



Integrative Taxonomy, Molecular Diagnosis and Phylogenetic Relationships of Plant-Parasitic Nematodes

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Message from the Guest Editors

Dear Colleagues,

Unravelling the diversity of PPNs infesting soils from an agricultural ecosystem is an essential task. Species discrimination in nematodes has classically been based mainly on morphology and morphometrics of diagnostic features. However, morphologically based species characterization is complicated by a high degree of intraspecific variability within morphometrics, as well as small interspecific differences that lead to substantial overlapping among species and increase the risk of species misidentification. For this reason, it is essential to implement approaches to ensure accurate species identification. Sequences of nuclear rDNA and mtDNA genes have proven to be a powerful tool for providing accurate and molecular species identification. Their close morphological similarities are usually not associated with their ecological traits or association with plant resistance or vectoring of plant viruses. This demonstrates the importance of using integrative taxonomic identification. Although this approach is more complex than traditional taxonomy, its application reduces the degree of subjectivity that is common in traditional taxonomic practices.





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Message from the Editor-in-Chief

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