VOL 51 ISSUE 1

ORGANIZATION OF NEMATOLOGISTS OF TROPICAL AMERICA
ONTA NEWSLETTER
http://www.ontaweb.org/ May 2021

SEVENTH INTERNATIONAL CONGRESS OF NEMATOLOGY

1-6 MAY 2022 ANTIBES JUAN-LES-PINS-FRANCE

"Crossing borders: a world of nematode diversity and impact to discover"

7th International Congress of Nematology
ICN 2020
Antibes Juan-les-Pins - France

Fig. 1. Palais des Congrès (Juan-les-Pins, France)

IFNS PRESIDENT UPDATE OF THE 7TH ICN

IFNS Activities in 2021

At a virtual meeting of IFNS councilors and officers-elect in September 2020, John Jones, Mike Hodda and Eric Grenier volunteered to explore the need and options for graduate students to present research results during 2021. Indeed, in addition to having no meetings in 2020, a poll of the societies revealed that just 5 of 18 nematology societies (RSN, CSPN, SON, NSSA, AAN) plan to hold on-site meetings later this year. Just two entirely virtual opportunities have been announced - early career and student members of ESN will meet virtually this month and the Nathan A. Cobb Foundation will again conduct a student video contest with a deadline of June 30. Given the limited interaction opportunities for nematology graduate students in many parts of the world, it was concluded that an IFNS program would be an important outlet. Eric Grenier is overseeing the formulation of rules and selection processes for a 3-minute thesis competition to be announced later this year. The format is ideal for students to preview their research pursuits prior to the ICN next year, and some prizes may take the form of Congress bursaries. A second activity proposed by John Jones was approved by the councilors and is under development for later this summer. A series of workshops are being planned to occur during two days. Each topic will be addressed by two speakers who will be encouraged to look at and beyond their own research to highlight major opportunities/questions in the discipline.

The ICN 2022 Local Arrangements Committee met briefly in mid-March this year to ensure that the information on the congress websites is available at: https://www.alphavisa.com/icn/2020/index.php.

Briefly, information about the scientific program and hotel accommodation will be sent to all registrants later this year when the worldwide situation regarding travel and meetings becomes more apparent. The take-home information at this time is that Ernesto San Blas will work with the original session organizers and keynote speakers to revise as closely as possible the scientific program found on the website (https://www.alphavisa.com/icn/2020/documents/overview.pdf). All presenters will have the opportunity to update their abstracts.

A frequently heard sentiment these days among Nematologists is that people cannot wait to meet together again after so many months (years now) of isolation. The situation remains as serious as ever in many places, and we all wish the best for colleagues who are affected in many ways by this pandemic. However, the outlook is improving rapidly as vaccination efforts and rates increase. ICN 2022 awaits next year (Fig. 1) as a special opportunity for us Nematologists to resume our lives together. Until then, be safe and stay well!

Fig. 2. Larry Duncan IFNS President

FROM THE ONTA PRESIDENT AND VICE-PRESIDENT

Fig. 3. Martín Augusto Delgado Junchaya

Fig. 4. Fabio Chaverri Fonseca

Dear ONTA members,

Since the COVID 19 pandemic began in 2020, ONTA Executive Committee (EC) has responded in a timely manner to this global emergency to maintain active our Organization and communications, as much as possible, with ONTA members. Through 2020-2021, EC members have also been exploring how to take advantage of digital platforms to continue our organization activities, especially those related to our traditional ONTA Annual Meeting.

As ONTA President and Vice-President (Figs. 3, 4) we are aware that the COVID-19 pandemic caused unforeseen changes at work. However, something positive has come out of this lock down: the use of virtual tools when it was not longer possible to give in person lectures or carry out research. Although it was a challenge for many of us to learn virtual communication technologies, we have adapted.

On this occasion, we want to acknowledge the great commitment of our colleague and ONTA Treasurer Renato Inserra (Fig. 5). After having read Renato's detailed report, we wish to express our sincere gratitude for his support and permanent cooperation in keeping ONTA's finances healthy. It does not take much imagination to understand that the financial statements of many companies and institutions around the world are going through the economic crisis generated by the pandemic. It is understandable that our funds have been reduced by around 18.9% but what is remarkable is that, despite this crisis, we still have the support of some companies and membership; above all, that ONTA's strength will allow us resume activities as soon as world bio-safety conditions allows.

ONTA's Vice President (Fig. 4), with support of the National University of Costa Rica, would like to inform you that preliminary platform tests have been carried out (April-May 2021) to evaluate if it is possible to hold a virtual ONTA Annual Meeting or seminars in the second semester of 2021 using digital platforms. We will inform you very soon of our progress.

Our appreciation goes to our members and, very especially, to Julia Meredith, Rosa Manzanilla, Maria Mendes and Larry Duncan, who deserve our gratitude for their support. In particular, we would like to thank Maria Mendez who served as Secretary of ONTA until March 2021.

We hope to overcome this pandemic together.

Best wishes from us,

Martín Delgado (President) and Fabio Chaverri (Vice-President)

ONTA TREASURER REPORT 2019-2020

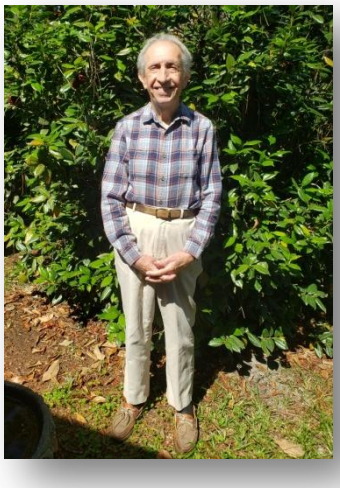

Fig. 5. Dr Renato Inserra

Gainesville FL, January 27, 2021

Dear Colleagues,

I am submitting, in an attached file, a tabulated account of deposits received and expenses incurred by ONTA from July 11, 2019 to January 27, 2021. Deposits were divided into different categories, including regular member dues, sustaining member dues and other payments related to ONTA activities.

ONTA FL, Inc. is a tax-exempt corporation, which is considered by the state of Florida and the US federal government a charitable 501(c) (3) organization operating for scientific and educational purposes. However, a tax return must be filed each year. I filed the return for 2019 electronically.

The financial settlement with the onsite organizers of the 2018 ONTA meeting in Arequipa, Peru, which was agreed to in 2018, included a reimbursement by ONTA of US$ 500.00 that were given by Dr Julia Meredith (assistant treasurer) to Prof. Carolina Cedano of the Local Arrangement Committee for Arequipa. Both Julia and Carolina receive my sincere thanks for settling this financial matter.

During 2019-2020, ONTA's income decreased **US$ 9,106.24** because contributions from Agro Industries were drastically reduced due to the adverse effect of the COVID pandemic on agricultural activities and because many industries had already committed large contributions to the organizers of the International Congress of Nematology in France, which was postponed from 2020 to 2022. I would like to mention that Dr Luis Payan (Syngenta) helped ONTA defray the costs of award plaques and booklets for the ONTA meeting in Costa Rica with a contribution of US$ 600.00 on July 18, 2019, before the outbreak of the COVID virus. Dr Payan's generosity is greatly appreciated and commendable.

Dr Johan Desaeger (Chair of the sustaining member committee) is assessing the ups and downs of the market that supplies the production of agricultural commodities before starting a fund-raising campaign during 2021, in spite of the persistent COVID pandemic.

During the 19 months covered by this report, ONTA members have paid their dues intermittently for a total of US$ 2,967. Almost 23% of these dues (US$ 680) were collected by Julia Meredith and Maria Mendes (Secretary) during the 2019 meeting in Costa Rica. The remaining part was received through ONTA's website using the PayPal system and transferred to ONTA account by Julia Meredith. Payments in the PayPal account and not yet transferred to the ONTA treasury are not reflected in this report and will appear in that for 2021. Available funds for the organization amount to **US$ 39,209.45** compared to **US$ 48,315.69** in the previous year.

Dues collection via PayPal from ONTA website is operational and secure. The efforts of Dr Larry Duncan (website coordinator) in adjusting ONTA's website to receive PayPal payments are greatly appreciated. Payment by credit cards through ONTA's bank account is still maintained to meet the needs of many ONTA Sponsors who cannot use PayPal.

Let me thank again the above-mentioned persons for their valuable time, detailed work, dedication and loyalty to ONTA. While funds are less than previous years, ONTA's financial status is solid.

Please contact me anytime if you need more explanation concerning this report.

Respectfully submitted,
Renato Inserra
ONTA Treasurer

REPORT FROM THE ONTA TREASURER (cont.)

TABULATED TREASURER'S REPORT 2019-2020		AMOUNT
Balance Previous Year, 2018-2019		**US$ 48,315.69**
DEPOSIT RECEIVED		
Members dues		US$ 2,967.00
Sustaining member dues		
SYNGENTA (7/18/19)		US$ 6000.00
Donation for ONTA Foundation		US$ 1,310.00
TOTAL DEPOSITS		**US$ 4,877.00**
EXPENSES INCURRED		
Credit card processing fee		US$ 1,708.36
Nematropica		
Vol. 49 (1) 2019 (Partial)		US$ 385.00
Vol. 49 (2) 2019		US$ 2,580.00
Vol. 50 (1) 2020		US$ 1,610.00
Vol. 50 (2) 2020 (Partial)		US$ 720.00
Incorporation fees 2020		US$ 61.25
Award Brochures printed in advance for ICN, France		
Plaque plus shipment by F. Robinson to Dr E. McGawley		US$ 86.48
Bank cost for deposit slips, Wells Fargo Bank		US$ 42.27
ONTA website modifications		
Andrew Persaud:	US$ 375 (Dec. 2019) US$ 400 (Sep. 2020)	US$ 775.00
Contribution to student awards in Costa Rica (2019)		US$ 1500.00
Contribution to registration costs of key speaker		
Dr Etienne G. J. Danchin, for Costa Rica Meeting		US$ 250.00
Reimbursement funds to Prof. Carolina Cedano from 2018 financial settlement with on-site organizers, ONTA Meeting in Arequipa, Peru		US$ 500.00
Contribution to student awards ICN, France (2022)		US$ 2000.00
2019 Annual dues to HostGator, ONTA website domain		US$ 188.66
2020 Annual dues to HostGator, ONTA website domain	(248.23 + 17.99)	US$ 266.22
Transfer donations to ONTA Foundation		US$ 1,310.00
TOTAL EXPENSES		**US$ 13,983.24**
BALANCE Jan. 27, 2021		**$ 39,209.45**
Note: Balance reflects $ 9,106.24 **decrease over last year's funds of $48,315.69**		

FROM *NEMATROPICA* EDITORS-IN CHIEF

Update from *Nematropica*

Inga Zasada and Louise-Marie Dandurand (Editors-in-Chief)
Cathy Howard (Operations Manager)

Nematropica got back on track in 2020. Approximately 20 manuscripts left over from 2019 were processed along with 37 new submissions. The first 2020 *Nematropica* issue (Vol. 50, No. 1) had 12 manuscripts. The second 2020 *Nematropica* issue (Vol. 50, No. 2), which is still in progress, will have 12 manuscripts. Interesting facts about the manuscripts in the 2020 *Nematropica* issues include:

•Manuscripts were submitted from researchers from Algeria, Brazil, Costa Rica, United States of America, Mexico, Nigeria and Uruguay.

•20 manuscripts were in English, 2 in Spanish, and 2 in Portuguese.

•A diversity of nematodes were studied including *Pratylenchus*, *Globodera*, *Meloidogyne*, *Heterodera*, *Helicotylenchus*, *Rotylenchulus*, *Trichodorus*, *Tylenchorhynchus*, *Xiphinema*, *Heterorhabditis*, *Belonolaimus*, *Hoplolaimus*, *Criconemoides* and *Hemicycliophora*.

•Research focused on crops such as banana, yam, 'arracacha' (*Arracacia xanthorriza*), Bermuda grass, coriander, cowpea, barley, soybean, wheat, plantain, carrot, and potato.

•Two new nematode species were described.

We thank our Associate Editors for their hard work – Danny Humphreys, Tristan Watson, Johan Desaeger, Marcelo Oliveira, and Travis Faske.

Our goals for 2021 include assigning Digital Object Identifier (DOI) to *Nematropica* manuscripts. DOI enables every published article to cite properly, thus provides accurate number of citations and also increases the visibility of the published work. This will directly affect the impact factor of the author and journal as well. We would also like to launch a "First Nematode Report" component to *Nematropica*.

We need your help to continue to raise the impact factor of *Nematropica*. Currently, the impact factor for *Nematropica* is very low, 0.21. Please submit your manuscript to *Nematropica*. Have an idea for a review article? Let us know -- we are happy to work with you.

This is the journal for ONTA – let's make it better together!

Fig. 6. Inga Zasada and Louise-Marie Dandurand sampling for PCN

FROM THE NEWSLETTER EDITOR

Fig. 7. Rosa H. Manzanilla-López

Dear ONTA members,

We are very pleased to be in contact with you again through the ONTA Newsletter. We also hope that all of you are fine and are coping well. Through 2020-2021 digital, non face-to-face, technologies have allowed us to continue with many of our day to day activities, as shown by the news and experiences shared by ONTA members with the readers of this issue of the Newsletter. However, despite intense and extensive online activities, the face-to-face interaction is much missed by many colleagues who hope that world COVID vaccination will allow, in the near future, to hold face-to-face large events. Annual meetings have started to be organized in some countries by nematology societies such as **SON**, which will this year celebrate its 60th Annual meeting in Alabama, USA (**12-15 September 2021**). Plans also continue to meet at 7th International Congress of Nematology (**1-6 May 2022) at the Palais des Congrès in Antibes Juan-Les-Pins (France).** Meanwhile, until all societies meet together again at the 7th ICN, nematology societies and universities have held online meetings (AAB), online workshops and seminars (UC Riverside), and ESN will hold on May 26-28 a virtual event competition for graduate students.

We thank ONTA Newsletter contributors and we would like also to reassure you that all ONTA officers keep working to maintain our Organization active and alive, and that we would like to hear from you wherever you are.

Kind regards,

Rosa

ONTA MEMBERS NEWS

Francisco Franco Navarro – University of California-Riverside (USA)

We are very pleased to share news sent by MSc. Francisco Franco Navarro (Fig. 8) who is doing his doctorate in the Plant Pathology program at the University of California-Riverside (UCR); Francisco is also a member of the staff of the Nematology Research and Extension Laboratory of the Department of Nematology at UCR.

Francisco has kindly sent information about two important academic activities that were recently organized by the Cooperative Extension Department de University of Georgia and the Department of Nematology of UCR. They included one workshop (University of Georgia Extension) on plant-parasitic nematodes management in vegetable crops, whose highlight are also included in this issue, and the NEMA 250 Departmental Seminar (January to mid-March 2021), which was organized on a weekly basis by the Department of Nematology of UCR.

ONTA MEMBERS NEWS (cont.)

Francisco Franco Navarro – University of California Riverside (USA)

Fig. 8. Francisco Franco Navarro

The seminars were presented by professors and researchers not only from UCR but other universities and research centers of the USA. Although the seminar theme was plant-parasitic nematodes other related topics were also covered. Francisco pointed out that organizers of both events initially agreed to extend an invitation to other research groups and students from Mexico so that they can follow the Zoom seminars. However, later on the organizers gladly agreed to expand the seminar audiences even further. On ONTA's behalf, we would like to thank Francisco for his enthusiasm and commitment in organizing the logistics that enabled a broader international audience to benefit from the online seminars. In his own words: 'I take this opportunity to thank sincerely the presence of each of those who have participated in the sessions, and have significantly nurtured the audience each week. Although certain sessions were very *sui generis* and 'stumbling', I hope that this opportunity has satisfied to some extent your interests within Nematology'.

NEMA 250 Departmental Seminar Program

3 February: *"The slow sip from your glass of wine by plant-parasitic nematodes"*
Dr Inga Zasada, USDA-ARS Horticultural Crops Research Laboratory, Corvallis, Oregon (Fig. 6)

10 February: *"Managing plant nematodes in a sandbox: the case of Florida plasticulture"*
Johan Desaeger, Entomology and Nematology Department, University of Florida

17 February: *"Climate change and nematode distribution in the farming systems of Sinaloa, Mexico"*
Dr Manuel Mundo-Ocampo, Centro de Ciencias de Desarrollo Regional de la Universidad Autónoma de Guerrero (Mexico) and Research Associate WOS, Department of Nematology, UCR

24 February: "*Above- and below-ground environmental drivers structuring soil nematode and microbial communities in desert habitats"*
Dr Tiago Jose Pereira, University of Georgia, Institute of Bioinformatics (Fig. 9)

3 March: *"Entomopathogenic bombs"*
Dr Brent Sipes, Department of Plant and Environmental protection Sciences, University of Hawaii (Fig. 10)

10 March: *"Cell Surface Perception in Plant-nematode Interaction"*
Dr Shahid Siddique, Department of Entomology and Nematology, UC Davis (Fig. 11)

ONTA MEMBERS NEWS (cont.)

NEMA 250 Departmental Seminar Program (cont.)

16 March: *"Phasmarhabditis: What now?"*
Dr Irma Tandingan De Ley, Department of Nematology, UC Riverside (Figs 12, 13)

24 March
"Nematode parasitic fungi for biological control of Soybean Cyst Nematode"
Dr Kathryn Bushley, Assistant Professor, Department of Plant and Microbial Biology, University of Minnesota.

Fig. 9. Dr Tiago Jose Pereira, University of Georgia, Institute of Bioinformatics

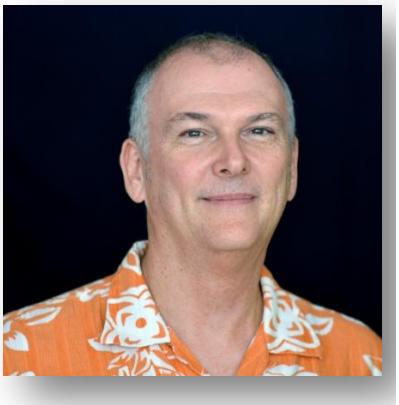

Fig. 10. Dr Brent Sipes, Department of Plant and Environmental Protection Sciences, University of Hawaii

Fig. 11. Dr Shahid Siddique, Department of Entomology and Nematology, UC Davis

Fig. 12. Dr Irma Tandingan and Dr Frieda Decraemer (ONTA Mayguez, Puerto Rico 2017)

Fig. 13. Snails and slugs: Phasmarhabditis *hosts*

ONTA MEMBERS NEWS (cont.)

"Management of Plant-parasitic Nematodes in Vegetables" – A Virtual Workshop

Francisco Franco Navarro

Fig. 14. Online workshop program

Last January 25th, in the middle of this health crisis that is changing everything around the world, the Cooperative Extension Department at University of Georgia (USA) organized the Virtual Workshop entitled "Management of Plant-Parasitic Nematodes in Vegetables" (Fig. 14), hosted by the Southern IPM Center. After the event was introduced by Dr Abolfazl Hajihassani, Assistant Professor at University of Georgia and workshop coordinator, six interesting talks were presented by nematologists from different USA universities (Fig. 15) about the management of nematodes on vegetable crops like: pepper, cucumber, tomato, squash, watermelon, potato, carrot and sweet potato.

The first speaker, Dr William Rutter (USDA-ARS, South Carolina), shared his findings and experience about the management of plant-parasitic nematodes in pepper and cucumber, mainly based on the use and underlying resistant material mechanisms. Dr Rutter mentioned the impact of the most important nematode group on both crops, the root-knot nematodes (*Meloidogyne* spp.) thus highlighting the most relevant species, and taking the opportunity to speak about *M. enterolobii*, currently the quarantine species of most concern in the South Eastern USA.

The second talk was by Dr Johan Desaeger, Professor at University of Florida; he talked about the management of nematodes in tomato and squash, sharing different field experiences testing resistant materials (tomato), as well as promising results applying known fumigants, new non-fumigant nematicides and even biological products. Dr Desaeger also mentioned interesting information relating to the most important plant-parasitic nematodes in both vegetable crops; in fact, he pointed out the root-knot nematodes were the most important species, including those interactions between nematodes and plant-parasitic fungi and their impact mainly on tomato.

The next talk corresponded to Dr Abolfazl Hajihassani (UGA, Georgia) who talked about the management of nematodes in watermelon and tomato. Afterwards, Dr Hajihassani talked about the vegetable industry in Georgia and the most important crops; he focused on the incidence and abundance of plant-parasitic nematodes, specifically the root-knot nematodes, which are more prevalent in Georgia. He also mentioned some strategies that have been tested by his research group under field conditions such as the use of rootstocks (watermelon) or resistant varieties (tomato), and the application of new non-fumigant nematicides.

Later, Dr Marisol Quintanilla, Assistant Professor at MSU, Michigan, talked about the management of lesion and root-knot

nematodes in carrot, and Irish potato (lesion nematodes interacting with *Verticillium dahliae*). Dr Quintanilla also shared some field experiences controlling these pathogens by the use of organic amendments on potato, the application of new nematicides, biological products and even new inorganic molecules on carrot.

In the last two talks, both Dr Tristan Watson, Assistant Professor at LSU, Louisiana, and Dr Adrienne Gorny, Assistant Professor at NCSU, North Carolina, shared some ideas about nematode management in sweet potato from the perspective of Louisiana and North Carolina. In both talks, the importance of sweet potato and nematode problems on this crop was highlighted (Southern root-knot nematode, reniform nematode, guava root-knot nematode). Also, Dr Gorny talked about basic concepts of sampling and diagnostics of these important nematode species, and some strategies for their control, like quarantine protocols, application of nematicides (those usually applied and new ones), crop rotation, biological control and the use of resistant varieties.

Thanks to the Zoom platform, hundreds of participants around the world attended the event, and after three hours of interesting and very informative talks the session was followed by questions and answers, in which all speakers participated answering questions about those important nematodes that were mentioned, how to sample and extract them, their interactions with other pathogens (mainly plant-parasitic fungi), damage thresholds, and control strategies based mainly on nematicides, including the best ways to apply them and improve their performance.

The "normality" disruption caused by the pandemic has brought new challenges and opportunities, and activities like seminars, workshops, symposia, or scientific meetings in a virtual mode mean great virtual spaces to get updated, discuss and expand our knowledge, extend our capabilities and relationships with our students, colleagues and other interested people who are involved in this wonderful discipline which is Nematology.

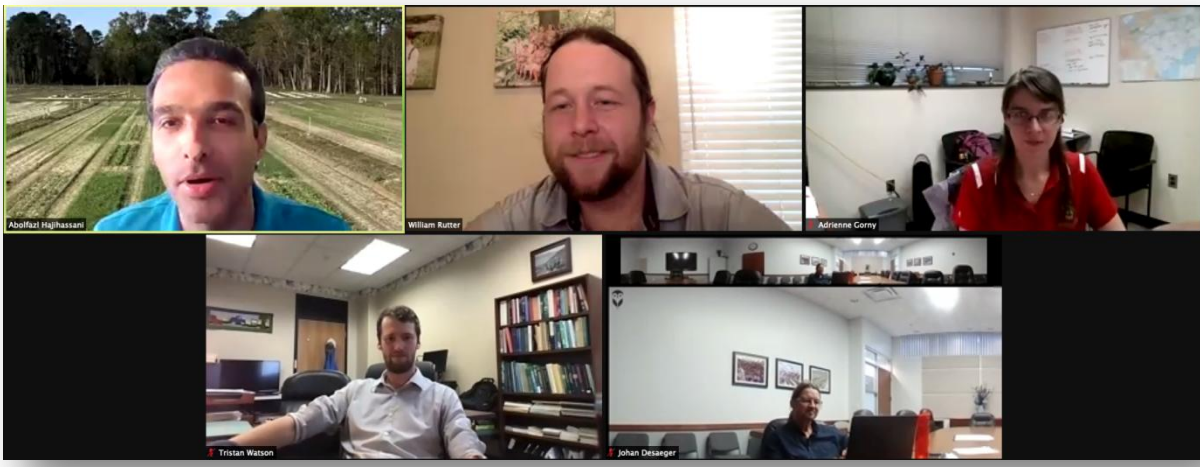

Fig. 15. Top row (from left to right): Abolfazl Hajihassani, William Rutter, Adrienne Gorny;bottom row: Tristan Watson, Johan Desaeger

ONTA MEMBERS NEWS (cont.)

NEMA 250 Departmental Seminar UC Riverside: feedback from Mexico

Fig. 16. Dr Alejandro Tovar Soto

Congratulations to colleagues who were behind to extend an invitation to students, teachers and colleagues beyond the USA frontiers to attend online the **nematology 250 winter quarter 2021 seminar** taught at the University of California Riverside Campus. It was an excellent idea; the invitation allowed nematologists from Mexico and North America to be in communication for several weeks with other colleagues, especially those who presented results and points of view about the research they carry on.

I would especially like to congratulate MSc. Francisco Franco Navarro, a colleague and doctoral student at UCR, who was instrumental in extending the invitation and was also attentive week after week to keep us informed in Mexico about the program, schedule and speakers during the seminar.

Thank you!

Alejandro Tovar Soto, Nematología Agrícola, Departamento de Parasitología, Instituto Politécnico Nacional, Mexico

Teaching nematology online

Fig. 17. Prof. Ignacio Cid del Prado-Vera and nematology students, Colegio de Postgraduados, Mexico

The course on 'Phytopathogenic Nematodes FIT-620" was taught for the first time online using a digital platform (Google Chrome). On this occasion, Dr Howard Ferris, professor in Nematology at the University of California Davis (USA) participated in the course with the lectures "Bioindicators and faunal analysis" and "Diagnostics and evolution of biochemical and molecular methods". Prof. Ferris also followed the whole course online.

Although I had to learn how to use the platform, this experience made me realize the advantages of the platform tools to increase course quality. I am very pleased that Drs Howard Ferris and Sara Sánchez-Moreno (Spain) have already expressed their interest to participate in next year's course (2022). I am considering how to add laboratory practical to the course. It was a very good experience for the students who had also the chance of attending online the UC Riverside seminars and learn about different research topics in nematology. I am convinced that we have an opportunity to start training human resources in nematology via the internet.

Kind regards,

Dr Ignacio Cid del Prado-Vera (Fig. 17)

CONGRATULATIONS!

Dr Manuel Silva-Valenzuela

Manuel Silva-Valenzuela's viva took place online on 6 March 2021. He successfully defended his thesis entitled '*Endophytic Fungi: a Biological Alternative for the Management of Phytoparasitic Nematodes'* and was awarded the degree of Science Doctor in Plant Health-Plant Pathology by the Colegio de Postgraduados, Montecillo campus, Mexico. Manuel's supervisor was Dr Emma Zavaleta-Mejía, his academic committee included Drs Reyna I. Rojas-Martínez, Rosa H. Manzanilla-López, Martha L. Macías Rubalcava and Sergio Aranda Ocampo.

Fig. 19. Manuel Silva-Valenzuela

Manuel (Fig. 19) is also one of the graduate students selected to give a poster at next seventh INC in Antibes, France. Manuel shared with the ONTA Newsletter the motivation behind his work with endophytic fungi: "During my professional training, I was learning about the complexity of the interactions that fungi can establish with plants and other microorganisms. Thus, I understood that some fungi have the ability to establish mutualistic symbiotic interactions with plants, such interactions favour plant development and give them resistance against biotic stresses, such as phytoparasitic nematodes. At present, nematodes are controlled with agrochemicals, which are harmful to health and a limitation for the commercialization of production. For this reason, biological management alternatives are being developed. However, in Mexico this topic is little studied. For this reason, we decided upon a research topic to isolate and evaluate the capacity of endophytic fungi as potential antagonists of phytoparasitic nematodes and thereby increase knowledge of the biological management of nematodes with mutualistic endophytic fungi in Mexico

CONGRATULATIONS! (cont.)

Endophytic Fungi: a Biological Alternative for the Management of Phytoparasitic Nematodes
Manuel Silva-Valenzuela [thesis abstract]

Root-knot nematodes (RKN) are an important limitation to crop world production. Control of RKN is carried out mainly with synthetic nematicides, which pose health and environmental risks. Hence, new biological alternatives such as the use of endophytic mutualistic fungi is increasingly being considered for their potential as a new non-chemical tactic for RKN control to be used as part of an integrated pest management approach. In this investigation, plant samples were taken from RKN infested fields from Sinaloa and Mexico City, Mexico, to isolate endophytic fungi that were antagonistic to *Meloidogyne enterolobii*, *M. incognita* and *Nacobbus aberrans sensu lato* (*s.l.*). A total of 14 root and leaf isolates were obtained and tested on tomato and chilli pepper plants to evaluate their plant growth-promoting effect, ability to parasitize eggs and second-stage juveniles (J2), fungal filtrates nematicidal effect on J2, and ability to induce nematode plant resistance using a divided root system and over expression of defense-related genes (*PR1*, *Lox D*, ER*E*BP) in the presence of the nematode. The most effective endophytic fungi were *Chaetomium globosum* (S1TH2), *Echria macrotheca* (S3RT2) and *Stagonospora trichophoricola* (XRC3). All three fungi promoted chilli plant growth, but only S3RT2, XRC3 promoted the growth of tomato. S1TH2 parasitized *M. enterolobii* eggs; S3RT2 and XRC3 the eggs of *N. aberrans s.l.* and S3RT2 the eggs of *M. incognita* and J2 of *N. aberrans s.l.* Fungal filtrate of S1TH2 had a nematostatic effect on *M. incognita* as well as those of XRC3 and S3RT2 on J2 of *N. aberrans s.l.* but the filtrate of S3RT2 had also a nematicidal effect. None of the three endophytic fungi induced resistance in both plant hosts against *M. enterolobii*. In contrast S3RT2 induced resistance in tomato against *M. incognita* and *N. aberrans s.l.* in chilli; S1TH2 induced resistance only against *N. aberrans s.l.* in chilli, and XRC3 in chilli and tomato against *N. aberrans s.l.* The relative accumulation of defense-related gene transcripts was determined by real-time PCR in the interaction *S. trichophoricola* XRC3-tomato-*N. aberrans s.l.* in plants inoculated only with fungus (H), nematode (N) or fungus plus nematode (H + N). Of the three genes *PR1*, *Lox D* and ER*E*BP, only *PR1* showed a significant increase 48 hours after inoculation of the nematode (H + N) as it increased 94% with respect to N treatment. The fact that only this gene was over-expressed suggests that XRC3 activated the gene-dependent defense mechanisms associated with this gene such as cell wall strengthening and defense-related protein synthesis.

CONGRATULATIONS!

Ernesto San-Blas new academic position at the University of O'Higgins (Chile)

Fig. 18. Dr Ernesto San Blas

Since March 1, 2021 Ernesto was appointed academic researcher at the Instituto de Ciencias Agroalimentarias, Animales y Ambientales (ICA3). The institute belongs to the recently created Universidad de O'Higgins in Chile. ICA3 is a research institute devoted to promote and develop research and innovation of excellence, which contributes to the generation and knowledge transfer for the sustainable development and protection of the ecosystems of the O'Higgins Region and Chile [https://www.uoh.cl/#instituto-de-ciencias-agroalimentarias-animales-y-ambientales]

As part of his regular duties, Ernesto will continue working with entomopathogenic nematodes combined with spectroscopic and artificial intelligence techniques to improve their management as biological control agents. Additionally, Ernesto will collaborate with the School of Agronomy giving lectures and mentoring students in different areas such as nematology, biological control, and integrated pest management. His new institutional email is esanblas@uoh.cl

"I sincerely thank all the ONTA colleagues who cared for me and my family. Your concerns and questions about our situation in the last few years were very appreciated. For sure, we will meet together soon (I hope at the ICN) and celebrate this achievement. Thank you all again. ESB."

CONGRATULATIONS!

Hugo Silva winner of the AAB Brian Kerry best student platform presentation award

Hugo Silva (Fig. 20) from the NEMATO-lab (Centre for Functional Ecology-Department of Life Sciences, University of Coimbra, Portugal) received the renowned Brian Kerry award for the best student platform presentation at the one-day conference "Advances in Nematology" organized by the Association of Applied Biologists (AAB) of the UK on 15th December 2020. Hugo presented results from his Master Thesis supervised by Joana Cardoso and Luís Fonseca. The presentation *"Bursaphelenchus xylophilus* secretome under *Pinus pinaster* and *P. pinea* stimuli" was focused on new results on qualitative and quantitative proteomic analysis of *B. xylophilus* secretomes under the stimulus of pine species with different susceptibilities by a high sensitive proteomic approach (Sequential Windowed Acquisition of All Theoretical Mass Spectra -SWATH-MS). The results revealed new insights into the molecular basis of *B. xylophilus*-host interactions. This study was made in collaboration with the Mass Spectrometry Unit of the Center for Neuroscience and Cell Biology (CNC, Portugal) and is part of an ongoing multidisciplinary project "POINTERS - Host tree-pinewood nematode interactions: searching for sustainable approaches for pine wilt disease management" (PTDC/ASP-SIL/31999/2017-POCI-01-0145-FEDER-031999) funded by the Portuguese Foundation for Science and Technology (FCT) and published in Frontiers in Plant Science, doi: 10.3389/fpls.2021.668064.
(https://www.frontiersin.org/articles/10.3389/fpls.2021.668064)

Fig. 20. Hugo Silva (right top inset) at Advances in Nematology 2020

CONGRATULATIONS!

Dr Aurelio Ciancio, CNR, Istituto per la Protezione Sostenibile delle Piante, Bari, Italy

The EU-funded Project MUSA 727624, coordinated by Dr Aurelio Ciancio (Fig. 21), received a six months extension, now ending on November 2021. The prolongation was requested because of the Covid-19 emergency, as some field trials had to be delayed. A web meeting with stakeholders was developed in June 2020, and a second edition is now scheduled in May 2021. A number of achievements have been secured, including the use of chitosan and the application of *Pochonia chlamydosporia* and other beneficial microorganisms on banana. Some isolates of *Trichoderma asperellum* were tested in Costa Rica by Dr Luis Pocasangre (Earth University, Costa Rica) for biological control of nematodes that proved to be effective for management of *Radopholus similis*. Entomopathogenic nematodes have been isolated and tested in Cuba by Drs Mayra Rodriguez and Belkis Peteira, to control the black weevil, *Cosmopolites sordidus*, in banana fields. Progress has also been made through various -omic approaches, including banana metagenome analyses in different production regions, Fusarium wilt biocontrol, endophytes transcriptomics and sequencing.

Fig. 21. From left to right: Luis Pocasangre, Aurelio Ciancio, Alison Cardona and Karol Loján, students of Costa Rica EARTH University (image courtesy of Mariella Finetti-Sialer)

For more information about the MUSA project and 'Banana plant, soil and root ecology', please visit CORDIS EU research results at https://cordis.europa.eu/article/id/429930?WT.mc_id=exp

OBITUARIES

Father Richard W. Timm, CSC (1923-2020)

Father Richard William Timm CSC (March 2, 1923, Michigan City, Indiana) died September 11, 2020 at the age of 97. Father Timm received his BA from the University of Notre Dame, and his MS (Biology) and PhD (Parasitology) from the Catholic University of America. Dr Timm conducted surveys on nematodes and described over 250 new species. Father Timm described *Timmia parva*, two species of *Megadontolaimus* (marine nematodes), two species of marine *Aphelenchoides* with Dr. Mary Franklin, as well as nematodes within *Imponema*, *Filiponema* and *Plutellonema* with Dr. Armand Maggenti. Father Timm authored "The Plant-Parasitic Nematodes of Thailand and The Philippines" published by SEATO in 1965. He served as a Fulbright Lecturer in Parasitology at the Government Medical College, Dhaka, Bangladesh and as a Visiting Professor in Nematology at the University of California from 1968-1970. In addition to being a nematologist, Father Timm was an educator and an activist.

Brent Sipes

More information can be found at:
http://nemaplex.ucdavis.edu/General/Biographies/RWTimm.htm
https://en.wikipedia.org/wiki/Richard_William_Timm
https://www.dhakatribune.com/obituary/2020/09/12/father-richard-william-timm-passes-away

OBITUARIES

Dr Fred J. Gommers (1942-2020)

Fig. 22. Dr. Fred J.Gommers
Picture Courtesy of the authors

We regret to inform you of the passing of our former faculty member Dr Fred J. Gommers on December 8th, 2020. Fred Gommers joined the Laboratory of Nematology at Wageningen University in 1969. Over the years his work proved to be truly seminal for understanding molecular mechanisms in nematode-plant interactions. Educated as a biochemist, he was one of the pioneers to focus on molecules and biochemical processes in plant nematology. His work in the 1970s on nematicidal thiophenic compounds from Compositae ("photochemistry in the dark'') and his approach to using enzymatic cycling in combination with cry-sectioning to measure metabolites within individual feeding cells of root-knot and cyst nematodes are illustrations of his creative mind. In the early 1980s, he was one of the first in Wageningen to obtain funding from the industry for fundamental research. Understanding the genetics of plant-nematode interactions and identifying the 'molecular factors' (currently known as effectors) underlying feeding cell induction was a major drive in his scientific profession. His dedication and endeavour to build a vital Laboratory of Nematology at Wageningen University has been fruitful and is an important legacy of his career. Although Fred retired in 2003 his colourful personality and non-conformist approach to science still evokes a lot of admiration. Importantly, as supervisor and mentor, Fred formed the basis of successful careers of many scientists in- and outside nematology. Saddened but grateful, we look back at Fred's tenure as an important turning point in the history of our laboratory.

On behalf of all former colleagues,

Jaap Bakker (Emeritus Professor)
Geert Smant (Professor)
Laboratory of Nematology
Wageningen University & Research
The Netherlands

ONTA Newsletter thanks *Nematology* and European Society of Nematologists for sharing Dr Fred J. Gommers obituary. For more information visit:
https://www.wur.nl/en/Research-Results/Chair-groups/Plant-Sciences/Laboratory-of-Nematology.htm
Nematology 23(4): 483-484. DOI 10.1163/15685411-00003453

OBITUARIES

Dr Seymour Dean Van Gundy (1931-2020)

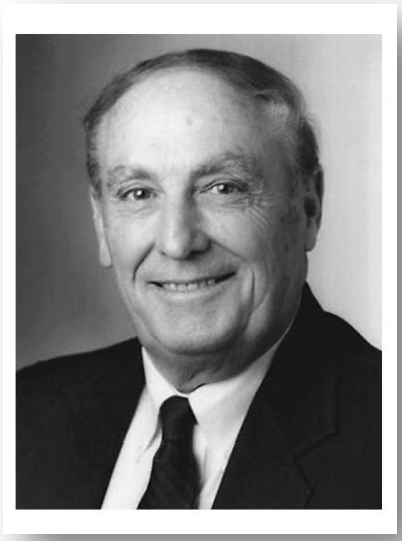

Fig. 23. Dr Seymour Dean Van Gundy
Picture Courtesy of the authors

Seymour Dean Van Gundy, UC Riverside professor emeritus of nematology and plant pathology, passed away peacefully at home on Dec. 27, 2020. He was born on February 24, 1931, in Toledo, Ohio. He graduated from Monclova High School, Monclova, Ohio, in 1949. Van Gundy entered Bowling Green State University on an Edwin Mosley Scholarship and graduated with a B.A. in Biology in 1953. In 1956, Van Gundy finished his Ph.D. research at the University of Wisconsin and continued as a postdoctoral student until February 1957. Dewey J. Raski, chair of the University of California Statewide Nematology Department, offered him a position in the Nematology Department at UC Riverside (UCR). Two months of training with esteemed nematologist Gerald Thorne prepared Van for his new job before going to California.

He joined the UCR Department of Nematology as a junior nematologist in March 1957. In 1958, Van researched and published the first complete life history of the citrus nematode (*Tylenchulus semipenetrans*). Consequently, he worked for many years on the ecology and management of citrus nematode. Nearly a decade later, he discovered the sheath nematode (*Hemicycliophora arenaria*), a new species parasitizing desert citrus. In 1964, he was named a Fellow of the American Association for the Advancement of Science (AAAS). Van was appointed Professor of Nematology in July 1968. During the 1965-66 academic year, Van Gundy spent a sabbatical leave in Australia working with Harry Wallace and Alan Bird to strengthen his interdisciplinary research interest in nematode ecology. He worked with Peter Tsao and Donald E. Munnecke of UCR's Department Plant Pathology on soil fungi/citrus nematode interactions and soil fumigants, respectively. From September 1968 to 1970, he served as associate dean for research in the Graduate Division at UCR.

OBITUARIES

Dr Seymour Dean Van Gundy (cont.)

From 1970 to 1972, Van Gundy served as assistant vice chancellor for research, and from 1972 to 1984, he was chairman of the Department of Nematology. Through his lobbying efforts, he secured state funding for the first Nematology Quarantine and Isolation facility. In 1977, in collaboration with Diana Wall, he spent a summer at the University of Alaska, Fairbanks, to study nematodes in the black spruce-permafrost ecosystem. In 1979, Van Gundy was joint appointed in the UCR Plant Pathology Department and received the title of professor of nematology and plant pathology. In 1984, he spent a sabbatical leave in Milton Schroth's laboratory in the Department of Plant Pathology at UC Berkeley studying rhizobacteria. On his return, he served in the College of Natural and Agricultural Sciences as associate dean for research from 1985 to 1988 and dean of the college from 1988 to 1993.

In the Society of Nematologists, he was instrumental in establishing the *Journal of Nematology* and served as its first editor-in-chief. He served as vice president and president of the Society of Nematologists and became a fellow in 1984 and honorary member in 1997. In 1978, Van Gundy was named a Fellow of the American Phytopathological Society.

Van Gundy retired in 1993 but had a voluntary but active role in the college as associate dean for International Programs. He was involved with the university's extension program, travelling to many countries to stimulate student and visiting scientist exchange with Russia, Vietnam, and Moldova, among others. In 2006, Van was inducted into Moldova's National Academy of Sciences for his formative role in developing the extension program between UCR and Moldova State University. Van Gundy influenced many people in his life with his kindness and generosity. He will be deeply missed.

Philip A. Roberts and J. Ole Becker

ONTA Newsletter thanks the Society of Nematologists and *Nematology* for sharing Dr Seymour Dean Van Gundy's obituary.
For more information visit:
https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=45615
Nematology 23 (3): 355-356
DOI: https://doi.org/10.1163/15685411-00003442

ONTA GALLERY

PAST ONTA MEETINGS

Fig. 24. Ten years ago ONTA met in Coimbra, Portugal

Fig. 25. Prof. Isabel Abrantes, XVIII ONTA Annual meeting in Coimbra, Portugal

ONTA AGENDA

SON 60th Annual Meeting 2021

Fig. 26. Alabama Gulf Coast, USA

Pat Donald sends to ONTA members an invitation to attend SON Annual Meeting 2021 (https://nematologist.org)

The Gulf State Park and Auburn University invite you to attend the 60th annual meeting of the Society of Nematologists on September 12-15, 2021. The Lodge at Gulf State Park, A Hilton Hotel, is a unique destination on the Alabama Gulf Coast where nature is at your doorstep. It is located inside the naturally beautiful 6,150-acre Gulf State Park. This unique destination stands out from other Gulf Coast destinations because of its size and the diversity of its preserved ecosystems. The park is part of the National Geographic Unique Lodges of the World (https://www.nationalgeographiclodges.com/lodges/map-view/) and the Jean-Michel Cousteau Learning campus (https://watershed.pro/portfolio/learning-campus-gulf-state-park/). Meeting rooms, restaurants, and hotel rooms are linked with covered walk ways. Open air space is optimized. The park has 3.5 miles of beautiful white sand beaches; 28 miles of educational hiking and biking trails, Segway tours, a nature center, outdoor classrooms, kayaking, guided nature walks and more. Its beachfront location also provides easy access to a host of water activities. This unique destination stands out from other Gulf Coast destinations because of its size, the diversity of its preserved ecosystems and commitment to sustainability. There is simply nowhere else like it on the Gulf Coast.

The Lodge at the Gulf state Park (https://www.gulfshores.com/lodging/resorts/the-lodge-at-gulf-state-park/) will serve as the meeting site and primary hotel accommodations. The Pensacola International Airport located in Pensacola, Florida is 37 miles from the park. (https://www.pensacola-airport.com/) American, Delta, Southwest and Frontier are some of the airlines that fly in to this airport. Rental cars and Uber offer transport to the park. Parking is US$ 5.00 a day and bicycles are available at no additional cost.

Your meeting registration includes access to all scientific sessions, the opening reception, the wine and cheese poster session, closing reception and awards banquet dinner. Included in your registration fee, we will have morning and afternoon beverage service and snacks as well as lunches provided.

Our initial meeting schedule:

- Sunday evening **Welcome Reception**
- Monday morning **Plenary Sessions I & II**
- Monday afternoon **Graduate Student Paper Competition**
- Monday evening **Star Gazing at the Pier**
- Tuesday **Paper sessions and Symposia**
- Tuesday evening **Wine and Cheese Poster Session**
- Wednesday morning **Nature Tours**
- Wednesday afternoon **Capacity Building grants & Committee meetings**
- Wednesday evening **Closing Banquet**

INVITATION

ONTA FOUNDATION

Get busy! ONTA Foundation, Inc. status is clear and high. Open your wings and take a flight!

Dear ONTA member,

ONTA Foundation is ready for a campaign to request donations and expand its contributor base in a big way. ONTA Foundation can receive funds through several means: 1) checks made out to the ONTA Foundation and mailed to Janete Brito (Fig. 27); 2) credit card, same information required as for membership payment; 3) wire transfer. Janete Brito and Renato Inserra have full codes for wiring if requested.

Please give generously to support the activities and projects of the ONTA Foundation.

Fig. 27. Janete Brito

ONTA ACTIVE MEMBERSHIP UPDATING

Dear ONTA Member,

A list of active members with their e-mail addresses and countries has been posted on the ONTA website (http://www.ontaweb.org/onta-membership-directory/). Please verify your membership status on the posted list. Contact Julia Meredith (jmeredith@cox.net) if your membership status is not updated.

Thanks,

Julia Meredith
ONTA Acting Secretary

Fig. 28. Julia Meredith

ONTA NEWSLETTER INVITATION

Dear ONTA member,

Do you have a passion for nematodes and nematology? Would you like to share nematology news and pictures with our ONTA members? If so, welcome aboard!

We would like to extend to you a warm invitation to send or share information for our next ONTA Newsletter issue.

Please contact us. We are looking forward to hearing from you and to learn about your local nematology events and news.

Thanks,

Rosa

Fig. 29. Rosa H. Manzanilla-López

ACKNOWLEDGEMENTS

The editor would like to thank all ONTA Newsletter contributors for sending and sharing information and images through the year of 2021.

Rosa H. Manzanilla-López
ONTA Newsletter Editor

ONTA SUSTAINING MEMBERS

ONTA gratefully recognizes the support received during 2020-2021 from the following sustaining members: ADAMA, AGBIOME, AMVAC, BAYER, CORBANA, CORTEVA AGRISCIENCE, DUPONT, E-NEMA, KOPPERT BIOLOGICAL SYSTEMS, FMC, MARKETING ARM INTERNATIONAL, MARRONE BIO INNOVATIONS, EBIO-PIONEER CHEMICALS and SYNGENTA.

ONTA OFFICERS

EXECUTIVE COMMITTEE

PRESIDENT: Martín Augusto Delgado Junchaya, Universidad Privada Antenor Orrego. Av. América sur 3145, Trujillo, La Libertad, Perú; email: <mdelgado@upao.edu.pe>

VICE-PRESIDENT: Fabio Chaverri Fonseca, IRET-UNA, Universidad Nacional, apartado postal 86-3000, Heredia, Costa Rica. Tel: (506) 22773584, (506) 22773587; Fax: (506) 22773583 <fabio.chaverri@una.cr>

PAST PRESIDENT: Edward C. McGawley, Department of Plant Pathology & Crop Physiology 302 Life Sciences Bldg.; Louisiana State University, Baton Rouge, LA 70803 USA. Tel: 225-578-7145; Fax: 225-578-1415; Mobile: 225-229-7638; email: <EMgawley@agcenter.lsu.edu>

ACTING SECRETARY: Julia Meredith. PO Box 140357, Gainesville FL 32614-03572; e-mail: <jmeredith@cox.net>

TREASURER: Renato N. Inserra, Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Nematology Section, P.O. Box 147100, Gainesville FL 32614-7100, USA. Tel: 1-352-395-4755; FAX: 1-352-395-4614; e-mail: <Renato.inserra@fdacs.gov>

NEMATROPICA EDITORS: Editors-in-Chief (EIC): Louise-Marie Dandurand, Entomology, Plant Pathology and Nematology, University of Idaho, 875 Perimeter Drive MS 2329, Moscow, ID 83844 <lmd@uidaho.edu> and **Inga Zasada**, USDA-ARS Horticultural Crops Research Laboratory, 3420 NW Orchard Ave., Corvallis, OR 97330 <inga.zasada@usda.gov>

NEWSLETTER EDITOR: Rosa H. Manzanilla-López, 16 Coleswood Road, Harpenden, Herts AL5 1EQ, United Kingdom. E-mail: <rosa.manzanilla@gmail.com>

MEMBERS AT LARGE: Danny Coyne, IITA, Kasarani, P.O. Box 30772-00100, Nairobi, Kenya; e-mail: <d.coyne@cgiar.org>. **Mayra G. Rodríguez**, Laboratorio de Nematología, Centro Nacional Agropecuario (CENSA), Apartado 10, San José de Las Lajas, Havana, Cuba; Tel: 53 64 63014 ext. 48; e-mail <mrguez@censa.edu.cu>

BUSINESS MANAGER: Janete Brito, Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Nematology Section, P.O. Box 147100, Gainesville FL 32614-7100, USA. Tel: 1-352-395-4752; FAX: 1-352-935-4624; e-mail: <Janete.brito@fdacs.gov>

COMMITTEES AND REPRESENTATIVES

ARCHIVE COMMITTEE: William Crow, Department of Entomology and Nematology, University of Florida, P.O. Box 110620, Gainesville FL 32611-0620, USA; e-mail: <wtcr@ufl.edu>.

FOUNDATION COMMITTEE: Janete Brito (Chair), see address under Executive Committee; **Larry W. Duncan**, University of Florida, Citrus Research and Education Center, 700 Experiment Station Road, Lake Alfred FL 33850-2299, USA; Tel: 1-863-956-1151; FAX: 1-863-956-4631; e-mail: <lwduncan@ufl.edu>; **Jim Rich**, University of Florida, 155 Research Road, Quincy FL 32351-9500, USA. Tel: 1-850-875-7130; FAX: 1-850-875-7148; e-mail: <Jimmyr@pineland.net>. **Rodrigo Rodríguez-Kábana**, Department of Plant Pathology, Auburn University, Auburn, AL 36849-5409, USA. Tel: 1-334-844-4714; FAX: 1-334-844-1948; e-mail: <rrodrigu@acesag.auburn.edu>. **Lee Simmons**, 504 Capstone Lane, Tallassee AL 36078, USA; email: <lsimmons@agbiome.com>.

HONORS AND AWARDS COMMITTEE: Forest Robinson (Chair), 2949 Mirrormere Cir, Bryan TX 77807 USA, email: <RobinsonONTA@gmail.com>. **Alejandro Esquivel**, Lab. Nematología, Escuela de Ciencias Agrarias, Universidad Nacional, AP 86-3000, Heredia, Costa Rica. Tel: 277 32 99; FAX: 261 00 35; e-mail:<aesquive@una.ac.cr>. **Erwin Aballay**, Universidad de Chile, Fac. Ciencias Agrarias, Dept. Sanidad Vegetal, P.O. Box 1004 or Avenida Santa Rosa # 11.135, La Pintana, Santiago, Chile; Tel: 56-2-6785821 or 56-9-4346229; FAX: 56-2-6785812; e-mail: <erwinaba@uchile.cl>. **Ignacio Cid del Prado**, Colegio de Postgraduados Montecillo. Km 36.5 Carretera México-Texcoco, Montecillo CP 56230. Texcoco, Edo. México. Tel: 595-20200 Ext. 1667; FAX: 015959520200 Ext. 1632; <email: icid@colpos.mx>. **Larry Duncan**, (address under Foundation Committee). **Paula Agudelo**, School of Agricultural, Forest, and Environmental Sciences, Clemson University. Clemson, SC, USA; e-mail <pagudelo@clemson.edu>. **Wilfrida Decraemer**, Royal Belgian Institute of Natural Sciences, Vautier Street 29, B1000 Brussels, Belgium; email: <Wilfrida.Decraemer@Ugent.be>.

NEMATROPICA EDITORIAL COMMITTEE: Louise-Marie Dandurand (EIC) and **Inga Zasada** (EIC) (see address under Executive Committee). **Brent Sipes** (past EIC), Department of Plant & Environmental Protection Sciences, 3190 Maile Way, Honolulu, HI 96822, St. John 309A, USA. Tel: (808)956-7813; FAX: (808)956-2832; email: <sipes@hawaii.edu>. **Johan Desaeger**, University of Florida, Wimauma, FL <jad@ufl.edu> (Senior Editor). **Travis Faske**, University of Arkansas, Lonoke, AR <tfaske@uark.edu> (Senior Editor). **Danny Humphreys-Pereira**, University of Costa Rica, San Jose, Costa Rica <danny.humphreys@ucr.ac.cr> (Senior Editor, Spanish). **Claudio Marcelo Oliveira**, Instituto Biologico, Campinas, Sao Paulo, Brazil <marcelonematologia@gmail.com> (Senior Editor, Portuguese). **Tristan Watson**, Louisiana State University, Baton Rouge, LA <twatson@agcenter.lsu.edu> (Senior Editor).

NEWSLETTER COMMITTEE: **Rosa H. Manzanilla-López** (**Chair**), (address under Executive Committee); **Louise-Marie Dandurand** (EIC) and **Inga Zasada** (EIC) (see address under Executive Committee). **Brent S. Sipes** (see address under *Nematropica* past EIC). **Terrence L. Kirkpatrick**, (see address under *Nematropica* Editorial Committee). **Kimberly Rowe**, Arkansas Plant Pathology, University of Arkansas, Department of Plant Pathology, Hope, AR 71801 USA; Tel: 870-438-2044; e-mail: <krowe@uaex.edu>

COMMITTEES AND REPRESENTATIVES (cont.)

NOMINATIONS COMMITTEE: Rosa H. Manzanilla-López (Chair), (address under Executive Committee); **Renato N. Inserra**, (address under Executive Committee). **Forest Robinson** (address under Honors and Awards Committee). **Patrick Quénéhervé** (Chair), ORSTOM Laboratoire de Nématologie, BP 8006-97259 Fort de France Cedex, Martinique (French West Indies); Tel: 596-645750; FAX: 596-717316; e-mail: <queneherve@ird-mq.fr>. **Juan Carlos Magunacelaya**, Avda. Brasil 2950, Valparaiso 4059, Chile, Tel: 56 2 678 5821; e-mail: <jmagunac@ucv.cl>. **Jim Rich**, University of Florida, 155 Research Road, Quincy FL 32351-9500, USA; Tel: 1-850-875-7130; FAX: 1-850-875-7148; e-mail: <Jimmyr@pineland.net>

SUSTAINING MEMBER COMMITTEE: Johan Desaeger (Chair), University of Florida, Gulf Coast Research and Education Center 14625 CR 672, Wimauma, Florida 33598, USA Tel: 1-813-633-4123 or 813-431-6246; e-mail: <jad @ufl.edu>. **Luis A. Payan (Co-Chair)**, Syngenta Crop Protection, PO Box 18300, Greensboro NC 27409, USA Tel: 336-632-6000; e-mail: <luis.payan@syngenta.com>. **Janete A. Brito** (see address under Executive Committee). **Donald W. Dickson**, University of Florida, Entomology and Nematology Department, Gainesville, FL 32611-0620, USA Tel: 352-392-1901 (135); e-mail: <dwd@ufl.edu>. **Jenny Escobar**, Junin 116 y Panama, Guayaquil Guayas 09-13293, Ecuador; e mail: <jenny.escobar@bayercropscience.com>. **Gustavo Fallas Meji**, Apartado 4595-1000, Edificio Rodfon C5 y Av.1, San Jose, Costa Rica. E-mail <gfallas@chiquita.com>. **Jimmy Rich**, (See address under Nominations Committee). **Lee Simmons**, (see address under ONTA Foundation committee). **Prem Warrior**, Valent BioScience Corporation, 6131 RFD, Oakwood Road, Long Grove, IL 60047, USA Tel: 1-847-968-4901; Fax: 1-847-968-4970; e-mail: <prem.warrior@valent.com>

WEB PAGE COMMITTEE: Terrence L. Kirkpatrick (Chair), (see address under Executive Committee). **Larry W. Duncan** (address under Foundation Committee and Honors and Awards Committee). **Erwin O. Aballay**, (address under Honors and Awards Committee). **Kimberly Rowe**, Arkansas Plant Pathology, University of Arkansas, Department of Plant Pathology, Hope, AR 71801 USA; Tel: 870-438-2044; e-mail: <krowe@uaex.edu>. **Leopoldo Hidalgo**, Centro Nacional de Sanidad Agropecuaria (CENSA), Apartado 10, San José de las Lajas, Habana, Cuba <lhidalgo@censa.edu.cu>. **César Ornat Longaron (Co-Chair)**, Dep. Enginiyria Agroalimentária i Biotecnologia, Universitat Politecnica de Catalunya, Avinguda del Canal Olímpic s/n, 08860 Castelldefels, Barcelona Spain. Tel: 34-935-521-072; FAX: 34-935-521-001; e-mail: <Cesar.Ornat@upc.edu>. **Jimmy Rich**, (See address under Nominations Committee). **Miguel Talavera Rubia**, (see address under *Nematropica* Editorial Committee).

REGIONAL REPRESENTATIVES: Erwin Aballay, (see address under Web Page Committee). **Janete Brito**, (see address under Nematropica Editorial Committee), **Ana M. Casassa**, Universidad del Zulia, Facultad de Agronomía, Instituto de Investigaciones Agronomicas, Ciudad Universitaria, Núcleo Agropecuario, Av. 16 (Guajira), Maracaibo, ZU 4005, Venezuela; e-mail: <casassae@cantv.ve>. **Alejandro Esquivel** (see address under Honors and Awards Committee). **Eleodoro Herrera Alvariño**, Calle 27 No. 376 Urbanizacion Córpac, San Isidro, Lima, Peru; e-mail eherrera@hotmail.com. **Francisco Franco-Navarro**, Phytopathology Program-Colegio de Postgraduados, Montecillo 56230, Mexico State, Mexico; e-mail: <ffranco@colpos.mx>. **Mayra G. Rodríguez** (address under Members at Large). **Betty Tello**, Junin 116 y Panama, Guayaquil Guayas 09-13293, Ecuador; e mail: <jenny.escobar@aventis.com>.

REPRESENTATIVES IN THE IFNS: Aurelio Ciancio, Istituto per la Protezione Sostenible delle Piante, C.N.R., Sezione Bari, via Amendola122-D, 70126 Bari, Italy; Tel: 39-80-5929-221; FAX: 39-80-5929-230; e-mail: <aurelio.ciancio@ipsp.cnr.it>. **Rosa H. Manzanilla-López** (address under Executive Committee).