S Comparative morphometrics and ribosomal DNA sequence analysis of *Longidorus orientalis* Loof, 1983 (Nematoda: Longidoridae) from Spain and Iran

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Abstract:

During recent nematode surveys in a muddy soil around undetermined graminaceous plants in El Rocío, Huelva Province, in southern Spain, and from the rhizosphere of date palm associated with graminaceous vegetation from Abadan, in Khuzestan Province, south-west Iran, populations of *Longidorus orientalis* were identified. Morphological and morphometrical studies on these populations fit the original description and represent the first report from Spain and Europe. Molecular characterisation of *L. orientalis* from Spain and Iran, using D2-D3 expansion regions of 28S rRNA, 18S rRNA and ITS-rRNA, is provided. Sequences of the D2-D3 expansion regions and partial 18S genes were analysed using maximum likelihood and Bayesian inference to reconstruct phylogenetic relationships within *L. orientalis* and other *Longidorus* species. The results revealed a closer phylogenetic relationship with *L. goodeyi* for the D2-D3 expansion region and with *L. vineacola* for the partial 18S region.

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