



Word from the President



Dear Entomologists,

This special issue of the SEB Newsletter was prepared to publicize the main events of the XXVII Brazilian Congress and X Latin American Congress of Entomology held in Gramado, RS from

September 2 to 6, 2018. Just before the Congress, the Society held an important event on “Grand Challenges in Entomology in Latin America” in partnership with the American Entomological Society. The objective was to discuss the problems and possible solutions for agricultural pests, invasive species, and public health. At the opening of the Congress, I gave a brief presentation on

the main activities carried out by SEB’s Board of Directors during these first two years. The president of XXVII CBE, Jerson Guedes mentioned the importance of the Congress to the Society and spoke about the main innovations that were implemented such as the “Producer Arena”. A historic event occurred on September 4 with the creation of the Federation of Latin American Entomology (FELA), whose main objective is the integration of entomological societies. The third edition of the EntomoQuiz was again a success! At the SEB Meeting, Fortaleza was chosen to host CBE 2020 and Juazeiro/Petrolina, for Siconbiol 2021. In this edition, we also introduce the new ISEB editorial team. We wish success to the organizers of the upcoming events and the new team of editors. We congratulate all the entomologists who were awarded and honored at the Congress for their contributions to SEB and for their ex-

celled in their areas of expertise. To the winning students, our congratulations for your dedication and quality of the presented works.

We would like to express our sincere appreciation for the brilliant event to the President of XXVII CBE/X CLAE, Jerson Guedes, the Organizing Committee, the great team involved with the production (students, attendants, drivers, assemblers, and many other professionals), who had an excellent impact on their peers! We are also grateful to the Promotion Agencies and the sponsors that made this event possible.

The entire board of SEB is grateful for the trust you showed in choosing us for another two years to lead this important Brazil Society of Entomology.

Sincerely,
Eliane D. Quintela
President

Word from the President of the XXVII Brazilian Congress of Entomology and X Latin American Congress of Entomology

Dear Colleagues of the Entomological Society of Brazil,

This Congress was planned and organized by professors of the Universidade Federal de Santa Maria and many other institutions in Rio Grande do Sul, as well as students, attendants, drivers, installers, other professionals, and especially the support of SEB, who entrusted us with the Brazilian Congress of Entomology (CBE) and gave us the security and freedom to work.

In numbers, the CBE had more than 2000 participants, 8 symposiums with specific themes, 12 keynote speeches, and more than 60 round tables, with a total of 188 speakers and/or mediators. I think that the XXVII CBE and X CLAE had several important characteristics essential for its success, including:

- 1) quality and diversified programming, which came from the ability to listen to the suggestions and be firm in the plans and thematic foci of the Congress;
- 2) integration of scientific, technical, and applied themes in agriculture, health, and the environment, which motivated and attracted colleagues from Brazil, Latin America (where we are the standard), and the rest of the world, with whom we have to relate, cooperate, and

- internationalize actions;
 - 3) innovation and inclusion of indispensable forms of financing, such as the cooperative round tables and the resources from the public agencies, which are sufficient to maintain the Congress;
 - 4) indispensable financing from companies, whose return was the Producer and Consultant Arena. This space was an unquestionable success, and we should keep it and expand it;
 - 5) recognition of older entomologists, but also selection and recognition of the newest members of Brazilian entomology;
 - 6) Finally, choosing a suitable city and places that support and make the event comfortable, helped us to have a quality, light, and joyous social program, so CBE could also be a reunion among colleagues.
- I believe that we must learn from what our colleagues have done in previous congresses, innovate as much as possible and, after doing so, share the good experiences



we had with SEB and Brazilian entomology.

See you in Fortaleza in 2020!
Hugs to everyone.
Prof. Jerson Carús Guedes
President of the XXVII Brazilian Congress of Entomology and X Latin American Congress of Entomology



Participate in the next Brazilian Congress of Entomology in Fortaleza

We invite everyone to participate in the XXVIII Brazilian Congress of Entomology in 2020 in the city of Fortaleza, CE. Fortaleza is easily accessed with a wide hotel network, and the most modern Convention Center in Latin America, with a capacity for 30 thousand people. We are already working with great motivation to organize this incredible event. We look forward to seeing you in Fortaleza!

Nivia Dias,
President of XXVIII CBE



Part of the XXVIII CBE Organizing Committee

The event *Grand Challenges in Entomology in Latin America* was a success



Antônio R. Panizzi, Eliane D. Quintela, Frank G. Zalom, and Michael P. Parrella

With an attendance of around 50 invitees, the event about the Grand Challenges in Entomology in Latin America was held on September 2, 2018. Beginning at 8:30 AM, Antônio R. Panizzi (Organizer and International Delegate of SEB), Frank G. Zalom, Michael P. Parrella (Co-organizers - Entomology Society of America, ESA), and Eliane D. Quintela (Co-organizer and President of SEB) started the activities that lasted until 5:00 PM.



Participants of the Invasive Species Challenge, which discussed the selected questions on that topic.

After the plenary session and presentation of the themes, an interview session took place with the representatives of several Entomology Societies in Latin America. Pablo Dellapé (Argentina), Veronica Massa (Peru), Enrique Castiglioni (Uruguay), and Eliane Quintela (Brazil) commented on the main entomological problems in the respective countries and highlighted possible solutions to alleviate issues related to three themes: agricultural pests, invasive species, and public health. These three challenges were presented later by moderators Daniel R. Sosa-Gomes (Sustainable Agriculture), Marcelo Silva (Invasive Species), and Luciano Moreira (Public Health) who closed out the morning activities.



Participants of the Public Health challenge discussing the selected questions on that topic.



Participants of the Sustainable Agriculture challenge gathered together to discuss the selected questions about that topic.

During the afternoon, the participants were divided into three rooms, one for each challenge, and the discussion of the themes began. After discussion and elaboration of answers to previously selected questions, the participants reconvened in the plenary session, where the moderators of each challenge presented the main conclusions. The issues related to the respective challenges are being elaborated for later dissemination among SEB members and other stakeholders.

This was the first event on the theme of *Grand Challenges in Entomology* held outside the United States. The event is being implemented world-wide after the first edition was held in 2016, on the occasion of the International Congress of Entomology in Orlando, Florida. This debate is expected to continue in Vancouver, Canada, in November, at the joint annual meeting of the American and Canadian Entomology Societies, when SEB will be present, represented by President Eliane Quintela.

Creation of the Federation of Latin American Entomology

During the XXVII Brazilian and X Latin American Congress of Entomology, on September 4, 2018, a meeting was held between representatives of entomological societies in Latin America to create the Federation of Latin American Entomology (FELA). Dr. Antônio R. Panizzi (SEB International Delegate), Dr. Bruno Zachrisson (IDIAP-Panama, representative of the Central America Section of SEB), Dr. Maria Stella Zerbino (representative of the South America Section of SEB), Dr. Veronica Rubin and Benjamin King (representatives of the Entomological Society of Peru); and Willy Chiaravalle (Representative of the Entomological Society of Uruguay). At the meeting, the importance of creating this Federation to foster an environment for academic and scientific exchange

among entomologists was discussed, to facilitate the coordination of activities and the exchange among different associations and to help strengthening them. Dr. Maria Stella Zerbino was appointed as President and Benjamin King as Secretary of FELA. As a priority, the constitution of statutes was defined, as well as the contact with the other entomological associations of Latin America.



Photo: Benjamin King, Eliane D. Quintela, Willy Chiaravalle, Bruno Zachrisson, Veronica Rubin, Antônio R. Panizzi, and Maria Stella Zerbino



Lively contests at the third EntomoQuiz

Created with the intention to promote greater interaction among the Congress participants, the EntomoQuiz held its third event at the XXVII Brazilian Congress and X Latin American Congress of Entomology. The following teams participated: Universidade Federal de Goiás (UFG), Universidade Federal de Viçosa (UFV), Universidade Federal de Lavras (UFLA), Universidade Federal do Paraná (UFPR), Universidade Estadual Paulista (UNESP/FCAV), and Escola Superior de Agricultura “Luiz de Queiroz” (ESALQ/USP).

It was four days of exciting competitions, always with the crowd rooting them on in a relaxed atmosphere. The audience can participate in answering questions, with the right to distribute various awards, in addition to the traditional “OLA!” In the final round, ESALQ was crowned champion in an exciting match against UFLA. As a prize, each member of the winning team won a tablet and a small replica of the trophy. The

main trophy will be in the possession of the PPG in Entomology at ESALQ until the next competition, in which the Piracicaba team will have the opportunity to defend their title. Completing the podium, the UNESP/FCAV team placed third.

The Organizing Committee of EntomoQuiz congratulates the teams for the participation, dedication, and sportsmanship. We encourage Graduate Programs to form their teams to make the fourth edition even more lively. Suggestions and questions/answers can be sent to the email address: entomoquiz@gmail.com. The awards for this edition of EntomoQuiz were sponsored by: Corteva Agriscience, Technical Books Livraria Ltda., FEALQ, UNESP, and IMAmT.

See you in Fortaleza in 2020, big hug!

Alexandre J. Ferreira Diniz, Cláudio R. Franco, Daniell R. Rodrigues Fernandes, Rafael M. Pitta, and Tiago C. da Costa Lima. (Organizers)



Teams participating in the third EntomoQuiz, held in the city of Gramado, RS.



Champion team of the EntomoQuiz: USP/ESALQ - Piracicaba, SP: Prof. Fernando Cònsoli, Frederico Hickmann, Ana Paula Wengrat, Camila Haddad, Fernando Amaral, and Prof. Celso Omoto.



Organizing team of the EntomoQuiz 2018: Alexandre Diniz, Rafael Pitta, Daniell Fernandes, Tiago Costa Lima, and Cláudio Franco.

Awards and honors at the XXVII CBE

During the XXVII Brazilian Congress of Entomology, the awards provided in the SEB statute were granted, as well as honors to contemporary entomologists who work in Rio Grande do Sul, with emphasis on teaching, research, and/or extension. The winners were:

- Ângelo Moreira da Costa Lima Award José Vargas de Oliveira (ex-UFRPE)

has an undergraduate in Agronomy from the Federal University of Ceará, and Master's degree and PhD in Entomology from ESALQ/USP. He was a professor in the School of Agriculture of Mossoró and worked at the Agronomic Institute of Pernambuco and the Federal Rural University of Pernambuco. With over 40 years dedicated to teaching and research, with enthusiasm and dedication, he published about 160 scientific papers in national and international journals, as well as participated in the production of several books and book chapters.



José Vargas de Oliveira

Edilson Bassoli de Oliveira Award Vanda Helena Paes Bueno (ex-UFLA)

has an undergraduate in Biological Sciences from UNESP - Rio Claro, and she holds a master's and PhD in Entomology from ESALQ/USP. She did a postdoctoral study at the University of



Vanda Helena Paes Bueno

California, Berkeley, USA and was a visiting professor at the University of Perugia (Italy). Vanda is a contributing professor at the University of Wageningen (The Netherlands). She made her career as a professor and researcher at the Universidade Federal de Lavras, advised than 30 masters and 13 doctoral students. Dedicating herself to biological control, she published about 145 scientific articles, 2 books, and 19 book chapters.

- Honorary Member Award Fernando Mesquita Lara (ex-FCAV/UNESP)

holds an undergraduate degree in Agronomy Engineering, a master's degree in Agronomy from ESALQ/USP, and a PhD in Sciences from the Universidade Estadual Paulista. Fernando is an emeritus professor at the Department of Entomology and Nematology of FCAV - UNESP, Jaboticabal, SP. A founding member of SEB, Fernando was Editor of the SEB Annals (current Neotropical Entomology), Editor of the SEB Newsletter, President of the Council, and President, from 1978 to 1984. His work emphasized plant resistance to insects. His publications include the books “Princípios de Entomologia” and “Princípios de Resistência de Plantas a Insetos”, in addition to more than 150 articles in journals.



Fernando Mesquita Lara

- Honorary Member Award Miguel Borges (Embrapa Genetic Resources and Biotechnology)

graduated in Biology from the Universidade Federal de Viçosa. She did a master's degree in Biological Research Methods and a PhD in Insect Chemical Ecology at the University of Southampton (England), devoted

to the study of chemical ecology and pheromones. He is a researcher at Embrapa where he has excelled in research on identification and use of pheromones for pest management, tritrophic interactions mediated by plant volatiles, application of advanced analytical chemistry and molecular biology techniques applied to chemical ecology, and communication of insects with multimodal signs. He has produced more than 100 scientific papers, 1 book and 10 chapters, and 3 technology patents.



Miguel Borges

- Meritorious Member Award Fernando Luis Cònsoli (ESALQ/USP)

holds a bachelor's degree in Biological Sciences from Unicamp, a master's and PhD in Entomology from ESALQ/USP, and he did a postdoctoral study at the Texas A&M University. He is a professor in the Department of Entomology and Acarology at ESALQ/USP. Fernando was president of IOBC - Regional Neotropical; and Editor-in-Chief of Neotropical Entomology, and the Book Series: Entomology in Focus. He researches the physiological, biochemical, and molecular host-parasitoid and insect-symbiont interactions, aiming to develop strategies and/or identify biomolecules for application in sustainable pest management. He has published 88 articles in national and international journals and a dozen book chapters. He was one of the



Fernando Luis Cònsoli

editors of the book *Egg Parasitoids in Agroecosystems with Emphasis on Trichogramma*.

- Meritorious Member Award

Neliton Marques da Silva (FCA/UFAM)

has a degree in Agricultural Engineering from the Universidade Federal do Amazonas and a PhD in Agricultural Entomology from ESALQ/USP. As a full professor at the Faculty of Agrarian Sciences of Universidade Federal do Amazonas, he advises undergraduates, master's and doctoral students in Agricultural Entomology and Environmental Management.

Neliton has published several articles and book chapters and the books "Técnicas de Procedimentos Entomológicos"; "Citros: Pragas & Doenças", and "Pragas agrícolas e florestais na Amazônia". In addition to teaching and research, he has held and holds various management positions in institutes, government departments, and environmental councils in Amazonas. At SEB, he was a counselor, president of the XIX Brazilian Congress of Entomology, and is part of the Fiscal Council.



Neliton Marques da Silva

- Flávio Moscardi Award

José Bruno Malaquias (Doctoral student at ESALQ/USP)

graduated in Agronomy from the Universidade Federal da Paraíba. He was a scientific initiation fellow at Embrapa Cotton advised by professor Celso Omoto, and he completed his master's degree in Entomology at ESALQ/USP. Currently, he is studying under Professors Wesley Godoy and Michael Caprio, for his Ph.D. with a sandwich period at Mississippi State University. José Bruno works with computational models of evolutionary ecology applied to the management of pest resistance to genetically modified plants. He has published 44 articles, co-authored a book, and five chapters.



José Bruno Malaquias

- Honored

Alci Enimar Loeck (UFPEl)

studied Agronomy at UFPEl, and did a master's and PhD in Entomology by ESALQ/USP. He was professor of the Faculty of Agronomy "Eliseu Maciel" of the Universidade Federal de Pelotas, until retirement in 2017. He taught the disciplines of Agricultural Entomology, Taxonomy of Agriculturally Important Insects, Pests of the Stored Products, and Application Technology for Phytosanitary Products. The main focus of his research was the study of leaf-cutting ants. He produced about 115 scientific articles, 4 Books, and 11 book chapters. He advised 38 dissertations and 15 theses.



Alci Enimar Loeck

Dirceu Neri Gassen (in memory of) (Ex-Embrapa Wheat)

was an Agronomist at the Universidade de Passo Fundo and did a master's in Agronomy at the Universidade Federal do Rio Grande do Sul. He studied soil pests in New Zealand. As a researcher, he worked at EPAGRI/SC and Embrapa Trigo/RS, especially with pest management in no-tillage systems. Dirceu participated in the Biological Control Program of Wheat Aphids. He was Technical Manager of the Cooperativa de Agricultores de Plantio Direto Ltda. He was honored with the scientific name of the parasitoid *Centistes gasseni*, which is a natural enemy of *Diabrotica speciosa*. He was distinguished for his role in dissemination and transfer of knowledge, with more than 200 publications, and as a national and international speaker.



Dirceu Neri Gassen

Ervandil Corrêa Costa (UFMS)

received his undergraduate in Agricultural Engineering from the Universidade Federal de Santa Maria; master's in Agronomy from the Universidade Federal do Rio Grande do Sul; and PhD in Forest Sciences from the Universidade Federal do Paraná. He also has a bachelor's, master's, and doctorate in Law. At UFMS, he was a full

professor in the courses of Agronomy and Forest Engineering. He is currently a lecturer in the Graduate Program in Forestry Engineering, in which he teaches the disciplines of Bioecology and Integrated Management of Forest and Insect Pests, and Phytosanitary Certification of Forestry. He has published about 220 scientific articles and advised 32 dissertations and 12 theses.



Ervandil Corrêa Costa

Miriam Becker (ex-UFRGS)

has a biology degree from the Universidade Federal do Rio Grande do Sul and a PhD in Zoology from the Imperial College of Science and Technology (England). She was a professor at UFRGS, in the Department of Zoology, in the course of Biological Sciences and Postgraduate Courses in Ecology and Animal Biology. Miriam also participated in the Course on Ecology and Natural Resources of UFSCar, in São Paulo. Up until her retirement in 1998, she produced some 85 publications, including scientific articles and theses, in the areas of taxonomy, biology, and insect ecology.



Miriam Becker

Rogério Fernando Pires da Silva (ex-UFRGS)

is an agronomist with a master's from the Universidade Federal do Rio Grande do Sul and has a PhD in Entomology from ESALQ/USP. He was a professor at the Faculty of Agronomy of UFRGS until his retirement in 2004. Rogério taught the disciplines of Agricultural Entomology and Habitat Entomology, in the undergraduate in Agronomy, and Methods for Pest Control, Cultivated Plant Pests and Fruit Plant Insects, in the postgraduate program. His scientific production of articles, dissertations, and theses advised, and other works, exceeds a hundred.



Rogério Fernando Pires da Silva

Photo Contest

The winners of the XXVII CEB and X CLAE photo competition were:

- Manual Category:

Gustavo Massaharo Shiomi

Symptoms of NPV in false medideira (*Chrysodeixis includens*) in soybean, Rondonópolis, MT.



Manual Category

- Microscopy Category:

Adriane Da Fonseca Duarte

Cosmolaelaps brevistilis and its complexity of details, Capão do Leão, RS.



Microscopy Category



Student Award Winners

The tradition of the Brazilian Congress of Entomology in the student competition is to award young entomologists who produce works of excellence. There were 39 presentations in the undergraduate student category

and 40 presentations in the postgraduate student category. From each category, 5 students were selected, who were classified for a second stage, and awarded the first, second, and third place. The winners will receive air tickets for

the next CBE or Siconbiol (1st place); registration for the next CBE or Siconbiol (2nd place); and SEB annuity (3rd place). We sincerely thank the 25 judges who helped in the selection process.

Undergraduate Students

Award	Presenter	Other authors	Work
1 st	Juliana G. Rodrigues	Antônio R.B. do Nascimento; Celso Omoto	Susceptibility to benzoylphenylureas insecticides un different host strains of <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae) (in English)
2 nd	Taynara Possebom	Antonio R. Panizzi; Tiago Lucini	Biology of nymphs and adults and preference of <i>Dichelops furcatus</i> (F) for reproductive structures of cereals and soybean (in Portuguese)
3 rd	Marcellus H.M. Lera	Diego V. Anjos; Kleber Del-Claro	Cerrado jumping beans: the behavior of endophytic larvae of <i>Anthonomus</i> sp. (Coleoptera: Curculionidae) beetles (in Portuguese)
4 th	Gabriel Paiola	Alfredo R. Abot; Carlos A.H. Flechtmann	Nationwide survey of Brazilian bark and ambrosia beetles (Curculionidae: Scolytinae, Platypodinae) – Aquidauana, Brazil (in English)
5 th	Carlos A. Pérez	M.L. Ramíres; R.A. Thiebeaud; V.I. Sosa	Population fluctuation of pentatomidae stickbugs in the soybean crop of the Obligado district (in Spanish)

Postgraduate Students

Award	Presenter	Other authors	Work
1 st	Igor H.S. Silva	Isabel Gómez; Jorge Sanchez; Diana L. M. Castro; Fernando H. Valicente; Mario Soberón; Ricardo A. Polanczyk; Alejandra Bravo	Identification of midgut membrane proteins from different instars of <i>Helicoverpa armigera</i> that bind to Cry1Ac toxin (in English)
2 nd	Wilson R. Valbon	Nádylla R. X. Oliveira; Khalid Haddi; Gislaine A. Carvalho; Gustavo F. Martins; Eugênio E. Oliveira	Yellow fever mosquito shows different abilities to survive under environmental stresses (in English)
3 rd	Ewerton C. Lira	Anderson Bolzan; Antônio R.B. Nascimento; Rubens H. Kanno; Ingrid S. Kaiser; Fernando S.A. Amaral; Celso Omoto	Genetic bases associated with the resistance of <i>Spodoptera frugiperda</i> (J.E. Smith) (Lepidoptera: Noctuidae) to spinetoram (in Portuguese)
4 th	Fernanda Canassa	Sidcleide B. Sousa; Nicolai V. Meyling; Ingeborg Klingen; Italo Delalibera Jr.	Entomopathogenic fungi used as inoculants on strawberry affected plant growth and <i>Tetranychus urticae</i> populations (in English)
5 th	Paulo A. Santana Jr.	Lalit Kumar; R.S. Silva; Marcelo C. Picanço	Distribution of <i>Tuta absoluta</i> and its natural enemies through global climate change. (in Portuguese)

New ISEB editors

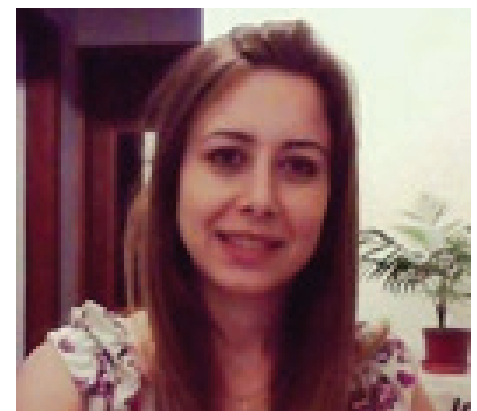
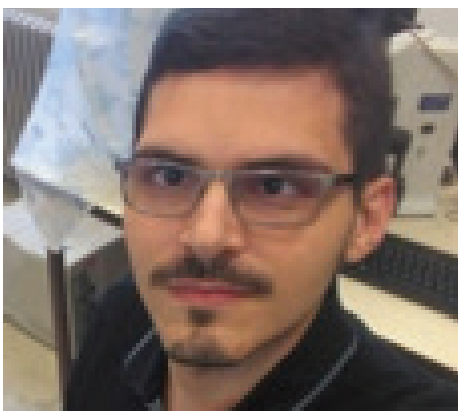
Starting with this edition, the Entomological Society of Brazil Newsletter has a new editorial team. For us, it is a great pleasure to publish the official publication of the Entomological Society of Brazil, which has informed its members about various aspects related to Entomology for more than 40 years. With this new challenge and passion for Entomology, we thank you for the opportunity to contribute to this story and we

hope to continue the work by providing information, news, highlights, and curiosities in the area. At the same time, we salute the former editors, Décio Gazzoni and Alexandre de Sene Pinto, for their brilliant work over the past two years.

If you have any news for ISEB please send an email to editors: informativoseb@gmail.com

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Online and Printed Journal R\$ 200,00	Online and Printed Journal R\$ 100,00	Online and Printed Journal US\$ 120,00

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Entomological Society of Brazil

INFORMATIVE



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