2021).~~ ~~*M.*~~ *mali* has a weak single EST band, the VS1 type, as in Figure 11A (see Esbenshade and Triantaphyllou (1985) for the isozyme notations or types)), while the MDH N1 type (Figure 11B) is most common. N1a and N3 types have also been observed within *M. mali* (Ahmed *et al*., 2013; Figure 11B, lanes 10 and 11, respectively). Some variation in isozyme types is common in sexually reproducing organisms.	P	*Category : EDITORIAL* **(164) Japan (17 9 2024 1:09 午後)**	O	
8. References					
262	**Araya, M. & Caswell-Chen, E.P.** 1993. Enzymatic digestion of roots for the recovery of root-knot nematode developmental stages. *Journal of Nematology*, ~~25~~25(4): 590–595. https://journals.flvc.org/jon/article/view/66547	P	*Category : EDITORIAL* **(165) Japan (17 9 2024 1:10 午後)**	O	
263	**Bonants, P., Edema, M. & Robert, V.** 2013. Q-bank, a database with information for identification of plant quarantine plant pest and diseases. *EPPO Bulletin*, ~~43~~43(2): 211–215. https://doi.org/10.1111/epp.12030	P	*Category : EDITORIAL* **(166) Japan (17 9 2024 1:10 午後)**	O	
264	~~**Brown, D.J.F., Dalmasso, A. & Trudgill, D.L.** 1993. Nematode pests of deciduous soft fruits and vines. In: K. Evans, D.L. Trudgill, J.M. Webster, eds. *Plant parasitic nematodes in temperate agriculture*, pp. 427–462. Wallingford, UK, CABI.~~	P	*Category : EDITORIAL* **(167) Japan (17 9 2024 1:11 午後)**	O	
266	**Carneiro, R.M.D.G., Almeida, M.R.A. & Quénéhervé, P.** 2000. Enzyme phenotypes of *Meloidogyne* spp. populations. *Nematology*, ~~2~~2(6): 645–654. https://doi.org/10.1163/156854100509510	P	*Category : EDITORIAL* **(168) Japan (17 9 2024 1:11 午後)**	O	
267	**EPPO (European and Mediterranean Plant Protection Organization)**. 2013. ~~*Nematode extraction*~~Nematode extraction. PM 7/119(1). *EPPO Bulletin*, ~~43~~43(3): 471–495. https://doi.org/10.1111/epp.12077	P	*Category : EDITORIAL* **(169) Japan (17 9 2024 1:12 午後)**	O	
268	**EPPO**. 2016. DNA barcoding as an identification tool for a number of regulated pests. PM 7/129(1). *EPPO Bulletin*, ~~46~~46(3): 501–537. https://doi.org/10.1111/epp.12344	P	*Category : EDITORIAL* **(170) Japan (17 9 2024 1:13 午後)**	O	
274	**Esbenshade, P. R. & Triantaphyllou, A. C.** 1985. Use of enzyme phenotypes for identification of *Meloidogyne* species. *Journal of Nematology*, ~~17~~17(1): 6–20. https://journals.flvc.org/jon/article/view/65610	P	*Category : EDITORIAL* **(171) Japan (17 9 2024 1:14 午後)**	O	
275	**Gu, J.~~F.~~, Fang, Y. & Liu, L.** 2020. Morphological and molecular ~~analysis~~ analyses of a *Meloidogyne mali* population with high intragenomic rRNA polymorphism. *Journal of Nematology*, ~~52~~52(1): e2020-105. https://doi.org/10.21307/jofnem-2020-105	P	*Category : EDITORIAL* **(172) Japan (17 9 2024 1:15 午後)**	O	
277	**Gu, J., Fang, Y., Schönfeld, U., Ma, X.~~X.~~ & ~~Xiaoling,~~ Lü, X.** 2021.	P	*Category : EDITORIAL*	O	

	Bursaphelenchus parayongensis n. sp. (Tylenchina: Aphelenchoididae) found in packaging wood from China. *Nematology*, 23(9): 1039–1051. https://doi.org/10.1163/15685411-bja10093		**(173) Japan (17 9 2024 1:17 午後)**		
278	**Heybroek, H.M.** 1993. The Dutch elm breeding program. In: M.B. Sticklen & J.L. Sherald, eds. *Dutch elm disease research – Cellular and molecular approaches*, pp. 16–25. New York, USA, Springer–Verlag. ~~xii + 344 pp.~~ https://doi.org/10.1007/978-1-4615-6872-8_3	P	*Category : EDITORIAL* **(174) Japan (17 9 2024 1:17 午後)**	O	
279	**Heydari, F. & Pedram, M.** 2020. Morphological and molecular characterization of *Ektaphelenchoides pini* (Massey, 1966) Baujard, 1984 (Aphelenchoididae; Ektaphelenchinae) from Iran, with morphological and taxonomic observations on some species. *Journal of Nematology*, ~~52~~52(1): ~~1–12 pp~~e2020-52 . https://doi.org/10.21307/jofnem-2020-052	P	*Category : EDITORIAL* **(175) Japan (17 9 2024 1:19 午後)**	O	
280	**Holterman, M., Karssen, G., van den Elsen, S., van Megen, H., Bakker, J. & Helder, J.** 2009. Small subunit rDNA-based phylogeny of the Tylenchida sheds light on relationships among some high-impact plant-parasitic nematodes and the evolution of plant feeding. *Phytopathology*, ~~99~~99(3): 227–235. https://doi.org/10.1094/PHYTO-99-3-0227	P	*Category : EDITORIAL* **(176) Japan (17 9 2024 1:20 午後)**	O	
281	**Inagaki, H.** 1978. Apple ~~root- knot nematode~~ root-knot nematode, *Meloidogyne mali*, its taxonomy, ecology, ~~damage~~ damage, and control. *Second Asian Regional Conference on root–knot nematodes*, *Thailand Kasetsart Journal*, ~~12,~~ 12(1): 25–30. https://li01.tci-thaijo.org/index.php/anres/article/view/240783	P	*Category : EDITORIAL* **(177) Japan (17 9 2024 1:21 午後)**	O	
282	**Itoh, Y., Ohshima, Y. & Ichinohe, M.** 1969. A root-knot nematode, *Meloidogyne mali* n. sp. on apple-tree from Japan (Tylenchida: Heteroderidae). *Applied Entomology and Zoology*, 44(4): 194–202. https://doi.org/10.1303/aez.4.194	P	*Category : EDITORIAL* **(178) Japan (17 9 2024 1:22 午後)**	O	
283	**Janssen, T., Karssen, G., Topalović, O., Coyne, D. & Bert, W.** 2017. Integrative taxonomy of root-knot nematodes reveals multiple independent origins of mitotic parthenogenesis. *PLoS ONE*, ~~12~~12(3): e0172190. https://doi.org/10.1371/journal.pone.0172190	P	*Category : EDITORIAL* **(179) Japan (17 9 2024 1:22 午後)**	O	
285	**Karssen, G., van Hoenselaar, T., Verkerk-Bakker, B. & Janssen, R.** 1995. Species identification of cyst and root-knot nematodes from potato by electrophoresis of individual females. *Electrophoresis*, ~~16~~16(1): 105–109. https://doi.org/10.1002/elps.1150160119	P	*Category : EDITORIAL* **(180) Japan (17 9 2024 1:22 午後)**	O	
287	**Manzanilla-López, R.H.**~~ & Marbán-Mendoza, N.~~., ~~eds.~~ 2012. *Methodology and symptomatology*. In: R.H. Manzanilla-López, & N. Marbán-Mendoza, eds. *Practical plant nematology*, pp. 89–129. Mexico, Biblioteca Básica de Agricultura.~~*Practical plant nematology*. Mexico, Biblioteca Básica de Agricultura, Grupo Mundi-Prensa, pp. 121–123. 883 pp.~~	P	*Category : EDITORIAL* **(182) Japan (17 9 2024 1:26 午後)**	O	
289	**Palmisano, A. & Ambrogioni, L.** 2000. *Meloidogyne ulmi* sp. n., a root-knot nematode from elm. *Nematologia Mediterranea*, ~~28~~28(2): 279–293. https://journals.flvc.org/nemamedi/article/view/63531	P	*Category : EDITORIAL* **(181) Japan (17 9 2024 1:23 午後)**	O	

290	**~~Sakurai~~ Sakurai, K.**, **~~Inagaki~~ Inagaki, H.**, **~~Yuhara~~ Yuhara, I. & Tsutsumi**, **~~Tsutsumi~~ M.** 1973. Damage and control of the apple root-knot ~~nematode~~ nematode, *Meloidogyne mali* Itoh, Ohshima and ~~Ichinoe~~Ichinohe, ~~1969~~ 1969, on apple trees. Research bulletin of the *Hokkaido National Agricultural Experiment Station*, 105: 9–22.~~*Res. Bull. Hokkaido Natl. Agric. Exp. Stn*., no. 105.~~	P	*Category : EDITORIAL* **(183) Japan (17 9 2024 1:29 午後)**	O	
292	**Toida, Y.** 1991. Mulberry damages caused by a root-knot nematode, *Meloidogyne mali* indigenous to Japan. *Japan Agricultural Research Quarterly*, ~~24~~24(4): 300–305. https://www.jircas.go.jp/en/publication/jarq/24/4/300	P	*Category : EDITORIAL* **(184) Japan (17 9 2024 1:29 午後)**	O	
9. Figures					
304	**Figure 3.** *Meloidogyne mali*. (A)–(H) Second-stage (J2) juveniles: (A) body; (B) and (C) anterior region (lateral and dorsal, respectively); (D) metacorpus region; (E) lateral field; and (F–H) tails (lateral). (I–M) Females: (I), (J) and (L) anterior region; (K) stylet; and (M) body shape.	C	*Category : TECHNICAL* **(185) Japan (17 9 2024 1:30 午後)** The resolution of the image in Figure 3 should be increased because the image is blurred.	O	
304	**Figure 3.** *Meloidogyne mali*. ~~(A)–(H)~~ (A–H) Second-stage ~~(J2) juveniles~~juveniles (J2s): (A) body; (B) and (C) anterior region (lateral and ~~dorsal~~dorsoventral, respectively); (D) metacorpus region; (E) lateral field; and (F–H) tails (lateral). (I–M) Females: (I), (J) and (L) anterior region; (K) stylet; and (M) body shape.	P	*Category : EDITORIAL* **(186) Japan (17 9 2024 1:31 午後)**	O	
305	*Source:* Itoh, Y., Ohshima, Y. & Ichinohe, M. 1969. A root-knot nematode, *Meloidogyne mali* n. sp. on apple-tree from Japan (Tylenchida: Heteroderidae). *Applied Entomology and Zoology*, ~~4~~4(4): 194–202. https://doi.org/10.1303/aez.4.194	P	*Category : EDITORIAL* **(187) Japan (17 9 2024 1:31 午後)**	O	
316	**Figure 6.** *Meloidogyne mali* males: (A) and (B) anterior region (lateral and dorsoventral, respectively); (C) ~~region of metacorpus~~metacorpus region; (D) lateral field; (E–G) tail regions (lateral, ventral, lateral, respectively); and (H) body.	P	*Category : EDITORIAL* **(189) Japan (17 9 2024 1:33 午後)** For consistency with paragraph 304	O	
316	**Figure 6.** *Meloidogyne mali* males: (A) and (B) anterior region (lateral and dorsoventral, respectively); (C) region of metacorpus; (D) lateral field; (E–G) tail regions (lateral, ventral, lateral, respectively); and (H) body.	C	*Category : TECHNICAL* **(188) Japan (17 9 2024 1:32 午後)** The resolution of the image in Figure 6 should be increased because the image is blurred.	O	
317	*Source:* Itoh, Y., Ohshima, Y. & Ichinohe, M. 1969. A root-knot nematode, *Meloidogyne mali* n. sp. on apple-tree from Japan (Tylenchida: Heteroderidae). *Applied Entomology and Zoology*, ~~4~~4(4): 194–202. https://doi.org/10.1303/aez.4.194	P	*Category : EDITORIAL* **(190) Japan (17 9 2024 1:33 午後)**	O	
324	**Figure 8.** Second-stage juvenile tails of *Meloidogyne mali*, ~~*Meloidogyne*~~ *M. ardenensis*, ~~*Meloidogyne*~~ *M. camelliae*, ~~*Meloidogyne paramali*~~*M.suginamiensis*, ~~*Meloidogyne suginamiensis*~~ *M. paramali* and ~~*Meloidogyne*~~ *M. vitis*.	P	*Category : TECHNICAL* **(310) Japan (26 9 2024 4:44 午前)** Corrected order of names to correspond to Figure 8.	O	
327	(1) Itoh, Y., Ohshima, Y. & Ichinohe, M. 1969. A root-knot nematode, *Meloidogyne mali* n. sp. on apple-tree from Japan (Tylenchida: Heteroderidae). *Applied Entomology and Zoology*, ~~4~~4(4): 194–202. https://doi.org/10.1303/aez.4.194	P	*Category : EDITORIAL* **(191) Japan (17 9 2024 1:34 午後)**	O	
328	(2) de A. Santos, M.S.N. 1968. *Meloidogyne ardenensis* n. sp. (Nematoda: Heteroderidae), a new British species of root-knot nematode. *Nematologica (1967)* ~~13~~13(4): 593–598. https://doi.org/10.1163/187529267X00418	P	*Category : EDITORIAL* **(192) Japan (17 9 2024 1:34 午後)**	O	
329	(3) Golden, A.M. 1979. Description of *Meloidogyne camelliae* n. sp. and *M. querciana* n. sp. (Nematoda: Meloidogynidae) with SEM and host-range observations. *Journal of Nematology*, ~~11~~11(2): 175–189. https://journals.flvc.org/jon/article/view/65150	P	*Category : EDITORIAL* **(193) Japan (17 9 2024 1:34 午後)**	O	
334		C	*Category : TECHNICAL* **(195) Japan (17 9 2024 1:38 午後)** The figure of M. mali in Figure 9 should be	O	

			replaced by the figure of Itoh et al. (1969), the original description of M. mali. The figure of M. mali in Figure 9 is not from the original description of M. mali in Itoh et al. (1969), which is the source of the citation, but from the original description of M. ulmi in Palmisano and Ambrogioni (2000). If not replaced, the description in the cited reference in [338] should be corrected.		
335	**Figure 9.** Perineal patterns of *Meloidogyne mali*, ~~*Meloidogyne*~~ *M.* *ardensis*, ~~*Meloidogyne*~~ *M. camelliae*, ~~*Meloidogyne paramali*~~*M. suginamiensis, M. paramali* ~~, *Meloidogyne suginamiensis*~~ and ~~*Meloidogyne*~~ *M. vitis*.	P	*Category : TECHNICAL* **(194) Japan (17 9 2024 1:37 午後)** Corrected order of names to correspond to Figure 9.	O	
336	*Note:* Drawings 1, 2, 4 and 5 are not to the same scale as photo 3.	C	*Category : TECHNICAL* **(196) Japan (17 9 2024 1:38 午後)** The scale of image 6 in Figure 9. is not stated.	O	
338	(1) Itoh, Y., Ohshima, Y. & Ichinohe, M. 1969. A root-knot nematode, *Meloidogyne mali* n. sp. on apple-tree from Japan (Tylenchida: Heteroderidae). *Applied Entomology and Zoology*, ~~44~~44(4): 194–202. https://doi.org/10.1303/aez.4.194	P	*Category : EDITORIAL* **(197) Japan (17 9 2024 1:39 午後)**	O	
339	(2) de A. Santos, M.S.N. 1968. *Meloidogyne ardenensis* n. sp. (Nematoda: Heteroderidae), a new British species of root-knot nematode. *Nematologica (1967)* ~~13~~13(4): 593–598. https://doi.org/10.1163/187529267X00418	P	*Category : EDITORIAL* **(198) Japan (17 9 2024 1:39 午後)**	O	
340	(3) Golden, A.M. 1979. Description of *Meloidogyne camelliae* n. sp. and *M. querciana* n. sp. (Nematoda: ~~Meloidogynidae)~~ Meloidogynidae), with SEM and host-range observations. *Journal of Nematology*, ~~11~~11(2): 175–189. https://journals.flvc.org/jon/article/view/65150	P	*Category : EDITORIAL* **(199) Japan (17 9 2024 1:40 午後)**	O	
341	(4) Toida, Y. & Yaegashi, T. 1984. Description of *Meloidogyne suginamiensis* n. sp. (Nematoda: Meloidogynidae) from mulberry in Japan. *Japanese Journal of Nematology*, ~~12~~14: 49–57.	P	*Category : EDITORIAL* **(200) Japan (17 9 2024 1:41 午後)**	O	
347	**Figure 10.** Male head regions of *Meloidogyne mali*, ~~*Meloidogyne*~~ *M.* *ardensis*, ~~*Meloidogyne*~~ *M.* camelliae~~, *Meloidogyne paramali*~~, ~~*Meloidogyne suginamiensis*~~ *M. suginamiensis, M. paramali* *and* ~~*Meloidogyne*~~ *M. vitis*.	P	*Category : TECHNICAL* **(201) Japan (17 9 2024 1:43 午後)** Corrected order of names to correspond to Figure 10.	O	
350	(1) Itoh, Y., Ohshima, Y. & Ichinohe, M. 1969. A root-knot nematode, *Meloidogyne mali* n. sp. on apple-tree from Japan (Tylenchida: Heteroderidae). *Applied Entomology and Zoology*, ~~44~~44(4): 194–202. https://doi.org/10.1303/aez.4.194	P	*Category : EDITORIAL* **(204) Japan (17 9 2024 1:44 午後)**	O	
351	(2) de A. Santos, M.S.N. 1968. *Meloidogyne ardenensis* n. sp. (Nematoda: Heteroderidae), a new British species of root-knot nematode. *Nematologica (1967)* ~~13~~13(4): 593–598. https://doi.org/10.1163/187529267X00418	P	*Category : EDITORIAL* **(205) Japan (17 9 2024 1:44 午後)**	O	
352	(3) Golden, A.M. 1979. Description of *Meloidogyne camelliae* n. sp. and *M. querciana* n. sp. (Nematoda: ~~Meloidogynidae)~~ Meloidogynidae), with SEM and host-range observations. *Journal of Nematology*, ~~11~~11(2): 175–189. https://journals.flvc.org/jon/article/view/65150	P	*Category : EDITORIAL* **(206) Japan (17 9 2024 1:45 午後)**	O	
353	(4) Toida, Y. & Yaegashi, T. 1984. Description of *Meloidogyne suginamiensis* n. sp. (Nematoda: Meloidogynidae) from mulberry in Japan. *Japanese Journal of Nematology*, ~~12~~14: 49–57.	P	*Category : EDITORIAL* **(207) Japan (17 9 2024 1:45 午後)**	O	
357	 	C	*Category : EDITORIAL* **(202) Japan (17 9 2024 1:44 午後)** Adjust the position of the images so that they are aligned vertically.	O	
358	**Figure 11.** Esterase (A) and malate dehydrogenase (B) isozyme profiles of *Meloidogyne mali* (1–5 and 8–12) and the reference *Meloidogyne javanica* (6 and 7).	C	*Category : EDITORIAL* **(203) Japan (17 9 2024 1:44 午後)**	O	

			Adjust the position of the images so that they are aligned vertically.		

Reconciliation report for 2023-032_Draft_PT_MA_Ir_Trogoderma_eng.docx (2023-032_Draft_PT_MA_Ir_Trogoderma_eng.docx)

Summary

Title	2024 consultation: Draft annex to ISPM 28: Combination of irradiation and modified atmosphere treatment for Trogoderma granarium (Id 1628)
Description	Draft annex to ISPM 28: Combination of irradiation and modified atmosphere treatment for Trogoderma granarium (2023-032)
Start Date	1 7 2024 2:45 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	In Progress

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
G	(General Comment)	C	*Category : SUBSTANTIVE* **(32) Japan (17 9 2024 4:58 午後)** The reference supporting the draft standard (Zhao et al. (2021)) does not show the effectiveness of this standard against diapausing larvae and pupae. Literatures on treatment tests showing the effectiveness against diapausing larvae and pupae should be presented. In Zhao et al. (2021), only adults, mid-stage larvae, and older larvae of Trogoderma granarium were tested, and diapausing larvae and pupae were not tested. Therefore the effectiveness of the treatment against these stages is not confirmed. In addition, Gao et al. (2004) mentions that diapausing larvae and pupae are more resistant to irradiation tretment exposure than order larvae, and Azab et al. (2013) reports that diapausing larvae are more resistant to gas replacement treatment than non-diapausing larvae. According to the Technical Panel on Phytosanitary Treatments (TPPT) meeting report in October 2023, the TPPT set the treatment conditions at 24°C or above and limited the treatment to stored products in order to eliminate the possibility of the presence of diapausing larvae. However, since it has been reported that the diapause may not be broken even at 25°C (Burges,	O	

			1963), it is possible that diapause larvae may survive under the proposed treatment conditions. In addition, Gao et al. (2004) has reported that eggs and young larvae are less resistant to irradiation treatment than late larvae.		
Treatment schedule					
28	**Treatment schedule**	C	*Category : TECHNICAL* **(33) Japan (18 9 2024 9:34 午前)** Regarding the minimum absorbed dose in this draft standard, the actual measured values of the X-ray irradiation in the confirmatory tests of Zhao et al. (2021) should be confirmed, and the higher absorbed doses of gamma radiation and X-ray should be reflected in the standard. The minimum absorbed dose of 200 Gy in this treatment schedule is based on the study by Zhao et al. (2021). According to this study, gamma radiation and X-ray are used for confirmatory tests. This study provides the method of measuring the absorbed dose for gamma radiation and the actual measured value, but does not explain the method of measuring the X-ray dose and notes that the uncertainty of X-rays is 5%.	O	
29	A minimum absorbed dose of 200 Gy, followed by modified atmosphere storage at not more than 1% O_2 and the balance maintained with added nitrogen (N2) for a minimum of 15 continuous days at ~~or above~~ 24 ~~°C~~°C or above.	P	*Category : TECHNICAL* **(34) Japan (18 9 2024 10:15 午前)** Modify to match the confirmatory test method in the reference (Zhao et al. (2021)). According to the reference, nitrogen was added to keep the oxygen concentration less than 1%.	O	
Other relevant information					
34	The efficacy of this schedule was calculated based on a total of 108 558~~111 366~~ larvae of *Trogoderma granarium* treated with no survivors; the control survival was 97.49% in all confirmatory trials conducted.	P	*Category : TECHNICAL* **(35) Japan (18 9 2024 4:58 午後)** 111,366 is the total number of tested insects in the 14- and 15-day irradiated treatments in Table 5 in Zhan et al. (2021), but natural mortality in the control at each iteration is not reflected in the number of insects tested in the treatment.	O	

Reconciliation report for 2023-033_Draft_PT_Ir_Pbaliteus_eng.docx (2023-033_Draft_PT_Ir_Pbaliteus_eng.docx)

Summary

Title	2024 consultation: Draft annex to ISPM 28: Irradiation treatment for Pseudococcus baliteus (2023-033) (Id 1629)
Description	
Start Date	1 7 2024 2:50 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	In Progress

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
G	(General Comment)	C	*Category : SUBSTANTIVE* **(24) Japan (18 9 2024 5:29 午後)** Information should be added to the reference to support the idea that adult females of Pseudococcus baliteus are the most resistant stage at irradiation treatment. According to the reference used to develop the draft (Zhao et al. (2023)), adult females of Pseudococcus baliteus were tested, but the draft does not contain any information to support the idea that adult females are the most resistant stage to irradiation treatment. On the other hand, PT 45 (Irradiation treatment for Pseudococcus jackbeardsleyi) and the other two draft standards on mealybugs currently being under consultation include literature in the "References" section that shows that the most resistant stage to radiation treatment is the adult female.	O	
19	This treatment describes the irradiation of ~~fruits and~~ fruits, vegetables and ornamental plants at 183 Gy minimum absorbed dose to prevent the hatching of eggs from *Pseudococcus baliteus* at the stated efficacy.[1]	P	*Category : EDITORIAL* **(25) Japan (19 9 2024 3:29 午後)** For consistency with paragraph 26 "Target regulated articles"	O	

Reconciliation report for 2023-034_Draft_PT_Ir_Pmarginatus_eng.docx (2023-034_Draft_PT_Ir_Pmarginatus_eng.docx)

Summary

Title	2024 consultation: Draft annex to ISPM 28: Irradiation treatment for Paracoccus marginatus (2023-034) (Id 1630)
Description	
Start Date	1 7 2024 2:56 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	In Progress

Participants

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
19	This treatment describes the irradiation of ~~fruits and~~ fruits, vegetables and ornamental plants at 185 Gy minimum absorbed dose to prevent the hatching of eggs from *Paracoccus marginatus* at the stated efficacy.[1]	P	*Category : EDITORIAL* **(28) Japan (19 9 2024 3:37 午後)** For consistency with paragraph 26 "Target regulated articles"	O	

Reconciliation report for 2023-035_Draft_PT_Ir_Plilacinus_eng.docx (2023-035_Draft_PT_Ir_Plilacinus_eng.docx)

Summary

Title	2024 consultation: Draft annex to ISPM 28: Irradiation treatment for Planococuss lilacinus (2023-35) (Id 1631)
Description	
Start Date	1 7 2024 3:00 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	In Progress

Participants

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
19	This treatment describes the irradiation of ~~fruits and~~ fruits, vegetables and ornamental plants at 163 Gy minimum absorbed dose to prevent the development of F_1 second-instar nymphs of *Planococcus lilacinus* at the stated efficacy.[1]	P	*Category : EDITORIAL* **(22) Japan (19 9 2024 3:41 午後)** For consistency with paragraph 26 "Target regulated articles"	O	

Reconciliation report for 2018-009_Draft_Annex_ISPM38_eng.docx (2018-009_Draft_Annex_ISPM38_eng.docx)

Summary

Title	2024 First consultation: Draft annex to ISPM 38 (International movement of seeds) on the design and use of systems approaches (Id 1626)
Description	NOTE: When leaving a comment, indicate the specific box in the image to which your comment refers.
Start Date	1 7 2024 2:33 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	In Progress

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
G	(General Comment)	C	*Category : SUBSTANTIVE* **(512) Japan (20 9 2024 10:35 午前)** Japan recognizes the importance of developing a standard on systems approach for seeds as systems approach could be a useful option for phytosanitary measure for seeds. We also understand that it is vital to collaborate with stakeholders to manage the pest risk through the seed supply chain, and it would be appropriate that the measures be designed based on the assumption that seed producers and other related parties assume certain roles and responsibilities in the systems approach. Furthermore, to ensure the effective operation of the systems approach, it is important that NPPOs issuing the phytosanitary certificate take the responsibility for measures implemented in their territory, for example, by monitoring the practices conducted by entities. However, we understand that there is almost no experience of multilateral systems approach described in this draft in actual seed trades. Given the lack of information on its effectiveness and usefulness, further study is needed to clarify the specific	O	

			implementation system and operational scheme of the systems approach in order to develop an ISPM. We think if there are countries or organizations that are conducting pilot studies, their experiences should be shared among contracting parties and then discussions should take place.		
1. Introduction					
33	Systems approaches may include, in addition to commonly used phytosanitary measures, components of the existing production practices and quality systems used by participating entities, as far as they relate to pest management. These components can be effective at reducing pest risk to a level that is sufficient to meet phytosanitary import requirements as evaluated by NPPOs. ~~When such components are used in a systems approach, NPPOs should collaborate closely with the participating entities, with NPPOs being responsible for identifying the pest risk, setting the acceptable level of pest risk for specified pests, designing the system, evaluating the effectiveness of the production-practice and quality-system components in reducing pest risk, and monitoring whether this effectiveness is being maintained throughout the entire seed supply chain.~~	P	*Category : EDITORIAL* **(515) Japan (20 9 2024 11:05 午前)** This part should be mentioned in section 8.1	O	
33	Systems approaches may include, in addition to commonly used phytosanitary measures, components of the existing production practices and quality systems used by participating entities, as far as they relate to pest management. These components ~~can be~~ are effective at reducing pest risk to a level that is sufficient to meet phytosanitary import requirements as evaluated by NPPOs. When such components are used in a systems approach, NPPOs should collaborate closely with the participating entities, with NPPOs being responsible for identifying the pest risk, setting the acceptable level of pest risk for specified pests, designing the system, evaluating the effectiveness of the production-practice and quality-system components in reducing pest risk, and monitoring whether this effectiveness is being maintained throughout the entire seed supply chain.	P	*Category : EDITORIAL* **(514) Japan (20 9 2024 11:03 午前)**	O	
1.1 Scope					
42	The pest risk management options described in this annex may apply to individual or groups of pests and should be considered sufficient to meet the phytosanitary import requirements of importing countries when integrated into a systems approach. This approach is consistent with the concepts and approaches described in ISPM 36 (*Integrated measures for plants for planting*), which does not cover seeds. Production practices used by participating entities may be included as measures in systems approaches if those practices are recognized by participating NPPOs as effectively managing pest risk. Such measures, in combination with the	P	*Category : TECHNICAL* **(547) Japan (26 9 2024 6:08 午前)** Insert paragraph 57 into this paragraph. This information should be included in the scope.	O	

	participating entities' quality systems (including audit and other requirements as outlined in this annex), should be considered as meeting the phytosanitary import requirements of the importing countries. If the NPPO of the importing country has indications that measures comprising the system approach do not properly address the pest risk posed by a particular regulated pest and therefore do not meet their phytosanitary import requirements, additional measures should be discussed with the NPPO of the country of origin.				
1.2 Background					
44	The development of a systems approach is described in ISPM 14 (*The use of integrated measures in a systems approach for pest risk management*) as a bilateral process involving the NPPO of an importing country and the NPPO of an exporting country, which may also involve stakeholders from industry. The NPPOs of several countries may also develop together a systems approach for export from, and import into, their countries. If this leads to the same systems approach for these countries, this becomes a multilateral systems approach, which may suit the multinational character of the seed trade. The benefits of such a multilateral systems approach, which involves multiple exporting and importing countries, are likely to be greater when a larger number of countries participate in it, providing more predictability for seed movement.	C	*Category : SUBSTANTIVE* **(513) Japan (20 9 2024 10:45 午前)** The reason why more predictability is provided should be clarified. As there is not enough understanding and experiences on multilateral systems approach, there may be different perceptions from country to country.	O	
1.4 Important considerations for systems approaches for seeds					
54	- the transport of bulk seed;	C	*Category : SUBSTANTIVE* **(516) Japan (20 9 2024 11:25 午前)** Japan suggests the definition of bulk seeds here be clarified and the reason why bulk seeds would need special requirements added. While "bulking" is referred to in the core text of the standard, the term "bulk" is often used to refer to the state of seed packaging prior to processing into sachets in industry.	O	
57	~~Production practices used by participating entities may be included as measures in systems approaches if those practices are recognized by participating NPPOs as effectively managing pest risk. Such measures, in combination with the participating entities' quality systems (including audit and other requirements as outlined in this annex), should be considered as meeting the phytosanitary import requirements of the importing countries.~~	P	*Category : EDITORIAL* **(548) Japan (26 9 2024 6:10 午前)** Move this paragraph to Scope (paragraph 42).	O	
59	To verify that regulated pests have been eliminated from the seed supply chain, NPPOs should always consider the feasibility of including seed testing ~~as an independent measure within the systems approach~~ or as a verification procedure.	P	*Category : SUBSTANTIVE* **(517) Japan (20 9 2024 11:47 午前)** As para32 explains the recognition of a systems approach may serve as an alternative to single measures, this phrase	O	

			would be confusing.		
60	Recognition of the equivalence of measures, which may include pest testing methods and diagnostic protocols, by NPPOs can lead to designing of more efficient ~~implementation of~~ systems approaches.	P	*Category : SUBSTANTIVE* **(518) Japan (20 9 2024 11:52 午前)** Recognition of the equivalence of measures would be useful for designing systems approaches rather than for efficient implementation.	O	
2.1 Identification of the commodity					
64	Entities may identify a seed commodity that is of interest for international trade purposes and propose to interested NPPOs of seed-producing countries that a systems approach be developed for that commodity. A systems approach for the seed commodity identified may be developed in collaboration with participating entities in so far as they can contribute to the reduction of pest risk through the systems approach.	P	*Category : EDITORIAL* **(549) Japan (26 9 2024 6:25 午前)**	O	
64	~~Entities~~ Identification of the seed commodity may be undertaken by the NPPO of the importing country, or the exporting country, or ideally through the cooperation of both countries. In addition, entities may identify a seed commodity that is of interest for international trade purposes and propose to interested NPPOs of seed-producing countries that a systems approach be developed for that commodity. A systems approach may be developed in collaboration with participating entities in so far as they can contribute to the reduction of pest risk through the systems approach.	P	*Category : SUBSTANTIVE* **(519) Japan (20 9 2024 11:53 午前)** The commodity that establishes a systems approach can be identified by not only participating entities but also the NPPO of the importing country or the exporting country.	O	
2.3 Measures and critical control points					
68	This section provides examples of the pest risk management options available to NPPOs and participating entities for potential inclusion as integrated measures in a systems approach. Further information can be found in section 1.5 ~~of this annex and~~ Appendix 2 of the core text of this standard.	P	*Category : EDITORIAL* **(550) Japan (26 9 2024 6:27 午前)**	O	
76	*production practices* – use of tested or certified seed, application of transplant sanitation, use of plant varieties that reduce risk of seed transmission of pests (e.g. resistant ~~or less susceptible cultivars~~varieties (section 1.5.2 of the core text of this standard)) , use of seed treatments, maintenance of documentation;	P	*Category : SUBSTANTIVE* **(520) Japan (20 9 2024 12:17 午後)** For varieties to be used as production practices in systems approach, it is important that they have characteristics to reduce the risk of seed transmission, regardless of having resistance or the level of susceptibility.	O	
3. Responsibilities of NPPOs and participating entities in addressing pest risk along the seed supply chain					
98	National plant protection organizations are responsible for systematically determining the measures that comprise a systems approach and verifying their effectiveness at reducing the pest risk posed by potential pests associated with each of the production stages. These measures should be in accordance with	P	*Category : SUBSTANTIVE* **(526) Japan (20 9 2024 12:27 午後)** Regional standards may not be relevant for countries from other regions.	O	

	international or regional standards if relevant, for pest risk management and systems approaches and may include existing production practices and quality-system components. To maintain flexibility and innovation in the system, participating entities may propose novel equivalent measures for a particular CCP, which NPPOs should evaluate for their effectiveness and feasibility. Appendix 1 of this annex depicts regulatory and non-regulatory actions performed by NPPOs and entities respectively at each CCP along the seed supply chain.				
5. Establishing performance criteria for authorization of participating entities					
103	Performance criteria should be established before the entities enter the agreement to participate in a systems approach. When developing a systems approach, NPPOs should incorporate a mechanism, based on performance criteria, for authorizing entities along the entire seed supply chain.	P	*Category : SUBSTANTIVE* **(521) Japan (20 9 2024 12:18 午後)** To authorize entities based on performance criteria, performance criteria should be established before agreement of the systems approach. In addition, there is a description regarding the establishment of performance criteria as one of the responsibilities of NPPOs in ISPM 45.	O	
6. Multilateral systems approaches					
106	When the same systems approach is recognized by several importing countries, this ~~becomes~~ can be a multilateral approach, which may suit the multinational character of the seed trade. In multilateral systems approaches, particular attention should be paid to those elements occurring in the exporting countries after detection of a non-compliance.	P	*Category : TECHNICAL* **(542) Japan (24 9 2024 10:54 午前)** When the systems approach is recognized by several importing countries, it does not always become a multilateral approach.	O	
106	When the same systems approach is recognized by several importing countries, this becomes a multilateral approach, which may suit the multinational character of the seed trade. In multilateral systems approaches, particular attention should be paid to those elements occurring in the exporting countries after detection of a non-compliance.	C	*Category : SUBSTANTIVE* **(522) Japan (20 9 2024 12:19 午後)** The intent of the second sentence of this paragraph ("In multilateral systems approaches, ...") should be clarified. The action after non-compliance is detected may be covered by section 8.2.2 "Reporting and addressing nonconformities". However, if there are any specific requirements regarding non-compliance of consignments under the multilateral system approach, the intent of this should be clarified.	O	
8.1 Responsibilities of NPPOs					
118	A systems approach may be developed by the NPPO (or multiple NPPOs) of any importing country along the seed supply chain, in collaboration with the NPPOs of the exporting countries and, if applicable, entities that wish to participate in the systems approach.	C	*Category : SUBSTANTIVE* **(551) Japan (26 9 2024 9:49 午前)** The procedures and scheme for development of a systems approach by multiple NPPOs are not clear. Examples of scheme for agreeing on a multilateral systems approach may be needed.	O	

122	The responsibilities of importing and exporting countries in relation to systems approaches are described in ISPM 14. The NPPOs of importing and exporting countries should maintain the confidentiality of any data or information on production practices and quality systems provided by entities. In the case of a multilateral systems approach, the responsibilities of each NPPO participating in the systems approach along the seed supply chain should be identified. These responsibilities should, for each of the participating countries, include the harmonization of their lists of regulated pests, the analysis of the associated pest risk, the evaluation and description of the measures that comprise the systems approach, and the identification of the CCPs in the systems approach where those measures are to be applied.	P	*Category : SUBSTANTIVE* **(523) Japan (20 9 2024 12:24 午後)** As parapraph 127 explains that entities should provide all relevant information on production practices and quality systems, it could include confidential information for the entities.	O	
8.2 Responsibilities of entities participating in systems approaches					
127	If an NPPO wishes to develop a systems approach, it should identify the list of regulated pests potentially associated with the seed commodity in the seed supply chain. The entities involved should provide all relevant information on production places, practices and quality systems, including any data related to the effectiveness of the practices in reducing pest risk, to allow the NPPO to evaluate these practices for inclusion in the systems approach. This information may relate to practices during any stage of seed production and distribution and to measures applied in other countries along the seed supply chain.	P	*Category : SUBSTANTIVE* **(527) Japan (20 9 2024 4:53 午後)** The information on production places would be crucial for NPPOs to evaluate the practices.	O	
8.2.2 Reporting and addressing nonconformities					
141	The entity should document the procedure by which it notifies the authorizing NPPO of any other nonconformities within the time frame agreed by the NPPO and the entity. 9. Records that demonstrate implementation NPPOs and participating entities should record the measures that have been applied in implementing the systems approach and should retain these records to demonstrate the implementation of the systems approach. The retention time of these records should be agreed between the participating NPPOs.	P	*Category : SUBSTANTIVE* **(524) Japan (20 9 2024 12:25 午後)** Documentation of records that demonstrate implementation is necessary to check if the measures of the systems approach have been implemented. The proposed text is based on draft ISPM 39 annex "use of systems approaches in managing the pest risk associated with the movement of wood" paragraph 201.	O	
Potential implementation issues					
143	This section is not part of the standard. The Standards Committee in May 2016 requested the Secretariat to gather information on any potential implementation issues related to this draft. Please provide details and proposals on how to address these potential implementation issues.	C	*Category : SUBSTANTIVE* **(525) Japan (20 9 2024 12:26 午後)** For implementation, how to set "performance criteria" may be needed. ISPM 45 section 4.1 (Roles and responsibilities of	O	

			the NPPO) mentions that responsibility of NPPO includes to clearly define the performance criteria, but the content of the performance criteria is not stated in this draft.		

Reconciliation report for 2015-004_DraftAnnex_ISPM39_SysApprMovWood.DOCX (2015-004_DraftAnnex_ISPM39_SysApprMovWood.DOCX)

Summary

Title	2024 Second consultation: Draft annex to ISPM 39 (International movement of wood) (Id 1635)
Description	2024 Second consultation: Draft annex Use of systems approaches in managing the pest risks associated with the movement of wood (2015-004) to ISPM 39 (International movement of wood)
Start Date	1 7 2024 3:27 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	In Progress

Participants

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
2. Practices, procedures and regulatory actions that can reduce pest risk					
111	**~~Air-drying (section 2.2 of this standard)~~Air-drying**	P	*Category : EDITORIAL* **(179) Japan (20 9 2024 5:53 午前)**	O	
112	Air-drying wood to the equilibrium moisture content can prevent some pests from completing their life cycle and make it unattractive for some pests, because of the reduction in moisture ~~content.~~content (see Appendix 2 of this standard).	P	*Category : EDITORIAL* **(180) Japan (20 9 2024 5:54 午前)**	O	
113	**~~Kiln-drying (section 2.2 of this standard)~~Kiln-drying**	P	*Category : EDITORIAL* **(181) Japan (20 9 2024 5:54 午前)**	O	
114	Kiln-drying can prevent some pests from completing their life cycle in wood commodities, because of the heat exposure and reduction in moisture ~~content.~~ content (see Appendix 2 of this standard).	P	*Category : EDITORIAL* **(182) Japan (20 9 2024 5:54 午前)**	O	
119	**Spraying or ~~dipping~~dipping (section 2.2 of this standard)**	P	*Category : EDITORIAL* **(183) Japan (20 9 2024 5:56 午前)**	O	
4.1 Responsibilities of NPPOs					
175	The responsibilities of the NPPOs participating in a systems approach are described in ISPM 14. In addition, for a wood-commodities systems ~~approach~~ approach, the responsibilities should include, but are not limited to, the following:	P	*Category : EDITORIAL* **(184) Japan (20 9 2024 5:58 午前)**	O	
5.2 Implementation procedures documented by participating entities and NPPOs					
198	procedures associated with maintaining records of the measures applied in the	P	*Category : SUBSTANTIVE*	O	

	systems approach and if necessary, ensuring ~~traceability~~traceability for specific control points; and		**(185) Japan (20 9 2024 6:07 午前)** Considering the long production cycle of wood, it may be difficult to ensure traceability at all critical control point . (e.g. information when planting).		

Reconciliation report for 2021-011_DraftAnnex_ISPM46_IntMovMango.docx (2021-011_DraftAnnex_ISPM46_IntMovMango.docx)

Summary

Title	2024 Second consultation: Draft annex International movement of fresh Mangifera indica fruit (2021-011) to ISPM 46 (Id 1634)
Description	
Start Date	1 7 2024 3:20 午後
End Date	30 9 2024 11:45 午後
Closed Out Date	
Completed Date	
Review Status	In Progress

Participants

T (Type) - B = Bullet, C = Comment, P = Proposed Change, R = Rating
S (Status) - A = Accepted, C = Closed, O = Open, W = Withdrawn, M = Merged

Para	Text	T	Comment	S	Author Comment
4. Options for phytosanitary measures					
316	SA2 ; VHT 6	P	*Category : EDITORIAL* **(108) Japan (20 9 2024 9:56 午前)** SA 2 is a measure based on ISPM 35 (Systems approach for pest risk management of fruit flies (Tephritidae)), and this measure is applicable to Bactrocera umbrosa as well as other Bactrocera species.	O	
489	~~MAFF~~ ICA (2021)	P	*Category : SUBSTANTIVE* **(107) Japan (20 9 2024 9:45 午前)** The document is published by ICA, not MAFF. See paragraph 614	O	
5.2 Tables					
614	~~MAFF (Ministry of Agriculture, Forestry and Fisheries)~~ICA (Instituto Colombiano Agropecuario). 2021. *Work plan for the export of mango from the Republic of Colombia*. Bogotá. 9 pp. https://www.ica.gov.co/getattachment/9bace868-59ec-4202-bcf3-381dc1897cce/Mango.aspx	P	*Category : SUBSTANTIVE* **(106) Japan (20 9 2024 9:44 午前)** The document is published by ICA, not MAFF.	O	