NEMIDSOFT: A Web-based Software as an Aid to the Identification of Nematodes

Abstract

The genus Merlinius includes plant-parasitic nematode species and is of great practical importance. This paper describes a web-based identification tool (which has been described by the authors under the name of Nemidsoft) that uses morphological characters and morphometrical data. The characters and data used are the same as the polytomous keys of Brzeski (1998) [1] and Handoo et al. (2007) [2]. For each specimen examined, the software compares characters of the unknown specimen with all 32 species of the genus accepted by Handoo et al. (2007) [2] that submitted in database. One or more than one species is suggested to the user by the software. Additional data of the suggested species (in some species) such as, images of the species, PDF of full-text or abstract of the reference article is present. A later step of the program has been adopted for analysis of cyst forming genus Heterodera.

References

Merlinius khuzdarensis n. sp. associated with date palm. Nematology 9, 251-266.
- Jairajpuri, M. S. 1982. Some studies on Tylenchorhynchinae: The subgenus Bitylenchus Filipjev, 1934, with description of Tylenchorhynchus (Bitylenchus) depressus n. sp. and a key to species of Bitylenchus. Mededelingen van de Fakulteit Landbouwwetenschappen Rijksuniversiteit Gent 47, 765-770.


**Index Terms**

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**Keywords**

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