NAME OF THE ORGANISM: Meloidogyne (1MELGG)

GENERAL INFORMATION ON THE PEST

Name as submitted in the project specification (if different to the preferred name):

Meloidogyne spp.
Pest category:

Nematoda **1- Identity of the pest/Level of taxonomic listing:**
Is the organism clearly a single taxonomic entity and can it be adequately distinguished from other entities of the same rank?

Yes
Is the pest defined at the species level or lower?:

No
Can listing of the pest at a taxonomic level higher than species be supported by scientific reasons or can species be identified within the taxonomic rank which are the (main) pests of concern?

* Yes: Vegetable propagating and planting material (other than seeds) sector

Is it justified that the pest is listed at a taxonomic rank below species level?

Not relevant
Conclusion:

* Candidate: Vegetable propagating and planting material (other than seeds) sector

Justification (if necessary):

Root-knot nematode (M. exigua, M. naasi, M. hapla, M. incognita, M. arenaria, and M. javanica, M. ethiopica) (EPPO Global Database, Kotcon et al., 1985; Davis et al., 2003; CABI, 2017) are polyphagous pests. They all cause characteristic knots (galls), swellings and other malformations on the roots of onion. M. ethiopica is included in EPPO alert list (<https://www.eppo.int/QUARANTINE/Alert_List/alert_list.htm>) (EPPO website). These species cause similar symptoms on the host and they are all present in the EU. Distinction among them can be difficult. Including all the species in the genus would make for practical application and avoid the need for full identification to species of any root-knot nematodes found in the material to be eventually marketed.
Remark: In the RNQP Questionnaire, for the 'Vegetable propagating and planting material (other than seeds)' Sector, GB supported a listing at the Genus level for Allium cepa but did not support such a listing for Cucumis melo, Solanum lycopersicum, Solanum melongena (no justification was given, and no information for the other host plants). No other EU Member States selected this entry as an important entry in the RNQP Questionnaire.
For the 'Ornamental' Sector, no country supported a listing of the entire genus. However SE suggested to define specific Risk management measures for this entry on Citrus, Prunus and Rosa. Experts commented that for ornamentals, the principal risk is linked to M. hapla. **2 – Status in the EU:**

Is this pest already a quarantine pest for the whole EU?

No
Presence in the EU:

Yes
Conclusion:

candidate
Justification (if necessary):

The pest is present worldwide.

HOST PLANT N°1: Allium cepa (ALLCE) for the Vegetable propagating and planting material (other than seeds) sector.

Origin of the listing:

2 - Vegetable seedling sector: Commission Directive 93/61/EC
Plants for planting:

Plants intended for planting **3 - Is the pest already listed in a PM4 standard on the concerned host plant?**

No
Conclusion:

Evaluation continues **4 - Are the listed plants for planting the main\* pathway for the "pest/host/intended use" combination? (\*: significant compared to others):**

No
Conclusion:

Not candidate

Justification:

Meloidogyne spp. is a soil borne pest. It survives in weeds and in the crop debris. It spreads with infested materials, by human assisted means, root debris and soil but an infestation in a seedling nursery of vegetable species is unlikely. The SEWG considered that, for Meloidogyne as a genus, it is not possible to state that plants for planting are the main pathway. Most host species have a short growing season and are produced from seed. For Allium sets the total growing season is longer. However ‘Substantially free’ is a sufficient measure, including for onion sets.
Remark: no economic impact data of Meloidogyne on A. cepa have been found. **CONCLUSION ON THE STATUS:**

Disqualified: plants for planting are not the main pathway for Meloidogyne as a genus. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Delisting. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

No
Proposed Risk management measure:

Delisting. **REFERENCES:**

* CABI (2017) Datasheet - Meloidogyne ethiopica (Root-knot nematode). <http://www.cabi.org/isc/datasheet/33239>. Accessed June, 26th 2017;
* EPPO Global Database (2017) <https://gd.eppo.int/taxon/MELGEX/hosts>. Accessed June, 25th 2017;
* Richard F, Davis RF, Langston DB (2003) Reproduction of meloidogyne species on yello granex onion and potentian yield suppression. Nematropica 33, 179-188;
* Kotcon JB, Bird GW, Rose LM, Dimoff K (1985) Influence of Glomus fasciculatum and Meloidogyne hapla on Allium cepa in Organic Soils. J Nematol. 17, 55-60;
* Davis RF & Langston DB (2003) Reproduction of Meloidogyne species on yellow granex onion and potential yield suppression. Nematropica 33;