



NEMATOLOGICAL SOCIETY OF SOUTHERN AFRICA

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NSSA NEWSLETTER

Editorial

Dear Colleagues,

We have put together this newsletter to keep you informed of what is happening with the 6th ICN. So please read what Mieke has to say and learn that everybody is hard at work behind the scenes.

We are also awaiting applications for the GEORGE MARTIN MEMORIAL SCHOLARSHIP for 2013.

We would also like to know what is happening with the rest of the Nematologists, So please respond next time when there is a call for news-items.

Jeannie

Message from the President

Dear Nematologists,

It is that time again...when we get to sit back, relax and see what our fellow Nematologists have been up to.

I hope everyone has had a productive and exciting year so far. Hard to imagine that we already half-way through this year. Albert Einstein is quoted as saying "The only reason for time is so that everything doesn't

Inside this issue:

<i>Editorial</i>	1
<i>Message from the President</i>	1
<i>Nemconsult, Upington, Northern Cape</i>	3
<i>News from the 6th ICN front</i>	4
<i>ARC-ITSC— What is new from Nelspruit</i>	6
<i>Short Course in Nematology</i>	7
<i>What is happening in Stellenbosch</i>	8
<i>Entomopathogenic nematodes for the control of the vine mealybug</i>	9
<i>Nemlab News</i>	10
<i>Greetings from Durban</i>	11
<i>Nematology— unit at North-West University, Potchefstroom</i>	12
<i>George Martin Memorial Scholarship</i>	14
<i>Contact us</i>	15



.... From the President

happen at once". I am sure for a lot of us it seems as if everything does happen at once most of the time.

As always, things are happening behind the scenes. We had our NESA Executive Body meeting in April and had lots to talk about. Most importantly (and in the forefront of our minds for the next year) is the upcoming 6th International Congress of Nematology in 2014! This is going to be a great event and Mieke and her team have done an excellent job so far in getting this huge event off the ground. You will no doubt hear more about this in this, and the following, newsletters. By the time this newsletter reaches your Inbox, we would have had our Nematology Workshop in Nelspruit on 18-19 June. A great place for us to catch up on news, refresh friendships and share some of our exciting research findings.

I wish everyone all of the best for the rest of the year and to keep the Nematology flag flying high and the importance of nematodes in the top of people's minds and agendas.

Best wishes

Shaun

*Decision-making takes care of goal-setting,
but discipline also takes care of goal-getting.
Decisions and discipline can't be separated;
one is worthless without the other.*

-John C. Maxwell

*Success is first understanding, and then
fulfilling, the Lord's purpose for your life.*

Jim Good, author



Nemconsult, Upington, Northern Cape

During the past year, Nemconsult has been confronted with quite a few tough decisions. It all started with Johan (my husband) being appointed as Operations Manager at Kaap Agri, Upington. We initially decided to move the Caledon Lab to Upington, but eventually we opened a new lab in Upington and kept the Caledon lab up and running as well. Anneke Davids is still doing a fantastic job with the extraction and identification of nematodes in Caledon. We are immensely grateful for her hard work and loyalty towards Nemconsult. At the Upington lab we have appointed a new assistant, Anne-Marie De Beer. We could not have asked for a more cheerful and positive 'spirit', we enjoy her dearly. Anne-Marie seriously considers following the Nematology Short Course in September this year. We will keep you updated on her progress.

Personally it has been quite a challenging year for myself as well. The move was quite a big event, especially for our three-year old son, Adriaan. His baby sister, Marike, was born on the 8th of August 2012. And then ofcourse, we had to do major construction work at our house in order to accommodate the new lab on our premises. But, it was all worth it and we are enjoying baby Marike and her brother Adriaan enormously.

Unfortunately we also experienced great sadness during the past month. Anneke and her husband fell pregnant last year, very excited about the baby daughter due in April 2013. Sadly, their daughter, Avida Sue-Maree Davids, passed away shortly after her birth on the 2nd of May 2013. Anneke and Adriaan, we convey all our condolences to you and your family.

Caroline Mouton

Life isn't always sunshine and butterflies. Sometimes you got to learn to smile through the pain.



News from the 6th ICN front

The committee had an EC meeting at the end of April where urgent matters were discussed. The website had to be launched and information like dates for registration, abstract submissions, application for student grants etc. had to be finalized.

Mid-congress tours and additional tours were also discussed as we are expecting about 500 delegates and there needs to be enough space at the sites where we intend taking the visitors.

Scientific program, possible sponsors and student grants were also discussed at length.

Sponsorships are handled by Sheila and her team and they are going strong. Sponsorship letters have been send out to the different companies. If you know of companies that are willing to sponsor an amount please contact Sheila Storey so that she can send them a letter or you can send the letter out to them. Sheila's email address is Sheila@nemlab.co.za.

The website was launched end of May and the registration online was opened early June. The website address is www.6thICN.com. Have a look and start getting excited like us!

We have had many requests from people abroad about the symposium and hope to attract many researchers from all over the world. And ... We have had our first registration!

The scientific program is not worked out but the chair and co-chairpersons were identified, invited and have accepted the positions. The chair + co-chair have to identify speakers and invite them for their sessions. The speakers include specialists as well as one or two excellent students. The other delegates will have to present posters. Fifteen themes have been identified with several subthemes as a framework to start with. The themes and subthemes can be seen on the website at www.6thICN.com.



....News from the 6th ICN front.



Abstracts will be sent to Rinus after online submission and he and his team will edit them before sending them to the chair/co-chair persons. That will ensure good quality English. We are still deciding if the abstracts will be published and where if so.

Registration and accommodation will be done by Going Africa.

And last but not least, we would like to be able to sponsor 50 students from all over the world so that they can attend the conference in Cape Town. Of course we need funds for that and Driekie and Danny are in charge of that operation. It would be great if we were able to bring in so many new talent and give them an opportunity to talk about nematology, discuss projects, make friends,...

If any one of you feels you would also like to make a contribution to the ICN, please contact us and tell us what you would like to do or help with.

Regards

Mieke



ARC-ITSC - What's new in Nelspruit

On 19th of June we (ARC-ITSC together with CRI) will have a nematology workshop in Nelspruit. The workshop is an alternative way of meeting each other since we did not have a nematology meeting in 2012 and will also not have one in 2013. We are going to talk about new advances in Nematology and hope to have some interesting conversations and maybe get some new ideas.

We have worked with several new products the last year and I am waiting to hear what the other researchers have worked on the last two years. The range of nematicides is really getting smaller and we urgently need new strategies.

Other news in Nelspruit is that we have a new Doctor at our premises. Candy Khosa has obtained his PhD at the North West University and may now be called Dr Khosa. The title of his thesis is 'An investigation into the potential of crude and partially separated material of selected non-crop plant species as control agents of root-knot nematodes (*Meloidogyne incognita*) in tomato'.

Willem Steyn has handed in his thesis for an MTech at the TUT and will hopefully graduate in September 2013. The title of his work piece is 'Resistance of vegetable genotypes to *Meloidogyne incognita* race 2 (Kofoid & White) and *Meloidogyne javanica* (Treub)'.

Mieke





Short course in Nematology

9 to 20 September 2013
Potchefstroom



North-West University (NWU) will be presenting another short course in Nematology later this year at abovementioned date. The university has presented the Nematology Short Course since 1982 almost every two years on their campus in Potchefstroom. In addition to their own expertise, the NWU co-opts experts from over South Africa to present specific lectures and practical sessions during the course. Candidates do a theoretical and practical examination at the conclusion of the course and only those that pass receive certificates. The course deals with agricultural nematology and the candidates learn basics in morphology, extraction, identification of important nematode taxons, epidemiology and associations of nematodes with the most important local agricultural and horticultural crops. The course consists of theoretical lectures but we endeavour to allow candidates as much as possible practical time through microscopes. There will be an introduction to entomopathogenic nematodes too. Experienced and highly trained presenters are continuously present during course hours to assist candidates with basic handling and preparation skills to study specimens under dissection and research microscopes. There are many and highly rated guesthouses or similar accommodation available within easy access to the course venue. Potchefstroom is a quiet rural city but offers everything needed to stay fed and comfortable. There are shopping malls, hospitals and medical services and quite a lot to do and see apart from meeting nematodes and their students. The duration is two weeks.

This short course in agricultural Nematology is the only of its kind and magnitude currently presented in South Africa. Those who are still interested to attend the course this year should contact the organisers as soon as possible for further information. The next opportunity will only be in 2015.

Prof Alex Mc Donald

Email alex.mcdonald@nwu.ac.za

Prof Driekie Fourie

Email driekie.fourie@nwu.ac.za



What is happening in Stellenbosch

Caro Kapp het tydens die Maart 2013 gradeplegtigheid haar MScAgric cum laude verwerf aan die Universiteit van Stellenbosch. Haar tesis is getitel: Nematode soil community structure and function as a bio-indicator of soil health in Fynbos and deciduous fruit orchards. Sy beplan om haar studies te bevorder deur die nastrewing van 'n PhD in Nematologie met die onderwerp: Nematode community structure and function as a bio-indicator of the effects of soil amendments on soil health in deciduous fruit orchards.

Caro Kapp received her MScAgric degree cum laude during the March 2013 graduation ceremony of Stellenbosch University. Her thesis is titled: Nematode soil community structure and function as a bio-indicator of soil health in Fynbos and deciduous fruit orchards. She plans to further her studies by pursuing a PhD in nematology with the topic: Nematode community structure and function as a bio-indicator of the effects of soil amendments on soil health in deciduous fruit orchards



If you are not willing to learn, No one can help you. If you are determined to learn, No one can stop you.



Entomopathogenic nematodes for the control of the vine mealybug (*Planococcus ficus*) in South African wine and table grapes



In the South African wine and table grape industries the vine mealybug, *Planococcus ficus*, is a significant pest contaminating grapes with waxy secretions, egg-sacs and honey dew. The low tolerance levels for cosmetic damage in the table grape industry result in many consignments rejected prior to shipping. With the increasing resistance of *P. ficus* to chemical pesticides, their cryptic life style and the growing opposition towards the use of chemical pesticides in the pursuit of sustainable agriculture, there has been a rise of interest into alternative pest control methods.

As of such, value has been placed on the investigations into the use of entomopathogenic nematodes (EPNs) within an integrated pest management (IPM) scheme to control *P. ficus* and other insect pests. EPNs of the Steinernematidae and Heterorhabditidae families have gained increasing attention for their potential as inundative biocontrol agents. They present no threat to the environment, to humans or any other vertebrate. As a result the overall aim of my current study is to generate knowledge of how to control *P. ficus* in South African vineyards using indigenous EPN species. To date there has little to no previous work conducted on the subject matter. As of such the two indigenous species *Heterorhabditis zealandica* and *Steinernema yirgalemense* have produced competitive results in both the laboratory and in the field for the control of *P. ficus*.

Patrique Le Vieux

MSc in Nematology and Entomology

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Nemlab News

Nemlab was proud to sponsor the Breederiver valley and the Stellenbosch VinPro “vine winning block” competitions this year. We enjoyed it thoroughly and it was interesting to observe all the numerous factors that need to be considered when planting new vines. VinPro did a great job at organizing these events. Nemlab has been approached by the protea industry to conduct root-knot nematode trials with different protea cultivars in order to assess which cultivars are least susceptible. We look forward to the results as this would be extremely helpful to the growers.

Regarding the soil health front, there has been significant progress and nemlab is proud to announce that we now have a soil health test available whereby growers can send in soil or compost samples for the purpose of assessing the health of their soil or the quality of their compost. Nemlab is offering this service in partnership with Hygrotech and Dr Micheal Southwood. Sheila and Tia also attended quite a few soil health meetings and workshops this year so far.

Nemlab has a new home! We have moved from Durbanville to Klapmuts and have found that our new location is much more central as we are nestled nicely between Paarl, Wellington and Stellenbosch. Please come and visit us! Also visit our Facebook page and see who has been to visit...

Nemlab is also expanding as we have appointed two new staff members. Dr Tia Ferreira and Lenè van der Walt are now part of the nemlab family and luckily we have ample space in our new offices.

Sheila Storey



NEMLAB'S NEW PREMISES



Nematology Unit at the North-West University, Potchefstroom

The year 2013 is full of challenges for nematologists and students at this unit. Proffs Alex Mc Donald and Driekie Fourie have a number of students that are enrolled under their guidance for Honors, Master and Doctoral studies. Two Honors students Naudene Maree and Maretha Viljoen are evaluating the host status of economically-important crops to root-knot nematodes. They are also under the guidance of Dr Sonia Steenkamp at the ARC-GCI where the practical work for their projects is being done. Three “first-year” Master students are enrolled and their study fields vary from nematode-microbe interactions (Chantelle Janssen and Marthinus Prinsloo) to a study where nematodes are investigated as indicators of acid-mine water pollution in cave systems (Gerhard du Preez). Another MSc student, Chanté Venter will finalize her Master studies this year. Her project focusses on the exploitation and characterization of resistance to the root-knot nematode *Meloidogyne incognita* in local soybean genotypes.

PhD students that are currently enrolled at the NWU are Suria Bekker, Nancy Ntidi and Akhona Mbatyoti. Suria’s study entails the potential of using complete soil nematode communities as bio-indicators of local soil quality in conservation agriculture compared to conventional tillage regimes. Akhona is involved in studying the association of plant-parasitic and non-parasitic nematodes associated with conventional and genetically-modified Roundup Ready soybean, while Nancy again engages in studying the association and impact of nematode assemblages on domesticated *Amaranthus* spp. in developing agriculture, with special reference to root-knot nematodes.

The presence of two international students that are visiting the NWU’s Nematology Unit adds excitement to study leaders and students at the Nematology Unit of the NWU. Dr Preeti Ahuja is a post-doctoral candidate, who joined the group since February 2013. She is from India where she completed a PhD study that focused on histopathological and molecular techniques used in Botany research. From the Netherlands (Wageningen) is Judith Lammers who is doing an intership as part of her MSc studies that entailed the evaluation of various Brassicaceae species for their host status to *Meloidogyne hapla*. Both these ladies are actively involved in existing research projects and will contribute to knowledge being gained on various topics related to nematology research. Driekie is also involved as co-promoter of two students at the University of Pretoria with Prof Nico Labuschagne leading as promoter.



.....North-West University

Ultimately, news about progress on the final editing of the book on nematology research in South Africa for which all NSSA members supplied chapters related to their field of expertise, is that it is projected to be finalized later this year. The compilation of this book will be a milestone for South African nematologists and will contribute to the knowledge of this discipline.

Congratulations are also in order for Suria Bekker on the birth of her baby boy. Nancy Ntidi is also expecting her second child any time soon.

Driekie Fourie

A teacher ultimately is judged by the achievement of his students.

- Chauncey Veatch

The amazing thing about the winners is that none of them really felt that they were doing anything special. They just felt like it was the right thing to do.

- Caroline Kennedy



Greetings from Durban

We are happy to announce the appointment of Uvendri Pillay as assistant research officer in Nematology at SASRI on a permanent basis from March 2013. She has been on contract with SASRI since March 2012 and is looking forward to her new career in Nematology. To introduce her to the world of Nematology and the wonderful people in our field, she will be attending the Nematology workshop in Nelspruit in June and the short course in Potchefstroom in September.

I (Prabashnie Ramouthar) have formally been appointed as the Nematologist at SASRI and am looking forward to my challenging new role. I am however expecting my second baby so I will be on maternity leave from July 2013-January 2014. In my absence Uvendri will be the point of contact at SASRI.

In terms of the research, we have been furiously working on identifying a new effective nematocide for the sugar industry. Our initial field trial results are very promising and we will be working on registration trials for one or maybe even two products this year.

Prabashnie Ramouthar

Successful people are those who've fallen off the horse a dozen times and gotten back on a dozen times.

Jean Driscoll, Wheelchair racer

Success is the culmination of failures, mistakes, false starts, confusion and the determination to keep going anyway.

- Nick Gleason



Nematological Society of Southern Africa George Martin Memorial Scholarship

Applications are invited for the “GEORGE MARTIN MEMORIAL SCHOLARSHIP” tenable for the year 2013. The award, to the value of R 4000.00 is open to persons from countries of southern Africa: South Africa, Botswana, Lesotho, Swaziland, Mozambique, Malawi, Zimbabwe and Namibia.

The purpose of the scholarship is to promote nematology in southern Africa, preferably by assisting the successful candidate to attend a recognized course in nematology.

Applicants must be serious about pursuing a career in nematology and about furthering the science of nematology. The successful candidate will be expected to give a paper at the next NSSA symposium and/or report in the Society’s newsletter how the funds were used.

A letter of application and a curriculum vitae should be sent before 28 February 2013 to:

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Potchefstroom
2520
South Africa
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**Nematological Society
of Southern Africa**

**We're on the web:
www.sanematodes.com**

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