



35th

*Symposium of the European
Society of Nematologists*

*Cordoba, Spain
15-19 April, 2024*



Organize:

European
Society of
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Welcome

Dear colleagues,

It is a pleasure to announce the upcoming 35th International Symposium of the European Society of Nematologists, to be held in Córdoba (Spain) by 15-19 April 2024. A unique opportunity to exchange Nematology knowledge with the scientific and stakeholder communities.

Two years have passed since our last symposium in Antibes (France) and some changes have arisen since then. Next year we will have the opportunity to know how to face these challenges. Scientific sessions will include hot topics based on Nematology Research and applications around the world:

- Nematode Taxonomy, Systematics and Diagnosis
- Nematode Phylogeny, Phylogeography and Phylogenomic
- Biodiversity, Distribution and Ecology of PPN, EPN, and free-living
- Plant-nematode interactions and host response
- Nematode omics, metabolism and physiology
- Marine and Freshwater nematodes / Animal parasites
- Entomopathogenic nematodes
- Management of plant-parasitic nematodes
- Nematodes as bioindicators and nematode community assemblies
- Nematode effectors and parasitism genes
- Nematode interactions with other organisms: Complex diseases and Biocontrol
- New nematicidal products: Botanicals and Agrochemicals
- Cultural management of PPN: Cover crops, organic amendments, ASD
- Role of soil microbiome in nematode suppression
- Quarantine Nematodes: Diagnostics and management.

We look forward to seeing you all during the upcoming 35th International Symposium of the European Society of Nematologists in Cordoba, Spain. April 2024.

The Local Organizing Committee

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221. Management of *Meloidogyne incognita* through the use of resistant pepper varieties and rootstocks under the greenhouse

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Area: Integrated Management of Plant-Parasitic Nematodes

Type: Poster

Keywords: root knot nematodes, resistance genes, nematode management, *Capsicum annuum*, undisinfected soil

ABSTRACT:

The cultivation of pepper is one of the emblematic crops of Campo de Cartagena (Southeast of Spain), the strong restrictions on the use of soil fumigants and the limitation of the use of sheep manure for biosolarization in the management of soil pathogens, for being an area vulnerable to nitrates, paints a difficult scenario that threatens the sustainability of the crop. Last season, many farmers grew varieties and grafted plants on nematode-resistant rootstocks on undisinfected soil. With the aim of studying the viability of this practice, 5 commercial varieties carrying nematode resistance genes (Cabanas, Kation, Katmandu, Nelto, Pretoria) and 4 resistant rootstocks (Alcos, Beldrock, Robusto and Oscos) were evaluated. Cultivated the susceptible variety Maestral (Fito seeds) without grafting in a greenhouse homogeneously infested with a population of *M. incognita* in the process of virulence selection for the Me3 gene for resistance to the nematode. Nematode population density and nematode incidence and severity were measured during cultivation every 6-8 weeks and at the end of the trial and production. The varieties carrying the Me1 resistance gene were less affected by the nematode than those carrying the Me3 gene, which did not show significant differences with respect to the susceptible ungrafted variety. The population density in the soil at the end of the crop decreased between 57-99%, compared to the susceptible variety, where genotypes carrying the Me1 gene were grown. The differences in production are due to the intrinsic characteristics of each genotype, however the rootstocks improved the performance of the susceptible variety without grafting. Preliminary results show that the cultivation of varieties carrying the Me3 gene in soils infested with populations virulent to the gene could affect yield. On the other hand, it remains to be verified whether the reiteration of genotypes carrying the Me1 gene in undisinfected soil could lead to the appearance of nematode population to this gene.

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