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Swedish University of Agricultural Sciences

SLU Risk Assessment of Plant Pests

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Feedback on a list of plant pests with candidates for risk assessments – Batch 5

Background

During May and June of 2022 nine of the plant pests that were found in EFSAs media and literature horizon scanning were evaluated with EFSAs PeMoScoring tool (EFSA 2022a, b unpublished). Based on the PeMoScoring the pests were either rated as above a threshold value (= positive) or below it (= negative), where further actions are proposed for the former group of pests.

The nine pests were:

- *Eoreuma loftini* (Insecta) (positive)
- *Exserohilum rostratum* (Fungi) (positive)
- *Pratylenchus scribneri* (Nematoda) (positive)
- *Candidatus* Phytoplasma brasiliense (Bacteria) (negative)
- *Erysiphe diffusa* (or *Microsphaera diffusa*) - soyabean powdery mildew (Fungi) (negative)
- *Lasiodiplodia pseudotheobromae* - cryptic species from the *L. theobromae* complex (Fungi) (negative)
- *Megalurothrips usitatus* (Insecta) (positive)
- *Pestalotiopsis clavispora* (= *Neopestalotiopsis clavispora*) (Fungi) (positive)
- *Pseudomonas syringae* pv. *coriandricola* (Bacteria) (positive)

SLU Risk Assessment of Plant Pests was requested by the Swedish Board of Agriculture to provide feedback in terms of (i) whether any of these pests are present in Sweden and (ii) whether there are some special reasons to exclude or prioritize any of the pests for further pest categorizations (i.e., in addition to those provided by an EFSA PeMoScoring evaluation of these species (EFSA 2022b, unpublished)). This report is the 5th of similar reports provided on the topic.

Methods

A broad approach was used to find information about observations of the pests in Sweden. Searches were performed in: Web of Science (2022) (filtering for "Sweden"), the search engine Google (restricting the search to Swedish wepages), Google Scholar (including "Sweden" in the search string and restricting the review to the top 100 hits), and in different specific databases, i.e., CABI Crop Protection Compendium (CABI 2022), EPPO Global Database (EPPO 2022a), EPPO Platform on PRAs (EPPO 2022b), EUROPHYT (2020) (at the species level), Fauna Europaea (2022), SLU Artfakta (SLU Swedish Species Information Center 2022), iNaturalist (2022), GBIF (2022), UK Plant Health Risk Register (FERA 2022), USDA Fungal databases (Farr & Rossman 2022) and the book "Nematoder som växtskadegörare" (Andersson 2018).

The searches included, in addition to the preferred names (according to EPPO Global Database), also the following synonyms (CABI 2022a; EPPO 2022; Farr & Rossman 2022);

- *Eoreuma loftini* [EORELO] = *Acigona loftini, Chilo loftini*

- *Exserohilum rostratum* [DRECRO] = *Drechslera gedarefensis, Drechslera halodes, Drechslera prolatum, Drechslera rostrata, Exserohilum gedarefense, Exserohilum longirostratum, Exserohilum prolatum, Helminthosporium halodes, Helminthosporium leptochloae, Helminthosporium longirostratum, Helminthosporium rostratum, Setosphaeria prolata, Setosphaeria rostrata, Bipolaris rostrata, Exserohilum antillanum, Exserohilum gedarefensis, Bipolaris halodes, Exserohilum macginnisii, Exserohilum mcginnisii, Drechslera prolata, Luttrellia rostrate, Setomelanomma rostrata.*

- *Pratylenchus scribneri* [PRATSC] = no synonyms were found

- *Candidatus* Phytoplasma brasiliense [PHYPBR] = Hibiscus witches' broom phytoplasma, Phytoplasma brasiliense

- *Erysiphe diffusa* [MCRSDI] = *Erysiphe glycines*[1]*, Microsphaera diffusa, Trichocladia diffusa, Oidium caricae, Acrosporium caricae, Oidium papayae*

- *Lasiodiplodia pseudotheobromae* [LSDPPS] = no synonyms were found

- *Megalurothrips usitatus* [MEGTUS] = *Frankliniella nigricornis, Frankliniella obscuricornis, Frankliniella vitata, Physothrips usitatus, Physothrips usitatus cinctipennis, Taeniothrips longistylus, Taeniothrips nigricornis, Taeniothrips usitatus, Taeniothrips usitatus cinctipennis*

- *Neopestalotiopsis clavispora* [PESPCL] = *Pestalotiopsis clavispora*, *Pestalotia clavispora.*

[1] Should be considered a separate species according to Farr & Rossman (2022).

- *Pseudomonas syringae* pv. *coriandricola* [PSDMSC] = no synonyms were found

Information about the pests were also requested from several Swedish experts (see Acknowledgement).

Results and discussion

- ***Eoreuma loftini*** [EORELO] (Insecta) Positive PeMoScoring
  No reports of observations of *Eoreuma loftini* in Sweden were found.

- ***Exserohilum rostratum*** [DRECRO] (Fungi) Positive PeMoScoring
  No reports of observations of *Exserohilum rostratum* in Sweden were found.

- ***Pratylenchus scribneri*** [PRATSC] (Nematoda) Positive PeMoScoring
  The only support that was found for that *Pratylenchus scribneri* is present in Sweden was a study by Andersson (1971) which also was cited by EFSA (2022b unpublished). According to Andersson (1971) the species could be considered to be subtropical and the occurrence in temperate regions appears to be limited to plantations under glass (see also Parkinson (2015)). Andersson (1971) describes findings of the pest in four different indoor production sites of Amaryllis (*Hippeastrum* sp.) in Sweden. The species is also mentioned as a pest of Amaryllis in Sweden in some later extension material by the same author published during the first years of 21th century (Anderson 2000; Anderson and Eriksson 2001). However, in his most recent book, which aims to describe all known nematodes of economic interest for Nordic conditions, *P. scribneri* is not included (Andersson 2018). Considering that the only original report of this pest thus is more than 50 years old it is uncertain whether the pest is currently present in Sweden.

  Additional information to that in EFSA (2022b unpublished): Three notifications of interceptions of this pest in EU on *Canna* sp. from United States (EUROPHYT 2020).

- ***Candidatus* Phytoplasma brasiliense** [PHYPBR] (Bacteria) Negative PeMoScoring
  No reports of observations of *Candidatus* Phytoplasma brasiliense in Sweden were found.

- ***Erysiphe diffusa*** [MCRSDI] (Fungi) Negative PeMoScoring
  No reports of observations of *Erysiphe diffusa* in Sweden were found.

- ***Lasiodiplodia pseudotheobromae*** [LSDPPS] (Fungi) Negative PeMoScoring
  No reports of observations of *Lasiodiplodia pseudotheobromae* in Sweden were found.

  Additional information to that in EFSA (2022b unpublished): According to EFSA (2022b unpublished) this pathogen is not present in EU, however according to a PRA by USDA (2021) the pathogen is present in Spain and the Netherlands (they refer to Farr & Rossman 2022 who cites Lopez-Moral et al. (2020) for the presence in Spain

whereas they cite Alves et al. (2008), Zhao et al. (2010), and Chen et al. (2011) for the presence in the Netherlands).

- ***Megalurothrips usitatus*** [MEGTUS] (Insecta) Positive PeMoScoring
  No reports of observations of *Megalurothrips usitatus* in Sweden were found.

- ***Neopestalotiopsis clavispora*** **(=** *Pestalotiopsis clavispora*) [PESPCL] (Fungi) Positive PeMoScoring
  No reports of observations of *Neopestalotiopsis clavispora* in Sweden were found. Note however that *Pestalotiopsis* spp. has been intercepted in Sweden during 2020 on traded strawberry plants and it is assessed likely that the genus is present in strawberry production in Sweden (personal communication V. Tönnberg, HIR Skåne).

  Additional information to that in EFSA (2022b unpublished): This pathogen has also been found in Finland on strawberry plants (Parikka & Latvala 2021).

- ***Pseudomonas syringae*** **pv.** ***coriandricola*** [PSDMSC] (Bacteria) Positive PeMoScoring
  No reports of observations of *Pseudomonas syringae* pv. *coriandricola* in Sweden were found.

Conclusion

The search procedure described in the Methods section above did not reveal any new information regarding the presence of any of these pests in Sweden, i.e. in addition to the distributions provided by EFSA (2022b, unpublished).

Some additional information was however found for some of the pests, e.g. the presence of *L. pseudotheobromae* in the EU and that *N. clavispora* has been found also in Finland. No other reasons were found to exclude or prioritize these pests for further pest categorizations beyond those provided by the EFSA PeMoScoring evaluations (EFSA 2022b, unpublished).

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Authors

This report was prepared by SLU Risk Assessment of Plant Pests at the Swedish University of Agricultural Sciences:

Niklas Björklund, Dept. of Ecology, Swedish University of Agricultural Sciences, P.O. Box 7044, SE-750 07 Uppsala, Sweden. Visiting address: Ullsväg 16, E-mail: Niklas.Bjorklund@slu.se

Johanna Boberg, Dept. of Forest Mycology and Plant Pathology, Swedish University of Agricultural Sciences, PO Box 7026, SE-750 07 Uppsala, Sweden. Visiting address: Almas allé 5, E-mail: Johanna.Boberg@slu.se

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