# AUSTRALASIAN NEMATOLOGY NEWSLETTER



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## **From the Editor**

Thank you to all those who prepared contributions for this newsletter.

#### July Issue

The deadline for the July issue will be mid June 2010. I will notify you a month in advance so please have your material ready once again.

#### Kerrie Davies

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## **Association News**

## FROM THE PRESIDENT

## First the good news

Elsewhere in this issue (page 20) is the first call for applications for grants under a new scheme to encourage nematology in Australasia. This is a basic reason for the existence of AAN. The AAN was "... formed in 1989 in response to the general decline in support for nematology in Australia and New Zealand ...". After much discussion by the Executive and other office holders of AAN, we have a fund to support Australasian nematologists' attendance at conferences in Australia and the rest of the world. The money comes from accumulated funds and profits from past activities, rather than subscriptions, and is open to a range of people.

This is a positive development. It may not be world-shattering in size or scope, but it is at least a move in the right direction, which we hope may encourage students and those perhaps dabbling around the edges of nematology to both learn a bit more, and give the rest of us the benefits of their experience. In this way, the new initiative will hopefully contribute to the other great reason for AAN's existence which is to foster communication between Australasian nematologists.

Like all good things, the fund does not and will not work without people to keep track of it, periodically call for applications, assess them, and actually hand out the awards. The committee consists of the office bearers of AAN (*sensu lato*), who should be thanked for their time and effort. If anyone else wishes to contribute, please contact me.

#### Now the bad news

The recent APPS conference in Newcastle NSW had a very disappointing attendance of nematologists. Perhaps everyone had blown their travel budgets the previous year at the International Congress, or were saving up for the August 2010 Soilborne Disease Symposium on the Sunshine Coast, but the attendance of only about a dozen nematologists was disappointing nevertheless. There were few talks about nematodes, and the "traditional" nematology workshop was rather small. The positive side of having such a small workshop was that those present did get to discuss their diverse issues with each other in greater detail than might otherwise happen.

There were also issues with the lack of publicity for the nematology workshop, which will hopefully be addressed before the next conference. Vivien Vanstone did a sterling job with emailed messages, but we will try to do better with the conference organisers next time.

For those of you who missed APPS, there was also the traditional nematology dinner, which was held overlooking Newcastle Harbour. This was a very pleasant evening, enlivened by a bit of local colour: those not there will have to ask those who were to decode this cryptic remark. The general meeting of AAN preceded the dinner, and a report of this will be included in the next issue.

I hope that the readers of this newsletter will find both the funds and the will to come to future nematological meetings. If lack of will is the issue, then let us know what will change that. If (lack of) funds is the issue, then we hope we have a solution at hand. I encourage all nematologists to either apply to the new fund if they are eligible themselves, or encourage those who are eligible to do so.

## Finally, the neutral news

For those of you who do not know, Frieda Decraemer was elected the President of IFNS at the last meeting of IFNS during the International Congress in Brisbane. Typically for Frieda, she is right on the job. Her report on IFNS activities is elsewhere in this issue (page 12).

The main thing to note is that the selection of the site for the next congress is under way. I am the AAN representative to IFNS, and although final proposals are not due until March, so far I have been approached by Japan, South Africa, and The USA asking for support. Expect a brief

email in the next few months with a list of proposed sites, and a request for opinions on the site the AAN should support. Also note proposals for additions to the IFNS web site.

Any comments on anything in Frieda's report should be relayed through myself as the AAN representative.

Mike Hodda

## **Regional News**

## **NEWS FROM CANBERRA**

## **Ecogenomics**

Mike Hodda has just started a project in collaboration with other colleagues at CSIRO trying to make sense of data from mass sequencing of DNA from soils. Why the new project? Well, a lot of the sequences are nematodes (of course), quite a few more are organisms that are either confused with nematodes or collected along with nematodes, quite a few are organisms that either feed on or are fed on by nematodes, and the rest are interesting as well. In terms of large numbers of taxa in large numbers of samples, this sort of data seems only a step on from the sort of data that many nematode ecologists and taxonomists like yours truly have been dealing with for years.

There are quite a few technical challenges in extracting and purifying DNA, which Mike's colleagues seem to have advanced considerably. There are opportunities for testing their techniques in other situations if people are interested. Please contact Mike. There will also be challenges in data analysis and interpretation, but Mike is excited at the potential.

No, this does not mean that Mike has become a gene jockey... he is adamant that what he is trying to do is to be able to harness new technology to biological reality and traditional knowledge.

## Nematodes in Cropping Systems Course

In October Kerrie Davies and Mike Hodda held the seventh short course on 'Nematodes In Cropping Systems: Identification and Techniques'. This one was held at ANU and was attended by 12 people from AQIS, State Agriculture Departments, Universities and private consultants. Two participants were from overseas (Fiji and New Zealand), and particularly pleasing was the number of postgraduate students (three). As with all these courses, the direction this one took was different from previous ones, with a strong emphasis on quarantine, extraction and identification of common crop pests. Highlights of the course for Mike were the finding of Mike's recent new species on the bark of a new tree host, finding (non-pathogenic) nematodes on a certain root vegetable from a local supermarket, and Kerrie's quote of the course ("When I retire I will..." :Kerrie had to be reminded that, although it is not apparent from her scientific productivity, she has in fact been retired for several years now.) Both Kerrie and Mike thoroughly enjoyed teaching the course, and hope that all participants had an equally rewarding experience. The next one will probably be in another few years and should be in Adelaide.

## Students

Abdul Gafur has been collecting both Museum specimens and live material of *Radopholus* species for his project on revising the genus. He now has looked at holotypes or paratypes of most of the species in the genus, and in November he visited the Queensland Museum, southern Queensland and northern NSW to see or collect many of the remainder. Abdul is now sifting through extractions from a large quantity of soil from the type localities of several of the species collected only once. So far, he has found only a few of the nematodes he has been after, but there is still quite a bit of soil to process.

Mike's other student, Sunil Singh, has started his project on nematode biosecurity threats and identification even though he has yet to arrive permanently in Australia. Sunil has been working in Fiji, owing to delays in his student visa, but he visited briefly in September, and met other members of the CRC for National Plant Biosecurity. He should have arrived by the time this note is printed, but has been taking advantage of the marvels of modern telecommunications to keep in touch by phone.

## Mike Hodda

## NEWS FROM NEW ZEALAND

#### Landcare Research, Auckland

Dr Kerrie Davies (The University of Adelaide) was invited by Landcare Research, New Zealand to work with Dr Zeng Oi Zhao for a week. They finished a manuscript on a new genus and species of anguinid nematode, since submitted for publication. Dr Ian Riley (The University of Adelaide) and Brett Alexander (MAF, New Zealand) are co-authors of this MS. The nematode was recovered from leaves of *Coprosma repens* in a roadside planting at Wellington, New Zealand. The genus is characterised by having slender males and slender or semi-obese females; pharynx with a weak non-muscular median bulb, a terminal bulb containing the pharyngeal glands; female with a single gonad with a quadricolumella and post-vulval sac; male with arcuate spicules and the bursa arising 1-2 ABD's in front of the cloaca and extending nearly to the tail tip. It induces foliar cholorosis but not galls. The species has a short, robust stylet with conus forming *ca* 40% of stylet length and three well developed rounded knobs; secretory/excretory pore opening posterior to the nerve ring; terminal bulb abutting the intestine; and tail tips with variable form. The new nematode was confirmed as a new genus and species by molecular phylogeny of near full length small subunit, D2/D3 expansion segments of the large subunit and internal transcribed spacer rRNA genes. In addition, Zeng Oi has been describing new species of New Zealand Tripyla.

Zeng Qi Zhao

#### Department of Zoology, University of Otago

Here's an update on what's happening in my lab in the south of the South Island. I'm coediting a book with Rollo Perry (Rothamsted, UK) on "Molecular and Physiological Mechanisms of Survival in Nematodes". We hope it will be published late 2010 by CABI but are waiting for a few chapters to be completed. I've written two chapters for the book: on 'Cold Tolerance' and on 'Osmotic and Ionic Regulation'. The small size of most nematodes makes the removal of fluid for the measurement of ionic and osmotic concentrations difficult. I have developed a new technique, using a nanolitre osmometer with its specimen holder modified to enable it to be used a cold stage, that allows the melting point (and hence osmolality) to be measured to an accuracy of 0.01°C. I've used this technique to determine patterns of osmoregulation in an Antarctic nematode (*Panagrolaimus davidi*) and shown that it maintains its internal osmotic concentration hyperosmotic to the external concentration across a range of external osmolalities.

Masakazu Hayashi has joined my lab as a visiting Postdoctoral Fellow (from Tokyo Denki University). He is attempting to culture a field strain of *P. davidi* and also studying the cold tolerance mechanisms of the oatmeal nematode, *Panagrellus redivivus*. This has rather poor cold tolerance (compared with *P. davidi*) but responds to cold acclimation with a modest improvement in cold hardiness (although there is no rapid cold hardening response). Masakazu is also trying to see if a cold tolerant strain of this nematode can be selected by breeding from the survivors of a moderate cold challenge.

Farman Ali is continuing his PhD studies on the cold tolerance of entomopathogenic nematodes and Stephen Clarke his PhD on an ice-active protein from *P. davidi*. Melianie Raymond is now in Copenhagen but writing up her PhD on the cold tolerance of Antarctic nematodes. Daniel Leduc (Marine Science) has just been awarded a Postdoctoral Fellowship to study deep-sea nematodes. We have a manuscript submitted on some new marine nematodes from New Zealand.

Stephen, with Tim Hawes (a visiting Postdoc from the UK), is soon to depart for Antarctica where, amongst other things, they will collect samples for our continuing studies on Antarctic nematodes.

I am continuing my interest in anhydrobiosis in nematodes and hope to use x-ray microanalysis to follow the redistribution of elements after desiccation and rehydration. I've also been invited to participate in an international consortium that is planning to send a variety of anhydrobiotic

organisms on a return trip to Mars (but not landing on the planet!). I've been using *Ditylenchus dipsaci* for these studies and have been keeping cultures going in my lab. However, I'd like to supplement these and if you know of any fresh sources of *D. dipsaci* I'd be very pleased to hear from you.

David Wharton

## **NEWS FROM SOUTH AUSTRALIA**

## The University of Adelaide

In early October, Kerrie Davies went to Canberra to teach another short course on "Nematodes in Cropping Systems" with Mike Hodda (see report above). It seemed to go well, and they were pleased with the response of the participants and enjoyed the teaching. This was the seventh such course that Mike and Kerrie have taught together – they must be doing something right.

Kerrie has been travelling again, thanks to an invitation from Landcare Research and Zeng Qi Zhao to visit Auckland. She had a fabulous week with Zeng Qi at Landcare in early December, and together they drafted a manuscript (see report from Zeng Qi this newsletter). Kerrie presented a seminar on her work on *Fergusobia* and *Schistonchus*, and was delighted with all the questions it generated. Zeng Qi also gave her a Cook's tour of gourmet Chinese eateries in Auckland, and she came back needing to go on a diet!



Zeng Qi Zhao pointing out good sites for nematode collection in Auckland.

When at home, Kerrie continues to prepare manuscripts on the past 15 years work on *Fergusobia*, gall formers on myrtaceous hosts, and *Schistonchus*, found feeding in fig fruits. Evidence from her work and that of her collaborators (Robin Giblin-Davis (Uni. of Florida), Gary Taylor (Uni. of Adelaide), and Sonja Scheffer (USDA) among other others) supports the hypothesis that *Fergusobia* is species specific for its associated *Fergusonina* fly species, and is usually specific to one host plant species and produces one gall form. In contrast, particular *Schistonchus* species are frequently found associated with more than one agaonid wasp species, and may be collected from several *Ficus* host species.

Katherine Linsell continues to make good progress in work for her PhD on 'Genetic and physiological characterisation of resistance to root lesion nematode *Pratylenchus* sp. in wheat'. The overall objectives of this project are to identify the genetic loci and closely linked markers for the *P. thornei* gene(s) in the partially resistant Sokoll/Krichauff population and to describe the resistance response.

Kerrie Davies

## Research

## USE OF NATURAL PRODUCTS BASED ON RENEWABLE RAW MATERIALS TO STIMULATE SOIL HEALTH AND CONTROL *MELOIDOGYNE INCOGNITA*

## Mulawarman

Department of Plant Crop Protection, Faculty of Agriculture, Sriwijaya University, Jln. Raya Palembang - Prabumulih Km. 32 Indralaya, OI, Sumatera Selatan 30662, Indonesia

New products based on renewable raw materials as well as various sources of Chitin and Chitosan were screened to control plant parasitic nematodes. Chandler Check (20 kg/ha) and TerraPy<sup>®</sup> (200 kg/ha) significantly suppressed *Meloidogyne incognita* infection by 21% to 28%. Among chitinous compounds, Chitosan oligosacharides suppressed nematode infection by 23% to 70%, while those with higher molecular weight were most efficient. All Biosol treatments in general suppressed nematode infestation by 65%. Control efficiency was enhanced by combining Biosol with Oligo-Chitin and Oligo-Chitosan resulting in an average increase in control of 62%. With respect to origin, Chitosan originating from India and Canada and NM 9316 were shown to give best control of nematodes - up to 48%.

The application of organic amendments was optimised by varying application rates, forms and using combinations of organic amendments or combinations of organic amendments with antagonistic microorganisms. Both, high and low rates of Chitosan incorporated into soil at 28 days before planting and at planting caused a reduction in nematode infection and enhanced plant growth, while no effects were observed with application of Chitosan after planting. In an approach to reduce total amounts of application, Chitosan applied as a seed treatment significantly reduced *Pratylenchus zeae* infection of maize. Similarly, Chitosan also reduced *Heterodera schachtii* on sugar beets 21 days after inoculation and 35 days after inoculation. Infection of *Globodera pallida* was significantly reduced by all treatments of potato treated tubers at 35 days after inoculation. The application of Chitosan on tomato as a seed treatment caused only a slight reduction in *Meloidogyne incognita* infection. An additional reduction of nematode infection was observed for the combination of TerraPy with mycorrhiza.

The organic amendments significantly affected soil microorganisms and nematode communities. TerraPy<sup>®</sup>, Chitosan and to a lesser extent Magic Wet<sup>®</sup> reduced plant parasitic nematode densities and improved plant growth. The application of N and P in equivalents to the amount present in the formulations did not affect plant growth promotion to the same degree. Properties of the amendments such as improved soil structure, increased soil water retention or increased plant nutrient availability may play a key role in plant growth promotion. Further, modifications of the microbial community also might contribute to plant growth stimulation and nematode control, in that all three compounds TerraPy<sup>®</sup>, Chitosan and Magic Wet<sup>®</sup> significantly increased numbers of certain genera in the soil. *Acinetobacter*, for example, plays a key role in the solubilization of phosphate in soils. Therefore, increasing densities of *Acinetobacter* might result in an improved supply of phosphate to the plant. The highest increase of *Pseudomonas*, a bacterial genus with plant growth promoting activity, was observed following Chitosan application. Other, not yet identified bacteria, might have also contributed to plant growth or health promotion by mechanisms such as stimulation of phytohormones, N-fixation or suppression of deleterious microorganisms.

The potential mode of action of Chitosan as an inducer of systemic resistance against *Meloidogyne incognita* was studied on tomato using a split-root system and foliar spray. Chitosan application to one-half of a split-root system caused a significant reduction of egg masses on the other side of the split root system. Similar results were achieved when Chitosan

was applied as a foliar spray, indicating that a downward movement of signals associated with the resistance reaction occurs.

It is concluded that TerraPy<sup>®</sup>, Magic Wet<sup>®</sup> and Chitosan contribute significantly to plant growth and health by stimulating soil microorganisms and thereby suppression of plant parasitic nematodes.

## Reports

## FIRST INTERNATIONAL CEREAL CYST NEMATODE INITIATIVE WORKSHOP, TURKEY, OCTOBER 2009

## Ian Riley

University of Adelaide/SARDI

The first workshop of the International Cereal Cyst Nematode Initiative (ICCNI) brought together researchers from wheat growing regions worldwide with most representation from Europe, North Africa and West Asia. Nevertheless, the meeting had strong South Australian and AAN connections, with three of our members making important contributions. Firstly, it was Julie Nicol's vision that saw the proposal for the ICCNI floated at the 28th European Society of Nematologists Meeting in Bulgaria, June 2006 and its formal establishment at the meeting in Rome, March 2007. The workshop represented the first major activity of the Initiative and was organised by CIMMYT Turkey under Julie's passionate leadership. Ian Riley was pressed into service to edit the proceedings (details follow). John Lewis and Ian (together with Alan McKay, SARDI) both presented papers covering the history. research methods and successes in Australia's dealings with CCN. Australia is unique in that we are on the periphery of CCNs distribution and it is represented here by only one pathotype, yet



Julie Nicol officially welcoming delegates to the ICCNI workshop

CCNs impact was severe and its eventual successful control extraordinary. So Australia's contribution to ICCNI was clearly valued.

## The Proceedings

The full proceedings is now available at http://www.spipm.cgiar.org/reports.

**Abstract**: The first meeting of the International Cereal Cyst Nematode Initiative, held in October 2009 in Turkey, involved over 60 scientists from wheat-growing regions in Asia, Australia, Europe, north Africa and north America. Cereal cyst nematodes (CCN) are damaging root parasites of barley, oat, wheat and related plants; the most important species being



Heterodera avenae, H. filipjevi and H. latipons. Forty three papers in this volume cover: the history and status of CCN both globally and regionally; research on CCN morphological, genetic and ecology diversity; development and deployment of host resistance as the principal means of control, including advancements provided by molecular technology; and investigations into other types of control and opportunities for integrated management. The papers provide valuable insight into the impact of CCN and endeavour to provide sustainable management options for farmers. CCN's impact ranges from severe in resource- limited cropping systems with high pathotype diversity through to the now easily managed situation in Australia, with one pathotype and many resistant cultivars released. In many countries, unacceptable economic losses continue and international collaboration is needed to ensure that appropriate genetic resources and technology are developed, disseminated and applied where the need is greatest. Riley IT, Nicol JM, Dababat AA eds (2009) 'Cereal cyst nematodes: status, research and outlook.' (CIMMYT: Ankara, Turkey).

#### **Workshop Overview**

[An overview prepared by Sam Mitchinson and John Jones for publication in *Nematology News*, European Society of Nematologists; reproduced with permission.]

Sixty delegates representing twenty countries from around the world attended the first International Cereal Cyst Nematodes Initiative Workshop which was held in the Mediterranean resort of Antalya, Turkey, from 21-23 October 2009. The geographical and scientific range of delegates demonstrated how widespread and important a problem cereal cyst nematodes represents.

The workshop was opened by Dr Apdullah Atlamaz, Head of the Plant Protection Section from the Turkish Ministry of Agriculture and Rural Affairs. The meeting organiser Dr Julie Nicol then gave an overview of the CCN problem. She hoped that the Workshop would address several key issues including the need for recognition by policy makers that CCN is a problem, especially in areas where drought affects cereal production. During this talk, and at other times during the meeting, the need to share germplasm with potentially valuable CCN resistance was emphasised.

The meeting was subdivided into four sessions, each containing presentations focused on a theme. Session one covered the global status of CCN with a focus on the distribution of the major species (Heterodera avenae, H. filipjevi and H. latipons). Frequent reference was made to the presence of ecotypes and pathotypes and the problems that these pose for control. Session two examined the local status of these pests, with presentations from a wide range of countries. In these presentations the range of damage that CCN can cause, occasionally in association with other plant diseases, was apparent. Session three examined the biology of CCN, with presentations on molecular identification and phylogeny, hatching and morphology of the nematodes. Session four examined management of CCN by resistance. The session began with a presentation on genomics in cyst nematodes and how genome projects can yield practically useful information. Several other presentations described molecular studies on CCN with an apparent focus on identification of proteins involved in the parasitic process. Resistance to CCN can be achieved through conventional breeding or production of transgenic plants and several presentations in both areas followed. It was clear that opinion on the use of transgenic plants as a control strategy was sharply divided among delegates at the meeting but notable that delegates from countries where food production is a critical issue to prevent hunger were often strongly in favour of these approaches. Presentations describing the use of conventional resistance for CCN control also covered a wide range of approaches from a highthroughput system that screens hundreds of breeding lines per day for new sources of CCN resistance to smaller scale studies describing local use of resistance in association with rotations and chemical control. Finally in this session the International Winter Wheat Improvement Programme, a collaboration between the Ministry of Agriculture and Rural Affairs of Turkey, CIMMYT and ICARDA was discussed. In this programme, germplasm that has been tested in yield trials is placed in an International Nursery allowing exchange across 50 countries and between 130 breeding programmes. In the final session other approaches to the management of CCN and integration of control strategies was discussed.

## SCIENTIFIC WRITING COURSES FOR NEMATOLOGISTS

Ian Riley University of Adelaide/SARDI

Last year in the ANN newsletter, Graham Stirling appealed to our members to strive for a strong culture of publishing in peer-reviewed journals. Likewise, publishing science in English is increasingly important for agricultural scientists in developing countries. International publication enables researchers to engage in the global exchange of knowledge and opinion in their discipline. Taking on the challenge of publishing in international, peer-reviewed journals will help sharpen the research skills of these scientists, provide a benchmark against international standards and increase their ability make a difference for food production and security in their region.

Over the last decade the Crawford Fund has been actively involved in addressing this issue of scientific writing. In particular, applied linguist, Margaret Cargill (The University of Adelaide) and her scientific colleagues have conducted courses in scientific writing in Asian countries with the Fund's support. The recent publication of Cargill and O'Connor (2009) *Writing Scientific Research Articles: Strategy and Steps* (Wiley-Blackwell: Chichester, UK) is, in part, a fruit of this support.

The Crawford Fund was also the major contributor to three Master Classes in Soil Borne Pathogens of Wheat held in Turkey, China and Tunisia in 200X, 2008 and 2009. These Classes provided much needed training in root diseases of wheat with a focus on practical skills. Nematode pests, particular cereal cyst nematode (CCN), are being recognised as major constraints of wheat production in the target regions of the Classes. The first workshop of the International CCN Initiative (ICCNI) was held in Turkey in October 2009.

Ian Riley was one of the team of four Australian trainers in these Master Classes and an editor for the ICCNI Workshop in Turkey in October. Ian saw an opportunity to value-add to Margaret's efforts and used his ICCNI involvement to train 13 nematologists from Iran, Nepal and Turkey in scientific writing, with Cargill and O'Connor (2009) as key the training resource. Two highly successful and appreciated courses in were held in Ankara and Adana, before and after the ICCNI workshop, both enabled by Crawford Fund support.



Ankara class in the CIMMYT office library

Adana class in avenue of Aussie eucs at the Turkish Ministry of Agriculture's Plant Protection Research Institute

## **INTERNATIONAL FEDERATION OF NEMATOLOGY SOCIETIES**

## Wilfrida Decraemer President of IFNS



With the end of 2009 in sight, this is a perfect time to provide you with an overview on the actions undertaken by the IFNS officers with respect to the Federation and also to make some reflections on the future of IFNS and its role and to exchange ideas on what direction IFNS should take in order to serve better in the future despite the small number of officers.

We are convinced that all of you are very committed to the science of Nematology, to your respective societies and to the Federation as your

common platform for communication. We see IFNS and its website as an additional tool to promote the science of Nematology and improve communication between us without interfering/hampering the societies. Therefore, we do hope to receive some increase in response especially with respect to the status of IFNS and its website despite your very busy schedules.

2010 will be an important year for our Nematological Societies and the Federation since we will have to elect the location of the 6<sup>th</sup> International Nematology Congress. I thank all the societies who have submitted a Letter/e-mail of Interest to organise the next congress.

By the 1<sup>st</sup> of March 2010 the IFNS officers expect to receive your formal submission of a location proposal with documented evidence (on air travel, accommodation and food, communications, tours and spouse activities and financial support) to support the merits of the location. I'm sure that the outcome will be very promising and the elected location supported by every councillor.

The overview of 2009 here after, deals first with some historical facts, followed by the steps undertaken in 2009 with respect to the IFNS status, constitution and website. In addition some tasks for 2010 are presented. We would like to receive your opinion on the status of IFNS, the need for the creation of special committees e.g. to provide an overview of "Education of Nematology" or an overview on "Type and Voucher collections of Nematodes and there importance for e.g. agricultural Nematology", or others subjects.

Above all, I wish to thank you all for your commitment to the Federation. The IFNS Officers wish you a prosperous and interesting and successful 2010.

## **IFNS: historical facts**

1984: 1st International Nematology Congress at Guelph (Canada)

Concept of Nematological Federation, involving ESN, ONTA, SON

1990: 2<sup>nd</sup> International Nematology Congress at Veldhoven (The Netherlands)

Study group appointed for developing IFNS organization

1996: 3rd International Nematology Congress in Guadeloupe

Proposal for IFNS approved, involving 14 nematological societies with about 2500 members affiliated

The need for a Constitution and Operations Manual was expressed

## 1996-2002: more than 10 different drafts of a constitution were proposed

Upon an e-mail ballot Ghent (Belgium) was indicated as IFNS domicile but Ghent later withdrew and Beltsville (Maryland, USA) was accepted as IFNS domicile

2002: 4th International Nematology Congress at Tenerife

Draft of a constitution of IFNS was discussed and resulted in an adapted proposal

2008: 5th International Nematology Congress at Brisbane (Australia)

The draft of the Constitution from Tenerife was presented and adaptations proposed

It was agreed to keep Maryland as IFNS domicile and to further explore the possibility to make IFNS a legal non-profit, tax-exempt organisation.

## Update 7 December 2009

#### IFNS: Constitution

As a consequence of the agreement at the Brisbane meeting to keep IFNS domicile in Maryland, the proceedings for a legal status of the Federation has to follow USA law and therefore a US collaborator is needed. The president has been exploring many possibilities and contacted several people. She also contacted the board of Directors of the Cobb Foundation to learn more about the steps to become a legal organisation. IFNS has no financial means but receives financial support from the Cobb Foundation to maintain a website. There has been quite some substantial mailing going on. I wish to thank all for their kindness and help and more in particular Steve Thomas, Pat Donald, Robin Giblin-Davis, David Chitwood and Larry Duncan. At he Congress on Tropical Nematology at Maceio (Bresil), the president and vice-president had informal meetings with IFNS Councillors present.

## Options for IFNS status resulting from the discussions:

- We keep IFNS as it is, this means without legal status and without rectified Constitution
- We keep IFNS without legal status but discuss and rectify the draft of the Constitution
- We go for a legal status for IFNS i.e. as an international non-profit organisation with taxexempt status

a. If domicile remains in Maryland, we put an announcement via SON for an American representative to help

b. If no help can be provided we inquire for possible domicile in another country; if the councillors would chose for this option, I'm prepared to take the necessary steps in Belgium.

• We do not go for a legal status as organisation but go for a copyright of the name IFNS under the law on trademark protection.

#### Remarks on the different proposals

- We keep IFNS informal as it is since the federation works well and was so far very successful in fulfilling its main task: to plan, facilitate and promote the International Nematology Congress every six years. All is founded on good will and mutual confidence, respect and commitment since there are no binding statutes/rules.
- IFNS as a legal organisation: a legal status could make it easier to obtain financial support from official institutions; possible communication problems or others can be solved according to the Constitution.

You will receive an e-mail with an inquiry on your view concerning IFNS and its status.

## **IFNS Website**

So far the website has been regularly updated for announcements of nematology symposia and congresses.

- Some small other changes have been made with respect to the home page, and location of collections, the minutes. However, this voluntary task by Safia Siddiqi is time consuming and so we will seek some help for her so that the website can be extended and more informative. In January an extensive update on new books (published since 2002) will be uploaded.
- Apparently, the website is rarely visited by the councillors or members of their society. Some of the pages on the societies need to be updated e.g. reference to the website of the Society is missing or subscription rates have changed.
- Also information concerning the journals of the societies need update.
- You will receive an e-mail with a demand to provide the president updates of the information concerning the Societies.
- If you would consider it relevant we could provide you twice a year a *Newsletter* but to make it interesting we need contributions from your respective societies. We would like to hear your opinion.

The website provides the possibility for interaction, post your opinion news e.g. under Letters, profiles.

## Future

- Further steps with regard to IFNS status depending on the results from the inquiry to the councillors.
- Organizing the selection process for the next congress site

By 1st March 2010: Formal submission by the societies to IFNS President and Officers of a location proposal with documented evidence to support the merits of each location. The President will forward all proposals at the same date to all IFNS Councillors together with a ballot paper and with indication of time of submission of the votes.

- A poster on IFNS is being made. The poster will be presented at all Nematology symposia and congresses in order to make nematologists better aware of the Federation and its aims.
- In order to make the website more informative, information additional to that on the websites of the societies could be provided but therefore your collaboration is needed e;g. with the help of working groups or committees. For example it would be interesting if the IFNS website could provide an overview on education in Nematology and links to existing information on other websites. Where can you study nematodes?
- Another interesting subject especially for non-specialists interested in our field is "nematologist role models" i.e. providing an inside in the life and career of a nematologist who made an important contribution to Nematology.
- Other suggestions for topics for the website are welcome.
- As soon as the website is updated, other societies related to our field will be contacted to put a link on their website to IFNS
- A letter on the importance of Nematology is being prepared and will be sent to official Institutions to improve the visibility of our federation.

## Announcements

## FOURTH ASIAN CONFERENCE FOR PLANT PATHOLOGY AND EIGHTEENTH BIENNIAL AUSTRALASIAN PLANT PATHOLOGY CONFERENCE



## Call for workshops/field tours – Expression of interest

The 4<sup>th</sup> Asian Conference for Plant Pathology and the 18<sup>th</sup> Biennial Australasian Plant Pathology Society conference will be held in Darwin, NT from 26 – 29 April 2011. The region provides an opportunity for a range of workshops. If you would like to propose a tour or workshop in association with the ACPP/APPS conference, please send your EOI to Barbara Hall (barbara.hall@sa.gov.au) by Friday 26 February 2010 using the form on the website.



Peter Williamson Business Manager, APPS Inc. www.appsnet.org

## SIXTH AUSTRALASIAN SOILBORNE DISEASES SYMPOSIUM

After successful meetings at the Gold Coast, Lorne, the Barossa Valley, Christchurch and Thredbo, the Sixth Australasian Soilborne Diseases Symposium is to be held on Queensland's Sunshine Coast from 9-11th August 2010.

The meeting date is the week following the 19th World Congress of Soil Science in Brisbane, which means that 6ASDS delegates have the opportunity to attend two world-class conferences on one airfare.

An exciting program has been developed, with three well-credentialed scientists as keynote speakers:

- David Coleman (University of Georgia, USA). Dr Coleman is one of world's leading soil ecologists and co-author of the widely read textbook "Fundamentals of Soil Ecology". His research interests include energetics, decomposition, nutrient cycling and soil biodiversity.
- James Tiedje (Michigan State University, USA). Dr Tiedje's research focuses on microbial ecology and the use of molecular methods to understand microbial community structure and function. Currently his research group is making major advances in the use of genomic, proteomic and microarray approaches to better understand soil microbial processes.
- Ralph Noble (University of Warwick, UK). Dr Noble is an expert in the production of composts from organic waste materials. At present he is involved in research on controlled composting technologies, the influence of input materials on compost quality and the use of composts to control soil-borne pathogens.

The invited papers will also cover topics of interest to nematologists:

- Farming systems for improved soil health and more sustainable vegetable production
- Future strategies for enhancing plant resistance to soilborne pathogens
- Composts, biochar and other organic materials as soil improvers
- Novel formulations and application strategies to increase the activity of biocontrol agents
- New technologies for better diagnosis and prediction of soilborne diseases
- Restoration of organic carbon in soil and its role in disease suppression

Since there will also be poster and contributed paper sessions, all those participating have the opportunity to present their research results and discuss them with others.

The attractiveness of ASDS is its breadth. It encourages interaction between people working in a wide range of disciplines, including fungal, bacterial and nematode pathogens; field crops and horticulture; microbial ecology and molecular biology; chemical and biological control; and integrated pest and disease management.

Please check out the website (www.asds6.org) and start making plans to enjoy a few pleasant winter days on the Sunshine Coast in August 2010.

Graham Stirling

Chair, 6ASDS Organising Committee

graham.stirling@biolcrop.com.au

## FIRST ROUND OF AUSTRALASIAN NEMATOLOGY FUND GRANTS: CALL FOR APPLICATIONS

Following the 5ICN, and in line with the stated aim of AAN to support development of nematology and to encourage communication between Australasian nematologists, a small fund is available to support registration and other costs of students training in nematology to travel to national and international conferences. The fund is now calling for applications for support in 2010/11. Two grants of about \$500 are available, but the advisory committee may vary amounts awarded in any year, including not allocating grants, at its absolute discretion. Applicants should be members of AAN, and an award will not disqualify further applications in future years, although preference will be given to awardees who have not previously been recipients.

## **APPLICATION PROCEDURE**

In keeping with the desire for maximum flexibility, there is no formal procedure. Send an email to Mike Hodda with the subject "Australasian Nematology Fund" stating what you want to attend, why, what support you have and need, and what you are going to do if supported (eg "oral presentation on …", "attend specialist workshop on…"). Also include personal information (name, institution, department, degree, year, supervisor(s), email, telephone, proposed title of presentation, other support for travel (the advisory panel may make enquiries regarding claims made under this heading), and list of attendance at other nematology and plant pathology meetings, and any previous awards under ANF (not relevant in this the first year of the scheme). Please send applications for this years awards by 30 May 2010. Depending on availability of the advisory panel, an announcement should be made by the end of June.

## **SELECTION CRITERIA**

- Financial need and availability of institutional support
- Inability to attend without support
- Potential benefit to applicant
- Potential benefit to Australasian nematology (will applicants be in a position to share any knowledge gained, particularly from overseas conferences, with other AAN members, or will presentations by applicants at local conferences benefit audiences, or enhance information exchange or collaborations)
- Quality of any proposed presentations
- · Benefits from any previous award

## ADVISORY PANEL

Executive of AAN (Mike Hodda, Vivien Vanstone and Sarah Collins), plus Kerrie Davies.

Mike Hodda

mike.hodda@csiro.au