35th Symposium of the European Society of **Nematologists**

Cordoba, Spain
15-19 April, 2024

Organize:

European Society of Nematologists

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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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300. Investigating nematode biodiversity in the Irish boglands using morphological features. *Tilman Klappauf*

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208. Pathogenicity tests with entomopathogenic nematodes isolated from chestnut groves on *Cydia* and *Curculio* larvae

Sara Amoriello[1], Agostino Strangi[1], Immacolata Iovinella[1], Chiara Sciandra[1], Leonardo Marianelli[1], Pio Federico Roversi[1], Giulia Torrini[1]
1 CREA Research Centre for Plant Protection and Certification, Florence, Italy

Area: Entomopathogenic Nematodes
Type: Poster
Keywords: Biological control agents, chestnut phytophagous insects, *Steinernema carpocapsae*, *Steinernema feltiae*

ABSTRACT:
The Italian chestnut-growing, particularly in rural areas, continues to represent an ecological niche and a reservoir of cultural and historical significance, as well as an important economic source for farmers.
Chestnut cultivation is threatened by phytophagous insects that cause early drops of fruits and considerable losses of harvested product. Tortrix moths [*Cydia fagiglandana* (Zeller), *C. splendana* (Hübner), *Pammene fasciana* (L.)] and chestnut weevils (*Curculio elephas* Gyllenhaal, *C. propinquus* Desbrochers des Loges) are considered among the most economically damaging native species.
The study of entomopathogenic nematode (EPN) communities in these cultivated areas aims to enhance the knowledge useful for the development of low-impact control strategies, in order to promote the proliferation and conservation of these natural biological control agents for the control of harmful insects.
Monitorings were carried out in autumn and spring period, in two different types of chestnut groves in Northern Italy: pure and mixed with other tree species.
A clear predominance of EPNs was recorded in mixed chestnut groves, where the genus *Steinernema* was the most frequent. In particular *S. feltiae* was the most abundant species (31.3% of positive samples), however it was exclusively isolated in mixed chestnut groves. Moreover, two new *Steinernema* species were isolated in the spring period sampling, one only in mixed and the other in both types of chestnut grove. These species are under description.
Laboratory tests were carried out to assess the pathogenicity of *S. feltiae* and *S. carpocapsae* strains isolated from chestnut groves against *Cydia* and *Curculio* larvae. The results obtained indicate that both EPN species are excellent biocontrol agents. In particular, *S. carpocapsae* gave the best results against both pests, killing 100% of *Cydia* and *Curculio* larvae.

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