



@ESNematologists

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Nematology News



Bursaries for ESN student members attending IFNS 2014

The ESN governing board is delighted to announce that 10 bursaries of up to 1000 Euro will be available to student members of the ESN. These bursaries will be awarded on a competitive basis. Details of who can apply and an application form are available in the members section of the ESN website. The ESN governing board will select the successful bursars on the basis of the scientific impact of the student's research findings. Completed application forms should be submitted to Loes den Nijs before 1st October 2013.



Recipients of ESN bursaries at the 2012 Adana meeting

ESN Facebook page and Twitter feed!

The ESN has taken its first tentative steps into the world of social networking with its own Facebook page and Twitter feed. Both are being run by the ESN webmaster, Wim Bert. A search on Facebook for "European Society of Nematologists" will take you to our Facebook page. We will try to put relevant information onto this page as often as possible but all users are also welcome to post information on this page that you feel might be of interest to other users. This is something of a step into the unknown for most of the ESN Governing Board so please be patient! At the time of writing the ESN Facebook page had already accumulated 86 "likes" - not bad going after 3 days in existence!

You can follow ESN on Twitter - our username is @ESNematologists. We will aim to send out news and information as often as possible.



ESN News

Call for election of new members of the governing board

The ESN constitution foresees the election of new members of the governing board during the general assembly held at the occasion of the biennial symposia; the next symposium will be held at the IFNS meeting in South Africa (4th – 9th May 2014). Two members of the board have come to the end of their mandate and need to be replaced. ESN members are invited to nominate candidates for these vacancies. "Each nomination shall be made by a member of the Society and shall be seconded by another member of the Society" (article VI B, internal rules). Each nomination should therefore be supported by an independent member of ESN in writing.

The nominees who fulfil the requirements for Governing Board membership shall be listed as candidates for election and be published in Nematology News and on the website four months prior to the General Meeting. In view of the date of the General Assembly, the deadline for submission of nominees is 1st December 2013. Nominations and supporting letters should be sent to the secretary/treasurer.

Call for nominations for Fellows of the ESN

Election of Fellow of the Society is accorded to General Members in recognition of outstanding contributions to the science of Nematology or distinguished service in promoting the Objectives of the Society. The call for nominations for Fellows of the ESN to be elected in South Africa (4th – 9th May 2014) is now open. Nominations for Fellow of the Society may be made by any member. All nominations must be accompanied by a written statement outlining the professional achievements of the nominee and giving reasons for the proposed election. All nominations must be supported by two other members.

Nominations should be submitted to the Secretary/Treasurer (Loes den Nijs) at least three months before the General Meeting of the Society. For the current election, nominations should be received before 1st December 2013. The selection of Fellows will be made by a committee appointed by the Governing Board which will inform the membership of its decision at the General Meeting in South Africa.

Current ESN Fellows (year of election)

Maurice Ritter (1986)	August Coomans (2000)	Maria Susana Santos (2004)
Julia Meridith (1990)	Virginia Ferris (2002)	Richard Sikora (2006)
David Hooper (1994)	David Trudgill (2002)	Anton Dalmasso (2006)
Pieter Loof (1994)	John Webster (2004)	Roland Perry (2008)
Nigel Hague (1998)	Roger Cook (2004)	Maurice Moens (2010)

ESN Financial Statement for 2012

The internal rules of the ESN require that a summary of the financial transactions that have taken place each year is published in this newsletter. The financial statement for 2012, signed off by two independent members of the ESN (i.e. two members that are not part of the governing board), is presented here. The finances of ESN are in a healthy state due to improved collection of membership fees as well as profits from ESN symposia. Profits made by ESN fund the continuing activities of the society, including support for student members to attend ESN meetings.

Financial Statement ESN (2012) [Currency Euros (€)] Loes den Nijs, Secretary-Treasurer ESN Transactions from 1 January 2012 - 31 December 2012

INCOME		EXPENDITURE	
To Balance bid @ 1 January 2012	59.076,00	Domain name renewal 2012	35,15
Membership subscriptions (excluding UK)	2.700,00	bursarie payments via UK account	937,28
Membership subscriptions (UK)	585,60	bursarie payments via NL account	8.000,00
benefit symposium Adana	3.500,00	costs GB	85,24
transfer from ESN-NL to UK account	8.920,36	Bank charges	160,83
return money costs symposium fee	1.150,00	transfer to UK account	10.000,00
Interest	317,91	Chamber of Commerce annual fee	24,08
		ESN flag	150,24
		costs symposium	700,00
		prepaid costs symposium fee	1.150,00
		presents for proof reading	138,47
		travel expenses symposium	1.280,99
		MTC hosting fees	224,95
		exchange rate differences	637,87
		By Balance c/d @ 31 December 2012*	52.735,97
	<u>76.250,07</u>		<u>76.250,07</u>

*Balance c/d comprising of:
Wageningen Account € 38.138,20
United Kingdom Account € 16.530,28
Paypal account € 67,49

N.B. 1. All figures are presented in the ESN currency of € (Euros), although funds in UK are held in £ (Pound Sterling). The value will therefore vary, dependant on fluctuating exchange rates.
N.B. 2. The Wageningen account comprises of the running account and an account for savings.
RABO Account is ESN Central Bank Account in Wageningen, The Netherlands

Audited by:

 Dr. J. van der BEEK

B. GERIĆ STAVE


date: May 7/13

News from South Africa – 6th ICN

The 6th ICN conference is getting closer -the website with online registration has been opened (www.6thICN.com). Please have a look and see what we are offering. Accommodation, excursions, pre- and post-field trips can be booked on the website while registering. For the young and not so young but fit nematologists, we will have a bike ride on Sunday morning. This will take you through the beautiful Cape Peninsula. Every morning we will organise a run from the hotel. Cape Town has many nice running sites, so you will not want to miss out on this.



Four different excursions will be offered. Two of the 4 will have an agricultural angle while the 2 other excursions will be purely touristic. Of course you will be able to see the beautiful countryside on all of the excursions. If weather allows we will all meet on Table Mountain for sundowners.

We are trying very hard to get at least 50 students here funded by a full or partial grant. If you are a student and you have a nice and interesting project, do not hesitate to contact us and apply for a grant. We have a special page for student grant applications and are looking hard for more sponsors.

The scientific program consists of 15 themes, with several sub themes in each. Each theme will have at least 2 sessions with presentations. The number of posters is not limited. For each theme a chair and co-chair have been selected and these people will select papers and poster presenters. We will have workshops during the symposium but have not finalized these topics yet. If there is an urgent matter that needs to be discussed this can be done during a workshop. We have an extra room available so that we will be able to fit in a workshop easily. The official program will only be available later as we need abstracts and titles to produce this. So look at the themes and start thinking about your abstract. And send it to us as soon as it is ready. Guidelines are available on the website. Abstracts can be submitted online.

PRELIMINARY PROGRAM

Sunday 4 May 2014:	Early morning cycle trip for those interested Registration and finger dinner
Monday 5 May 2014:	Plenary session followed by a full day of presentation
Tuesday 6 May 2014:	Full day presentations and posters sessions
Wednesday 7 May 2014:	Full day field excursion with sundowners on Table Mountain
Thursday 8 May 2014:	Full day presentations and posters sessions Gala dinner + award ceremony
Friday 9 May 2014:	Full day presentations

SCIENTIFIC PROGRAMME

Theme 1: Nematodes and soil health

- Nematodes as bioindicators of agro-ecosystem health/functioning (terrestrial and aquatic)
- Rhizosphere biology and multitrophic interactions
- Suppressive soils
- Promoting the importance of nematodes as bio-indicators

Theme 2: Morphology, taxonomy, phylogeny and classification

- Current trends in nematode phylogeny and classification
- Morphology: towards an integrated approach with novel methods
- Molecular applied systematics and classification
- Nematode diagnostics / barcoding

Theme 3: Physiology, biochemistry, and behaviour of nematodes

- Nematode physiology
- Survival, adaptation and tolerance of nematodes in extreme environments



- Biochemistry of nematodes
- Exploiting RNA interference

Theme 4: Regulatory aspects of plant nematology

- Quarantine and biosecurity
- The impact of climate change on quarantine nematodes
- Emergent nematode pests (potential threats):
- Molecular applications in nematode detection and identification

Theme 5: Genomics and plant-nematode-interactions

- Functional genomics of host plant responses to plant-parasitic nematodes
- Gene expression in nematodes
- Mining plant-parasitic genomes
- Assessing new genomic tools

Theme 6: Nematode interactions

- Mutualistic / phoretic associations of nematodes
- Virus-vector nematodes
- Pine wilt disease
- Symbionts of entomopathogenic nematodes

Theme 7: Animal parasitic nematodes

- Nematodes parasitic on vertebrates (terrestrial and aquatic)
- Nematodes parasitic on invertebrate vectors (terrestrial and aquatic)
- Parasite genome and genetics
- Nematode parasites and poverty

Theme 8: Nematode biodiversity

- Ecology, biogeography and evolution
- Soil metagenomics, functional metagenomics
- Marine and freshwater nematodes biodiversity
- Nematodes as indicators of pollution

Theme 9: Entomopathogenic nematodes

- Biocontrol potential of specific EPNs
- Genetic selection to improve beneficial traits in EPNs
- In vitro culturing of EPNs
- In vivo production of EPNs

Theme 10: Biological control of nematodes / biopesticides

- Future applications and markets for biological control agents
- Plant extracts, plant phenylpropanoid pathway products to control plant-parasitic nematodes
- Future for environmentally friendly products
- Incorporation of biological control products into IPM strategies

Theme 11: Chemical control of nematodes

- Future applications and markets for environmentally-friendly products
- Phase-out of nematicides
- Introduction of new products
- Resistance inducing chemicals

Theme 12: Plant resistance and nematode virulence

- Breeding for resistance to plant-parasitic nematodes
- Engineering for genetic resistance
- Suppression of plant defense by nematodes
- Resistance genes and incompatible parasitic interactions



Theme 13: Integrated nematode management

- Integrated nematode management in subsistence and smallholder agriculture
- Integrated nematode management in conventional farming systems
- Integrated nematode management in sustainable agricultural cropping systems
- Integrated nematode management in organic farming

Theme 14: Future of nematology, education and training

- Funding of applied nematology, extension and teaching
- The flow of technology transfer– from researcher to end-user
- Integration of technological advances in developing countries; innovation for societal requirements
- The challenge of maintaining nematology in universities and research institutes

Theme 15: Industry- related issues

- Impact of nematodes on the food chain
- Impact of nematode control products on the environment

WORKSHOPS

- Meloidogyne Host races – Janete Brito and Judy Thies (coordinators)
- Meloidogyne – Géraldine Anthoine (Chef d'unité développement de méthodes et analyses - assurance qualité).
- Chemical control of nematodes and the value chain – Bayer

*Mieke Daneel
Chair 6th ICN*

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INTRODUCTION TO NEMATODES

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La Serena, Chile, October 20 - 25, 2013

ONTA Meeting

Welcome to the XLV ONTA Meeting!

Dear ONTA members, nematologists and students.

The Organizing Committee of the ONTA Meeting 2013 and our sponsors welcome you to Chile, to the XLV Congress of the Organization of Nematologists of Tropical America, to be held between 20th and 25th of October 2013.

This is the most important activity of our organization and this year it will be performed in one of the most important agricultural Regions of Chile, **Coquimbo**, in the city of **La Serena**, a place where the agriculture shows a wide variety of crops, like grapevines, citrus, avocados, potatoes, pomegranates and many vegetable crops.



This is also an important tourist region, with one of the cleanest skies in the world, an incredible combination of hills and valleys, a diverse gastronomy and of course some of the best wines.

We are sure you will enjoy this meeting, which will be focused in different topics like taxonomy, management of plant-parasitic nematodes, biodiversity and ecology, interactions with other microorganisms and biological control among others.

We hope to see all of the members and friends of ONTA in our meeting.

Thanks for coming!!

The Organizing Committee

Meeting report - The 10th International Symposium of the Russian Society of Nematologists, July 2013

The 10th International Symposium of the Russian Society of Nematologists was held at Golitsyno – Bolshie Vyazemy on 1-5 July 2013. The meeting attracted delegates from 15 countries including Belgium, Egypt, India, Iran, Italy, Japan, Pakistan, USA and the UK; together with delegates from the Russian Federation, there were over 70 attendees. The programme was spread over five days. Scientific sessions on World Collections, Biology, Development, Ecology, Molecular Nematology, Host-parasite Interactions and Management ensured that this was a conference that covered a wide spectrum of topics. There was also a useful 'School for young scientists' as part of the programme and there was an encouraging number of young scientists among the delegates. The 'Best Student Poster' award was won by Victoria Lavrova, Institute of Biology of Karelian Research Centre, for her poster entitled Temperature priming – a basis for enhanced plant resistance to phytonematodes.



President of the Russian Society of Nematologists, Mikhail Pridannikov, and his wife



One of the sessions at the meeting

The conference included excursions around the places associated with the Russian poet, Alexander Puskin, the city of Zvenigorod and the Savvino-Stozozhevsky Monastery. An afternoon visit to the Russian Research Institute of Phytopathology in Golitsyno included demonstration of various modern facilities in the lab of genetics, the State collection of plant pests, experimental glasshouses and the nematode laboratories. The National Drinks Party and the Gala Dinner were highlights of the evening social activities! The conference was organised by the president of the Russian Society of Nematologists, Dr Mikhail Pridannikov (Russian Research Institute of Phytopathology, Bolshie Vyazemy), with able assistance from his colleagues. Mikhail and the society are to be congratulated on organising such a successful symposium. The Russian Society of Nematologists was established in 1993; in the intervening 20 years the society has strengthened its membership and the biennial meetings are an important facet of the society. The next meeting in 2015 will be held in Cheboksary, Middle Volga.

*Roland N. Perry and Alexander Ryss
July 2013*

Professor Maurice Moens honoured by Russian Society of Nematologists

At the 10th International Symposium of the Russian Society of Nematologists Professor Maurice Moens (right) was awarded an Honorary Membership of the society for his distinctive contributions to the science of nematology and development of scientific co-operation with Russian nematologists. On his appointment to the Institute for Agricultural and Fisheries Research (ILVO), Belgium, Maurice expanded the research in plant nematology over various areas covering molecular characterisation, biology of host-parasite relationships, biological control, resistance and other forms of non-chemical control. He was appointed head of the Crop Protection Department in 2000 and became Director of Research in 2006. He retired from ILVO in 2012. During his period at ILVO, Maurice had several collaborative research projects with Russian nematologists, including Sergei Spiridonov and Sergei Subbotin. As Director of the Postgraduate International Nematology Course at Ghent University, he supervised several Russian students for their Masters degree. He has participated in nematology symposia organised by the Russian Society of Nematologists and is a member of the editorial board of the Russian Journal of Nematology. Congratulations, Maurice!



Nematology Highlights, Vol. 15 (2013) Parts 1-4

Each annual volume of *Nematology* contains eight issues. The first four issues of *Nematology* volume 15 (2013) contain 34 full research papers and 2 short communications. Three selected papers from each issue are highlighted here. All articles are available online as corrected proofs and the DOI can be cited. *Nematology* papers, including the earlier papers of *Nematologica*, are available on Brill's online platform at: <http://booksandjournals.brillonline.com/content/15685411>

Part 1

Estifanos, Traunspurger and Peters used stable isotopes to examine feeding by free-living nematodes (**Selective feeding in nematodes: a stable isotope analysis of bacteria and algae as food sources for free-living nematodes**; pp. 1-13). The species used showed considerable differences in their isotope composition in relation to food sources. The technique allows direct dietary assessment and tracing of ingested food, which can be related to food source and niche partitioning thus providing information relevant to nematode feeding ecology.

In an article entitled **Seven new species of *Trichodorus* (Diphtherophorina, Trichodoridae) from Spain, an apparent centre of speciation** (pp. 57-100), Decraemer, Palomares-Rius, Cantalapiedra-Navarrete, Landa, Duarte, Almeida, Vovlas and Castillo describe a complex of new species from Spain mainly differentiated by differences in body length, onchiostyle length, spicule shape and number of ventromedian cervical papillae in the male and size and shape of the vaginal sclerotised pieces in the female. The presence of the *T. lusitanicus* morpho-species group with eight species, apparently endemic to the Iberian Peninsula, could point to a recent speciation event. Molecular evidence using the D2-D3 expansion segments of 28S rDNA supports the validity of the new species.

Responses of nematodes to seed treatments have become of great interest in relation to possible control strategies. In a paper entitled **Differential defence response due to jasmonate seed treatment in cowpea and tomato against root-knot and potato cyst nematodes** (pp. 15-21), Pankaj, Muttucumari, Powers, Gaur, Kurup and Curtis found a significant reduction in infection by *Meloidogyne incognita* and *Globodera pallida* of seeds treated with jasmonate, with the major effects being a reduction in the number of eggs produced. Seed treatment with natural elicitors of plant immunity offers an environmentally control possibility.

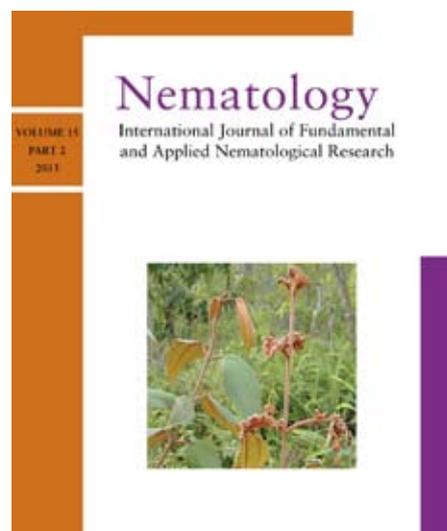
Part 2

A new species of *Globodera* is described by Knoetze, Swart and Tiedt from South Africa in a paper entitled **Description of *Globodera capensis* n. sp. (Nematoda: Heteroderidae) from South Africa** (pp. 233-250). The stages found are morphologically and morphometrically very near to, or indistinguishable from PCN, *G. artemisiae*, *G. millefolii* and *G. tabacum tabacum* but can be distinguished by the molecular characteristics of the ITS-region of the ribosomal DNA. Phylogenetic relationships of *G. capensis* with selected species of Punctoderinae, inferred from ITS-rRNA sequences by using the Maximum Likelihood method, indicate that it occupies a basal position within a lineage of *Globodera* species from Europe, Asia and New Zealand that parasitises non-solanaceous plants. For diagnostic purposes, digestion of the ITS1 with *AluI* distinguishes *G. capensis* from *G. mexicana*, *G. pallida*, *G. rostochiensis* and *G. tabacum*, but not from *G. artemisiae*, *G. millefolii* and *G. zelandica*, whilst *FauI* distinguishes *G. capensis* from all the other *Globodera* species tested.

Wang, Dong, Qian, Xia and Cong describe the biology of a virulent symbiotic *Xenorhabdus* from entomopathogenic nematodes (**Isolation, bioassay and characterisation of *Xenorhabditus* sp. SY5, a highly virulent symbiotic bacterium of an entomopathogenic nematode isolated from China**; pp. 153-163).

The authors isolated 122 strains of symbiotic bacteria from 23 isolates of entomopathogenic nematodes and all showed insecticidal activity against larvae of the Asian corn borer, *Ostrinia furnacalis*. The authors found that *Xenorhabditus* sp. SY5 exhibited strong insecticidal activity against five economically damaging insect species, and they were able to isolate seven toxins from the bacterium, each of which had different insecticidal activity/growth inhibition against the tested insects. This highly virulent strain has a potential value for pest control.

Oliveira, Santin, Sen, Dietric, Salaza, Subbotin, Mundo-Ocampo, Goldenberg and Barreto, in a paper entitled ***Ditylenchus gallaeformans* sp. n. (Tylenchida: Anguinidae) – a neotropical nematode with biocontrol potential against weedy Melastomataceae** (pp. 179-196), describe a gall-forming nematode from several hosts at numerous locations in Brazil and Costa Rica. In its native habitats it attacks several genera in the Melastomataceae, including



two species ranked as among the worst invasive weeds of Pacific island forests, namely *Miconia calvenscens* and *Clidemia hirta*. The new species causes a severe disease on infected plants involving the formation of gall-like structures on infected leaves, inflorescences and stems and may cause significant impact on its hosts. The molecular study revealed that the new species is related to *D. drepanocercus*, which was recently found in association with *M. calvenscens* but causing angular leaf-spots on this host. PCR with species specific primers was developed for diagnostics of both *Ditylenchus* species. *Ditylenchus gallaeformans* sp. n. has potential as a biocontrol agent against *M. calvenscens* and *C. hirta*.

Part 3

Meloidogyne chitwoodi is a quarantine pathogen and a severe problem of potato. Intraspecific variation and genetic structure are not well characterised but are critical to avoid misidentification and to optimise management strategies. In an important paper by Humphreys-Pereira and Elling entitled **Intraspecific variability and genetic structure in *Meloidogyne chitwoodi* from the USA**; pp. 315-327), the authors analysed the morphological and molecular variation of four *M. chitwoodi* isolates, representing all races and pathotypes currently known in the USA. Despite statistically significant morphological variation among adult females, morphometrics was not able reliably to distinguish *M. chitwoodi* isolates. By contrast to morphology, molecular traits determined by nuclear ribosomal genes were stable across all isolates. Malate dehydrogenase, esterase and superoxide dismutase isozyme phenotypes were conserved in all isolates. Analysis of a mitochondrial DNA segment including a partial region of COII, tRNA-His and 16S rRNA genes showed that genetic structure was weak and marked by high haplotype and low nucleotide diversity. The authors found a high level of mitochondrial heteroplasmy in *M. chitwoodi*. Taken together, the results indicate that there is significant intraspecific morphological and molecular variation in *M. chitwoodi*.

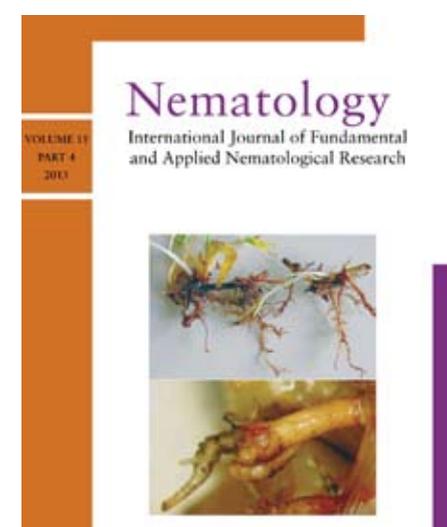
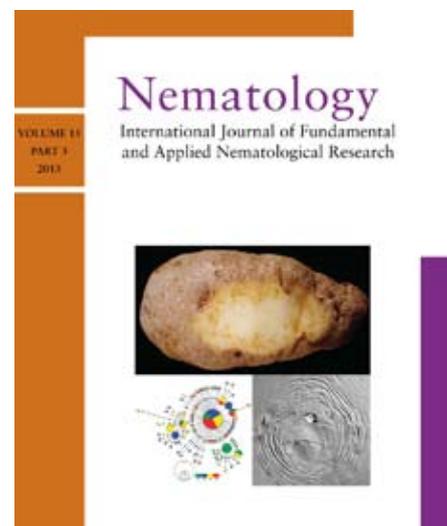
Managing parasitic variability of *Meloidogyne hapla* is a major challenge in carrot production. In a paper by Melakeberhan and Wang **Proof-of-concept for managing *Meloidogyne hapla* parasitic variability in carrot production soils**; pp. 339-346), the authors used glasshouse studies to test a hypothesis that knowledge of host suitability to populations of *M. hapla* could lead to developing effective management strategies. The authors used seven carrot cultivars and four *M. hapla* populations. The results suggest that identifying the reproductive potential of a resident *M. hapla* population is critical to making decisions about what carrot cultivars to plant as well as to minimise inoculum build up in an infested field.

Zhuo, Wang, Ye, Peng and Liao describe a new species of *Heterodera* from bamboo in China (***Heterodera hainanensis* n. sp. (Nematoda: Heteroderinae) from bamboo in Hainan Province, China – a new cyst nematode in the Afenestrata group**; pp. 303-314). *Heterodera hainanensis*, based on morphology and molecular analyses of rRNA D2D3 region of LSU and ITS, belongs to the Afenestrata group and is closest to *H. koreana* in dendrograms inferred from both markers. A key to all species of the Afenestrata group is presented.

Part 4

The soil nitrogen form available to a crop is strongly influenced by soil physical characteristics and chemical fertiliser supply and there is considerable potential for farming management practices to influence this parameter. In the first of two papers on this subject published in this issue of *Nematology* (**Effect of root nitrogen supply forms on attraction and repulsion of second-stage juveniles of *Meloidogyne graminicola***; pp. 469-482), Patil, Powers, Miller, Gaur and Davies investigated the effect of different forms of nitrogen supply to plants on subsequent nematode attraction and repulsion. They found that second-stage juveniles of *Meloidogyne graminicola* were significantly attracted towards the roots of rice plants grown in hydroponics containing 0.1 mM NO₃⁻ and 2.85 mM Ca(NO₃)₂ but repelled by 10.0 mM NO₃⁻, 2.85 mM NH₄NO₃ and NH₄Cl. The results suggest that the application of ammonia-based nitrogen fertiliser to the rice nursery bed may interfere with nematode attraction and thus reduce invasion, and the application of chemical nitrification inhibitors to rice nursery beds may decrease nematode invasion.

Distribution of the southern sting nematode, *Ibipora lolii* (Nematoda: Belonolaimidae), on turfgrass in Australia and its taxonomic relationship to other belonolaimids (pp. 401-415), by Stirling, Stirling, Giblin-Davis, Ye, Proazinska, Nobbs and Johnston, demonstrates from molecular evidence that the two belonolaimids described from turfgrass in Australia (*Ibipora lolii* and



Morulaimus gigas) are identical. Survey data show that *I. lolii* is widespread on turfgrass around Newcastle in New South Wales and in Perth, Western Australia, where the infested area is increasing rapidly, largely because the nematode is being spread in planting material. *Ibipora lolii* was not found in surveys of natural vegetation on the east and west coasts of Australia, suggesting that it is an introduced species, possibly originating in South America or the Caribbean.

Free-living nematodes have potential to be used as live food for early life stages of several species in marine aquaculture. In a paper by Honnens and Ehlers entitled **Liquid culture of *Panagrolaimus* sp. for use as food for marine aquaculture shrimp and fish species** (pp. 417-429), the authors consider that *Panagrolaimus* sp. has several favourable characteristics for this application and show that propagation of *Panagrolaimus* sp. in monoxenic liquid culture on *Saccharomyces cerevisiae* was possible, although yields were highly variable. Based on comparison of dry weight per individual the authors consider that *Panagrolaimus* sp. might be used as a substitute for rotifers, a commonly used live food organism.

David Hunt and Roland N. Perry
Editors-in-Chief, Nematology

Obituary: Georges de Guiran

Georges de Guiran, Senior Scientist at INRA, passed away on February 2, 2013. He began his career in the team of Michel Luc at ORSTOM Abidjan (Ivory Coast). At that time the field of tropical agricultural Nematology was in its infancy. Everything was to discover and build. Georges was a pioneer in several fields and actively participated in identification of tropical plant parasitic nematodes. Following his visits to major European laboratories he brought back first to Abidjan and then to Dakar (Senegal) the techniques needed for accurate observations. The task was huge considering the diversity of species in these regions. He was one of the founders of French tropical nematology. At that time most of the tropical research focused on systematics. Georges chose to devote his work to the biology of the main pests, including the genus *Meloidogyne*. His keen sense of observation led to several publications in "les cahiers de l'ORSTOM" and in major international journals in plant nematology. In 1969 he joined the INRA Antibes station headed by Maurice Ritter where he brought his extensive knowledge and techniques for observing nematodes in vitro. He taught numerous undergraduate courses at the University of Louvain (Belgium). He did not neglect applied nematology and he published richly illustrated a book on vermicular plant diseases, which is widely used. After an observatory mission to Japan whose forests were being ravaged by the pinewood nematode *Bursaphelenchus xylophilus*, he conducted pioneering research on the biology of this species which lead him to become one of the leaders of the European project for the prevention and control of this pest. Georges retired in 1994 and moved closer to his daughter in Tours. Georges will be always remembered by all those who knew him as a gentle and extremely warm person, with a great sense of humour. He will be particularly missed by the French nematologists community. He is survived by his daughter Laure, his son Marc and three grandchildren.



New internal rules for ESN

The ESN governing board proposes to make some minor changes to the internal rules of the Society. These are the regulations that govern the day-to-day running of the society. The proposed changes clarify the length of time that officers of the society can be part of the governing board, describe the process in which sites for the biennial meeting are chosen and clarify the role of the local meeting organisers and ESN governing board in running the meeting. The proposed changes will be voted on at the next general meeting of the ESN, scheduled to take place during the IFNS meeting in South Africa. The rules of ESN require that the new internal rules are published in full in this newsletter in advance of the vote. So, here you go. Any member that wishes to raise any concerns about the changes can contact the Secretary/Treasurer.

EUROPEAN SOCIETY OF NEMATOLOGISTS Internal rules Additional to the articles of association

ARTICLE I - Name and official address

The name of the Society shall be the EUROPEAN SOCIETY OF NEMATOLOGISTS hereinafter referred to as the Society. The official address of the Society is: Wageningen University and Research Centre (WUR), Wageningen, The Netherlands. All correspondence should, in the first instance, be addressed to the Secretary at his/her address.

ARTICLE II - Objectives

The objectives of the Society shall be:

- (1) the advancement of the science of nematology;
- (2) to foster communication and collaboration between nematologists particularly through the Society newsletter and through biennial Symposia and other meetings;
- (3) to represent the views of nematologists to other bodies, organisations and governments.

ARTICLE III - Membership

Membership of the Society is open to any person engaged in or interested in the science of nematology.

A. Classes of Membership

1. General Member

Any person may become and remain a General Member on application for membership to the Secretary of the Society and on continued payment of the annual Membership Fee, provided they are not otherwise disqualified from membership by these Internal Rules.

2. Life Member

Any person who joined the Society in this capacity before 1987; it is no longer possible to become a Life Member.

3. Fellow of the Society

A person thus elected in recognition of merit.

4. Sustaining Member

A person or organisation having contributed to the Society an annual Sustaining Membership Fee.

B. Privileges

All members may participate in general meetings of the Society, vote on all matters submitted to the membership for decision, offer nominations for office, hold office and serve on the Governing Board.

All members shall receive notification of the date and place of the General Meeting and of Society Symposia. All members shall be entitled to receive Society mailings, newsletters, membership directories and associated benefits.

Sustaining members shall be entitled to display and present information regarding their proprietary products and services at Society Symposia. Any organization that is a sustaining member may designate one person to exercise the voting rights of that membership; the designated person shall receive all official communications and newsletters from the society.

C. Termination of membership

Members (General Members and Sustaining Members) who fail to pay their membership fees when due shall be excluded from the Society. A member shall be informed in writing by the Treasurer that the membership fee has not been received by the Society. If the fees remain unpaid (i.e. not received by the Treasurer of the Society) for six calendar months, membership shall be terminated effective immediately.

Former members who have had their membership terminated for reason of non-payment of membership fees may re-apply and can be accepted without formality upon payment of membership fees and all debts to the Society.

D. Membership Fees

The annual Membership Fee shall be decided at the General Meeting of the Society.

The minimum annual Sustaining Membership Fee shall be determined by the Governing Board.

All fees shall be paid by 1 February of each year. Up to four years fees may be paid in advance and these shall not be subject to any increases imposed by the Society during that time.

Life Members and Fellows of the Society shall be exempt from Membership Fees.

E. Meeting of Members

At all meetings of the members, motions shall be resolved by a simple majority vote of the members present. The minimum number of members required to be present in order to constitute a valid meeting of the Society shall be 30.

There shall be a General Meeting of the Society at the time and place of the Biennial Symposium. Notice of such a meeting shall be given to all members by inclusion with the notice of the Symposium.

The purpose of the General Meeting shall be to enable the membership to discuss the affairs and management of the Society. It provides the opportunity to members to hear from and to question the Governing Board regarding its activities.

In particular, the General Meeting shall elect the President, confirm the election of members of the Governing Board, fix the membership fee and make decisions on any matters put to it by the Governing Board.

The President shall preside as Chair of the General Meeting. The Governing Board shall propose an agenda for the General Meeting which shall be agreed or amended by the meeting.

An Extraordinary General Meeting of the Society may be called at any time by a majority of the Governing Board. The

Governing Board shall also call an Extraordinary General Meeting whenever so requested in writing by at least 30 members (no more than 50% of whom shall be from any one country). Notice of such a meeting stating the purpose for which it is called shall be served personally or by mail to members not less than two calendar months before the date set for such a meeting. No business other than that specified in the notice convening the meeting shall be transacted at any Extraordinary General Meeting called in this manner, and the meeting shall be conducted with procedures identical to that of a General Meeting.

ARTICLE IV - The governing board

The Governing Board shall be responsible for the general management of the Society, shall nominate from within the GB the Secretary/Treasurer and from the assembly or the GB the Editor of Nematology News, and two persons (one of whom will usually be the Secretary/Treasurer) to represent the Society on the board of the International Federation of Nematological Societies (IFNS). The Governing Board shall appoint two members of the Society to a Finance Committee which will audit the accounts of the Secretary/Treasurer. The Governing Board shall report its activities to the General Meeting and may, at its own discretion, ballot the General Meeting on any matter it considers to be of suitable importance.

The Governing Board shall be composed of the President, the secretary/treasurer, and four ordinary members (of which one might be the editor of Nematology News) who shall be elected for four years by the membership of the Society. No member of the Governing Board shall serve for more than two consecutive periods, that is a total of eight years with the exception of the Secretary/Treasurer, who can stay for a maximum of 12 years; former members may be re-elected after an interval of two years.

A meeting of the Governing Board can only take place provided at least four members are present. In the event of a tie when voting the President shall have the deciding vote. At the discretion of the Governing Board, the Editor of Nematology News (when not a member of the GB) and the Symposium Director may participate at meetings of the Governing Board in a non-voting capacity.

ARTICLE V - Officers

The officers of the Society are the President, the Secretary/Treasurer, the Symposium Director, ordinary members of the GB and the Editor of Nematology News. The post of Secretary /Treasurer is to be held by one and the same person. Only members of the Society may hold office.

A. The President shall ensure that the affairs of the Society are conducted according to the Objectives of the Society and in accordance with the articles of association and these internal rules.

He/she shall preside over meetings of the Society and the Governing Board, and shall represent the Governing Board at the General Meeting. The President shall be elected at a General Meeting, assume the role at the completion of that General Meeting, serve for a period of four years and may be re-elected for one extra period but then be replaced at the end of that period (max of 8 years)

B. The Secretary/Treasurer shall keep the minutes of meetings of the Governing Board and of the General Meetings, prepare and distribute all notices of the Society, enrol new members and maintain records of membership, conduct business on behalf of the Society and attend to correspondence with the authority and approval of the Governing Board.

The Secretary/Treasurer shall also have the care and custody and be responsible for all funds and securities of the Society and deposit all such funds in the name of the Society in bank accounts or similar as approved by the Governing Board. He/she shall receive and record all payments of membership fees and shall inform individual members of non-receipt of their membership fees.

The Secretary/Treasurer shall prepare an Annual Statement of Account, itemising all the Society's credits and debits and indicating the present financial status of the Society. This Annual Statement of Account shall be presented to the Governing Board and then audited by the Finance Committee which shall have full access to all financial records. If the Finance Committee should be dissatisfied, for any reason, with the validity of the Annual Statement of Account, it shall inform the Secretary/Treasurer of the reason for dissatisfaction, thus allowing the Secretary/Treasurer to explain or modify the Annual Statement of Account. If, thereafter, the Finance Committee remains dissatisfied, it shall report the fact to the Governing Board, which shall take appropriate action at its discretion. If the Finance Committee is satisfied, it signs the Annual Statement of Account, which will be published in Nematology News, if possible, in the next edition before the General Meeting, and on the Society's website.

The audited Annual Statement of Account shall be presented by the Secretary/Treasurer to the General Meeting for approval. If approved, the GB shall sign the Statement.

C. The Editor of Nematology News shall have responsibility for publishing and distributing a single volume Newsletter (entitled Nematology News) in two parts in January/February and June/July of each year. Nematology News may be published in paper version or electronically, either distributed via mail or posted on the Society's website.

The Editor shall maintain a full record of expenses and income pertaining to the publication of Nematology News and shall present such accounts to the Secretary/Treasurer, to be incorporated into the Annual Statement of Account. These accounts shall then be published in Nematology News, if possible in the next edition after the General Meeting, and on the website.

D. The Symposium Director

The Symposium Director is responsible for the organisation of the biennial symposium. He/she shall normally participate in meetings of the Governing Board during the two years of the appointment prior to the symposium. The Symposium Director is responsible for the local organisation of the symposium, the scientific responsibility lies with the Governing Board (see article IX).

ARTICLE VI - Elections and appointments

A. Election of the President and Secretary/Treasurer

The Governing Board shall nominate candidates to the General Meeting for the position of President and for the position of Secretary/Treasurer. If the General Meeting does not approve the proposed candidates, the President shall seek nominations from those members present at the General Meeting. The General Meeting shall elect by vote the President and Secretary/Treasurer from among the candidates presented to it.

B. Election of Governing Board Members

At each General Meeting a minimum of one Governing Board member shall normally retire from office.

A request for nominees to become Governing Board members will be published in Nematology News and on the Society's website preceding a General Meeting. Each nomination shall be made by a member of the Society and shall be seconded by another member of the Society. The nominees who fulfil the requirements for Governing Board membership shall be listed as candidates for election on a voting form which shall be published in Nematology News and on the website at least two months prior to the General Meeting. In addition, the Governing Board shall make nominations for all the vacancies, and these candidates shall be designated on the voting form as being the nominations of the Governing Board. Voting will be either electronically through the website, via mail or by a show of hands at the General Meeting. The vacancies created on the Governing Board by members retiring from office shall be filled by the candidates receiving most votes.

In the event of an equal number of votes being cast for two or more candidates in the leading positions, a vote shall be taken in the General Meeting for the tied candidates. If such a tie is repeated in the vote of the General Meeting the President shall have the casting vote.

C. Appointment of the Editor of Nematology News and representatives to the IFNS.

The Editor of Nematology News and two ESN representatives to the IFNS (one of whom will normally be the Secretary/Treasurer) shall be appointed by the Governing Board and may serve for continuous periods at the discretion of the Governing Board. The appointments shall be notified to the General Meeting. The Editor of Nematology News can be chosen from within the Governing Board.

D. Election of the Symposium venue and Symposium Director

The Governing Board shall invite all members to submit venue bids according to the guidelines. The Governing Board will evaluate the bids. The Governing Board will propose up to 3 bids, that will be presented at the General Meeting. The General Meeting will vote for the venue. The local organiser will be the Symposium Director.

ARTICLE VII - Finances

The funds of the Society shall be maintained as 1) reserve funds and 2) working funds, the latter for use by the appointed officers of the Society. These funds shall be maintained in the ESN bank account as approved by the Governing Board. Withdrawals from the reserve funds shall require prior approval by a majority of the Governing Board.. All such withdrawals shall be recorded on the Annual Statement of Account.

A working fund, in amount agreed by the Governing Board, shall be maintained in a separate bank account for the Editor of Nematology News. The withdrawals shall be recorded on the Annual Statement of Account.

ARTICLE VIII - Committees and representatives

The Governing Board may establish committees as necessary to undertake the Objectives of the Society. The Governing Board may appoint members of the Society to represent the Society in other relevant organisations and committees. The members of the Society shall be kept informed by the Governing Board of the activities and membership of such committees and representations.

ARTICLE IX - Biennial symposia

The symposium director whose election is confirmed at the General Meeting, held during a biennial Symposium, shall have the responsibility for organising the next ESN Symposium at the venue agreed at the previous General Meeting. The symposium director shall form his/her own committee, which shall include the Secretary/Treasurer as ex officio member, to organise the Symposium. The symposium director shall also be guided by the Governing Board (through guidelines or a symposiums advisory committee established by the Governing Board) on the structure of the Symposium. The responsibility of the scientific contents lies with the Governing Board. During the appointed two years the symposium director will be an added member of the Governing Board.

The Symposium is expected to be self-financing. All excess funds shall be passed to the Society and after the Symposium within half a year,, the Past-symposium director shall provide to the Governing Board a summary of the accounts of the Symposium.

If, for any reason, the Symposium Director is unable to organise the planned Symposium, he/she shall inform the Governing Board as soon as possible. The Governing Board may, at its own discretion, appoint a replacement Symposium Director who is willing to organise a symposium either at the same date as previously planned or in the same period.

ARTICLE X - Honours

Election to Fellow of the Society is accorded to General Members in recognition of outstanding contribution to the science of nematology or distinguished service in promoting the Objectives of the Society. The number of Fellows elected biennially should normally not exceed 0.5% of the total membership.

Nominations for Fellow of the Society may be made by any member. All nominations for Fellow must be accompanied by a written statement outlining the professional achievements of the nominee and giving reasons for the proposed election, and must be supported by two other members. Nominations shall be submitted to the Governing Board no later than three calendar months before the General Meeting of the Society. The selection of Fellows is made by the Governing Board or by a committee appointed by the Governing Board which shall inform the membership at the General Meeting.

ARTICLE XI - Amendments

Proposals for amendments to these internal rules may be made to the Governing Board by any member of the Society. Members shall be notified of the proposed amendments by publication of the proposed amendment in Nematology News and on the website at least one calendar month before the General Meeting at which the proposal is to be considered. Proposals to amend the internal rules shall first be submitted in writing to the Secretary of the Society at least six calendar months before the General Meeting at which the proposal is to be considered.

Any amendment of the internal rules requires approval of two thirds of the members that are present at a General Meeting or in case of electronic voting, half of the subscribed members.

An adopted amendment shall become effective immediately upon approval unless stated otherwise in the amendment.

ARTICLE XII - Dissolution

In the event that the Society is dissolved for any reason, all assets remaining after payment of debts shall be distributed exclusively for the benefit of the science of nematology as recommended by the Governing Board.

ESN Governing Board

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Past President: Florian Grundler

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How to join ESN

If you would like to join the ESN please contact the Secretary/Treasurer - **Loes den Nijs** or your local contact. Membership of ESN costs 20 Euro per year.

ESN Country and Regional Representatives

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ESN Governing Board meeting

The ESN governing board held a meeting in Ghent on May 20th, the day before the ISCP meeting. Issues that were discussed included:

- Bursaries for ESN student members to attend the IFNS meeting in South Africa
- ESN input into the IFNS meeting
- The setting up of Facebook and Twitter accounts for ESN
- Revisions to the ESN Internal Rules
- The policy on obituaries in Nematology News
- Replacements for retiring ESN board members