



Word from the President



Dear colleagues,

I hope you are all healthy in a time of recollection and forced courage. The restriction of personal contacts due to Covid-19 has provided new ways to spread our science. Activities in the area of Entomology are increasing with numerous “online” technical lectures have been presented and social media are full of

groups dedicated to entomology. In this context, this newsletter presents the latest dissemination channel on Integrated Pest Management (IPM), the “SmartIPM”. In the Activities of the Board, we focus on information about the project “Women in Entomology” and the journals Neotropical Entomology and Entomological Communications. I am delighted with the interesting text about locust hunters featured in the Entomology in Focus section. Useful information can be found in Entomology in the Press on dermatitis

caused by beetles. Our Nomenclator Entomologicus addresses the genus change of the important group of stink bugs associated with different agricultural crops, the *Dichelops*. The other sections include the beautiful entomart, photos, and comic strip sent by our entomologists. The Society thanks everyone for their important contributions.

Sincerely,
Eliane D. Quintela

Activities of the Board

“Women in Entomology” Project

Two online meetings were held to organize the “Women in Entomology” project. The objective is to publish an article on the participation of women in Brazilian Entomology. The meeting was attended by Eliane Quintela (president of SEB), Carmen Pires (secretary general of SEB), Flávia Barbosa (treasurer SEB), Eliana Fontes (editor-in-chief of Neotropical Entomology), Nivia Dias (president of XXVIII CBE), Aline Guidolin (SEB Jovem coordinator), and Renata Coutinho (SEB executive secretary).



Entomological Communications

Dear readers,

Despite the adverse situation due to the pandemic, we will achieve our proposed targets for 2020. Currently, EC is indexed in four databases: Google Scholar, DOAJ, BASE, and recently the PKP Index. We are working to achieve the goal of publishing at least 40 articles in 2020. Currently 22 articles are being processed, in addition to the 26 articles published this year (totaling 42 articles published to date), which have received more than 6,500 downloads. We have also reached the mark of 10 citations and the H2 index in the base of Google Scholar (two articles received at least two citations each). We would like to take this opportunity to welcome the new editors: Bolívar Rafael Garcete Barrett (Museo Nacional de Historia Natural del Paraguay, Paraguay), Claudio Salas (Instituto de Investigaciones Agropecuarias, Chile), Daniel Aquino (Universidad Nacional de La Plata, Argentina), Eduardo Amat (Tecnológico

de Antioquia - Institución Universitaria, Colombia), and Juan Pablo Burla (Universidad de la República, Uruguay). In addition, to increasingly improve the quality of the journal, we have partnered with the Brazilian Association of Scientific Editors - ABEC to continuously train ourselves. We thank everyone who has participated in the evolutionary process of our journal (authors, reviewers, and editors)! We hope that Entomological Communications will be your next choice when it comes to divulging your data in a short, quick, free, and quality way. Access our website and follow our social networks on Instagram, Facebook, and Twitter (you will find a link to social networks in the “Follow” tab at the beginning of our page - <https://www.entomologicalcommunications.org/>).

Daniell Rodrigo Rodrigues Fernandes & Rafael Major Pitta
Chief Editors



Neotropical Entomology

Dear fellow insect lovers,

We hope you are all well and safe.

We would like to give you some recent information about Neotropical Entomology. For those who have not seen it yet, in August we published a special edition entitled Insect Pollinators, Major Threats and Mitigation Measures. We are very proud of this edition and satisfied with the quality of the manuscripts we received from different research groups from across the Neotropical community.

The edition was published in different media, increasing the access and visibility of our beloved journal. Our warmest thanks to the Editors invited to produce this special edition, Drs. Carmen Pires and Márcia Maués, from Embrapa Genetic Resources and Biote-

chnology and from Embrapa Amazônia Oriental, respectively. If you have an interesting idea for a special edition of Neotropical Entomology, please share it with us. We would also like to share with you the most cited articles published in NENT in 2019 and 2020:

- FORUM

Giorgini, M., Guerrieri, E., Cascone, P. et al. Current Strategies and Future Outlook for Managing the Neotropical Tomato Pest *Tuta absoluta* (Meyrick) in the Mediterranean Basin. *Neotrop Entomol* 48, 1–17 (2019). <https://doi.org/10.1007/s13744-018-0636-1>

- ECOLOGY, BEHAVIOR AND BIONOMY - RESEARCH ARTICLE

Oliveira-Junior, J.M.B., Juen, L. The Zygoptera/Anisoptera Ratio (Insecta: Odonata): a New Tool for Habitat Alterations Assessment in Amazonian Streams. *Neotrop Entomol* 48, 552–560 (2019). <https://doi.org/10.1007/s13744-019-00672-x>

- FORUM

Peñalver-Cruz, A., Alvarez-Baca, J.K., Alfaro-Tapia, A. et al. Manipulation of Agricultural Habitats to Improve Conservation Biological Control in South America. *Neotrop Entomol* 48, 875–898 (2019). <https://doi.org/10.1007/s13744-019-00725-1>

- ECOLOGY, BEHAVIOR AND BIONOMY - RESEARCH ARTICLE

Bianchi, F.M., Marsaro Júnior, A.L., Grazia, J. et al. Diversity of Stink Bugs (Pentatomidae) Associated with Canola: Looking for Potential Pests. *Neotrop Entomol* 48, 219–224 (2019). <https://doi.org/10.1007/s13744-018-0642-3>

Thank you for your attention and support, and please make sure you subscribe to Journal Alerts.

Eliana Fontes and Raul Laumman
Chief Editors



Focus Entomology

Locust Hunters

With the advance of the locust swarm of the species *Schistocerca gregaria* through Argentina in 2020 and the threaten entry of these insects into Brazil, Brazilian Entomology professionals turned their attention to this subject for several months. A review of the topic revealed that these locusts had formed swarms at various times in the past, causing agricultural losses in southern Brazil. The report below is about a “hunt” for *S. cancellata* locusts in the first half of the 20th century.

It all happened in September 1937, when a swarm of locusts appeared in the locality of Linha Jansen, in the community of Capela Nossa Senhora das Dores, municipality of Farroupilha, in the state of Rio Grande do Sul. According to reports by my great-grandfather, Abel Balbinot, now told by my grandfather Santo Balbinotte, the number of locusts was so massive that it hid the sun. The locusts landed on the hard ground of the road and from there they invaded the wheat fields, which in September were in full of ripening grains.

My grandfather, who was 11 years old at the time, remembers that “to spawn, they stayed for three to four days with their backs stuck on the ground, then they disappeared.” Forty days later the babies began to hatch, jumping and destroying everything that lay in their path. In the face of such a misfortune, residents and authorities gathered to kill the locusts. The weapons were branches of shrubs or coconut trees.

In the beginning, they scattered the dry wheat straw and set fire, burning everything, including the locusts. Another method adopted in an at-



tempt to contain the pests was to dig a deep ditch in the middle of the field with a plow, and then a group on each side would scare the locusts until they jumped into the ditch and were then covered with soil.

As the region was steep and full of stones, it was difficult to make these ditches, so they started to spread a large cloth, which was normally used to dry grains, and all the locusts were driven to the cloth, the sides were raised, and some men stomped on it, crushing the bugs until they were all dead.

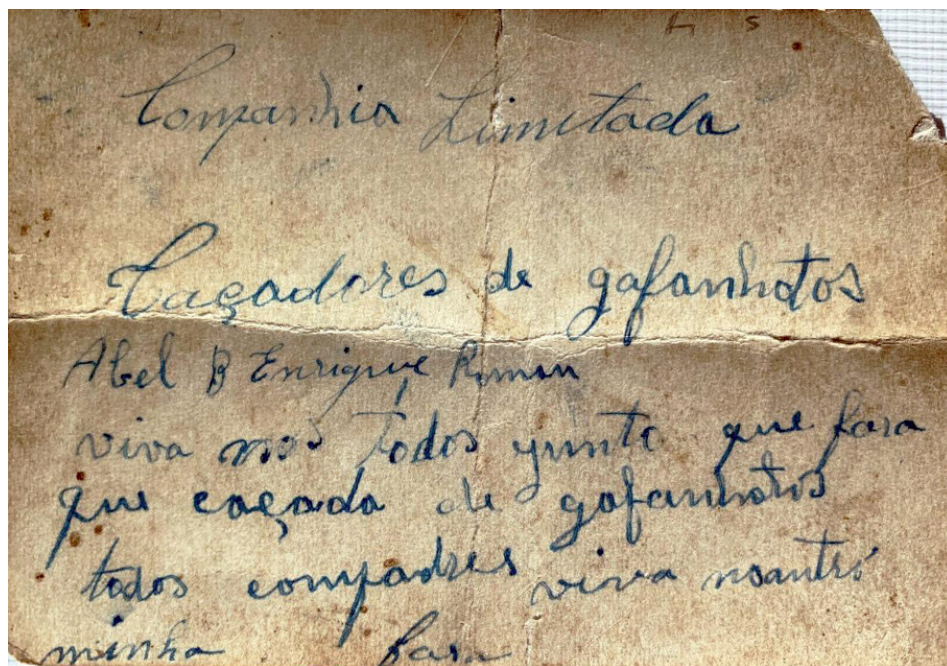
Through a lot of struggle and working together, the plague was fought. Wheat continued to be cultivated and the hills turned golden again. Des-

pite the situation, the memory of the entertainment remained!

On the back of the photo, my great-grandfather wrote (in a mixture of Portuguese and Italian):

Limited company
 Locust Hunters
 Abel B Enrique Roman
 ALIVE ALL OF US WILL BE
 THE LOCUST HUNTERS
 ALL COMPADRES ALIVE WE WILL BE

Juliana Balbinotte
 Master in Entomology (ESAL/USP)



Updated List of Absent Quarantine Pests

On August 20, the Ministry of Agriculture, Livestock, and Food Supply published Normative Instruction 85/2020 in the Federal Official Gazette, which added 12 species of insects to the list of Absent Quarantine Pests (PQA) published in Normative Instruction 39/2018. The update became effective as of September 1, 2020.

The listed species are:

- | | |
|---------------------------------|--------------------------------|
| COLEOPTERA | HYMENOPTERA |
| <i>Aromia bungii</i> | <i>Ophelimus eucalypti</i> |
| <i>Chrysobothris mali</i> | <i>Selitrichodes globulus</i> |
| <i>Paropsisterna bimaculata</i> | |
| <i>Paropsisterna m-fuscum</i> | LEPIDOPTERA |
| <i>Trachymela sloanei</i> | <i>Dendrolimus spectabilis</i> |
| <i>Trachymela tincticollis</i> | <i>Dendrolimus superans</i> |
| | <i>Dioryctria zimmermani</i> |
| HEMIPTERA | |
| <i>Eucalyptolyma maideni</i> | |



Entomology on the Press

The Rove beetle and human health problems

Paederus dermatitis is usually from a minor accident, which contributes to the low record of this health problem in Brazil and worldwide.

The culprit for the accident is a beetle of the genus *Paederus* (Coleoptera: Staphylinidae). This genus has about 600 species in the world, with only 4% of them responsible for dermatitis. In South America, 48 species are registered, and the main species involved in human accidents in Brazil are: *Paederus brasiliensis*, *Paederus amazonicus*, *Paederus columbinus*, *Paederus fuscipes*, and *Paederus goeldi*. Accidents occur mainly in the warmer seasons in the northern, northeastern, and central-western regions.

The beetle is known in English as “rove beetles” or Portuguese as bicho-de-fogo, pito, potó e podó, péla-égua, or fogo-selvagem depending on the region. It is about 7 to 10 mm, usually with a black head and a red chest. Adult beetles are attracted to white lights and thus come into contact with humans. Open windows with lights on can be problems, as the accident occurs when crushing the insect's body, since it does not bite or sting.

When crushed, the insect releases pederin, which is a toxin produced by *Pseudomonas* bacteria that lives symbiotically in the insect. Up to second degree burns may occur depending on contact.

According to dermatologist Yáscara Pinheiro, burns occur on exposed parts of the body or are discovered during sleep. According to the doctor, the initial procedures are to wash the wound with soap and water and then use a compression with cold water on the area. If left untreated, the burn can progress to secondary infection and generate scarring. In such cases, a doctor should be consulted to prescribe medication.

Severe cases in addition to the blisters may have symptoms such as fever, arthralgia, vomiting, and neuralgia. Do not use homemade recipes for the burn, as it can make the situation worse.

According to biologist Jefson Morais, in Northeastern Brazil near the end of the rainy season when heat season is beginning, the greatest incidence of the insect occurs. Changing the white lamps to yellow at this time can help to attract less of the insects.

Sources:

G1 Piauí: available at: <https://g1.globo.com/pi/piaui/noticia/2020/06/23/especialistas-revelam-mitos-e-verdades-sobre-o-poto-inseto-que-cause-queimaduras-na-pele.ghtml>. Accessed on 04/10/2020

Daraz et al. 2020. PAEDERUS DERMATITIS Available at: https://www.researchgate.net/profile/Zabor-Daraz/publication/341161478_PAEDERUS_DERMATITIS/links/5eb189da92851cb267745c07/PAEDERUS-DERMATITIS.pdf. Accessed on 04/10/2020

Nomenclator entomologicus

107. The genus *Dichelops Spinola* includes three subgenera (*Dichelops*, *Diceraeus Dallas*, and *Prodichelops Grazia*). The subgenus *Diceraeus* contains the species commonly known as percevejos barriga-verde (green-bellied stink bugs). *Dichelops (Diceraeus) furcatus* and *D. (Diceraeus) melacanthus* are considered emerging pests of various cultures in Brazil and other countries in South America. A recent phylogenetic study about monophyly of *Dichelops* based on mor-

phological characters indicated that the genus was paraphyletic. The characteristics proposed to identify the subgenera were shared with other taxa. Thus, *Diceraeus* was elevated to genus and, as a consequence, the nomenclature of the species in question became: *Diceraeus furcatus* (Fabricius, 1874) and *Diceraeus melacanthus Dallas*, 1851.

References:

1) Grazia J (1978) Revisão do gênero *Dichelops* Spinola, 1837 (Heteroptera, Pentatomidae, Pentatomini). **Iheringia, Série Zoologia** 53: 3-119.

2) Barão KR, Ferrari A, Grazia J (2020) Phylogenetic analysis of the *Euschistus* group (Hemiptera: Pentatomidae) suggests polyphyly of *Dichelops* Spinola, 1837 with the erection of *Diceraeus Dallas*, 1851, stat. rev. **Austral Entomology** (early view).

Kim R. Barão and Jocelia Grazia

Entomology Events

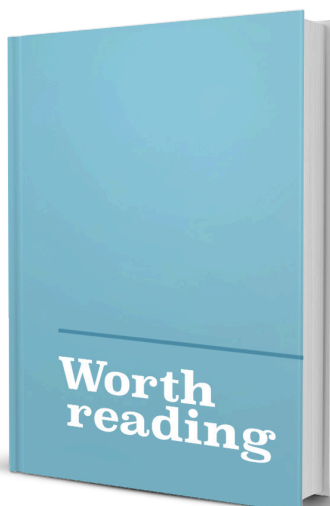
- 56th Annual Congress of the Brazilian Society of Tropical Medicine (MEDTROP) – June 6 to 9, 2021, Belém, PA, Brazil
- Second International Congress of Biological Control

(ICB2) – April 26 to 30, 2021, Davos, Switzerland

- IX Symposium of the European Association of Acarologists – July 12 to 16, 2021, Bari, Italy
- XXVI International Congress of Entomology– July 18 to 23, 2021, Helsinki, Finland
- Symposium on Insect-Plant Interactions (SIP) – July

25 to 29, 2021, Leiden, Holland.

- XXVIII Brazilian Congress of Entomology – August 30 to September 2, 2021, Fortaleza, CE, Brazil
- XVII Biological Control Symposium (Siconbiol)/II Latin-American Symposium on Biological Control – July 31 to August 4, 2022, Juazeiro, BA & Petrolina, PE, Brazil



Samways MJ (2020) Solutions for humanity on how to conserve insects. **Biological Conservation** 242: 108427

Weitzel T, Makepeace BL, Elliott I, Chairiri K, Richards AL, Newton PN (2020) Marginalized mites: Neglected vectors of neglected diseases. **PLOS Neglected Tropical Diseases** 14(7): e0008297. <https://doi.org/10.1371/journal.pntd.0008297>

Rocklöv J, Dubrow R (2020) Climate change: an enduring challenge for vector-borne disease prevention and control. **Nature Immunology** 21: 479–483. <https://doi.org/10.1038/s41590-020-0648-y>

Queiroz ACM, Mendes CR, da Costa DB (2020). Herbivores just need a calm place to feed: Ants cannot help them. **Entomological Communications** 2: ec02019. <https://doi.org/10.37486/2675-1305.ec02019>

Zeppelini, D.; Dal Molin, A.; Lamas, C.J.E.; Sarmiento, C.; Rheims, C.A.; Fernandes, D.R.R.; Lima, E.F.B.; Silva, E.N.; Carvalho-Filho, F.; Kováč, L.; Montoya-Lerma, J.; Moldovan, O.T.; Souza-Dias, P.G.B.; Demite, P.R.; Feitosa, R.M.; Boyer, S.L.; Weiner, W.M.; Rodrigues, W.C. The dilemma of self-citation in taxonomy. **Nat Ecol Evol** (2020). <https://doi.org/10.1038/s41559-020-01359-y>



Announce Your Page

Agronomist Fernando Henrique Lost Filho's passion for photographing insects was what sparked the idea of creating the SmartMIP project. Along with this, the desire to disseminate quality content on Integrated Pest Management (IPM) led Professor Pedro Takao Yamamoto and Ana Clara Ribeiro de Paiva to embark on this pilot project. The three are part of the USP/ESALQ Integrated Pest Management Laboratory, for which Professor Pedro is responsible. Ana Clara is a postdoctoral fellow in the laboratory and a professor at Faculdade Anhanguera, and Fernando is a doctoral student.

SmartMIP produces content for all audiences, through videos posted on our YouTube channel, texts on our blog and short information on our Instagram. For that, we have the support of professionals linked to different areas of entomology. On our channel, for example, we have the series "Jovens Talentos do MIP" (talented youth in IMP), dedicated to publicizing young professionals who work in areas related to IPM, from undergraduate students to re-

cently graduated doctors.

Contrary to what many people think, our target audience is not only entomologists, but anyone who is passionate about science (like us) and wants to know a little more about insects and IPM. In our blog, we show museums where the main attraction is insects, we talk about pests and their management, we present natural enemies, as well as important concepts for a better understanding of IPM.

On Instagram, we speak in a more direct and simple way than what appears on the Blog and YouTube. In addition, we recently started the "Novidades Taxonômicas" (Taxonomic News) series, where we present the changes in family, genus, or order of the main pests. There, we also show a little of our day-to-day activities in the laboratory, present curiosities from the entomological world and, most importantly, talk to our followers about their main questions.

Our commitment, in addition to offering quality content about IPM, is to provide our followers with authentic information, produced by us or our



SmartMIP

trusted partners.

Are you interested? You can find us on www.smartmip.com.br, on Instagram @smart.mip, on our YouTube channel SmartMIP, and on LinkedIN SmartMIP. With so many options, you won't miss any of our content from now on, will you?

Any question, suggestion, or interest in a partnership, please contact: smartmipbrasil@gmail.com

EntomoArt!

Corydalus batesii (McLachlan, 1867)

Artist: Giulianne Simizu Calizotti

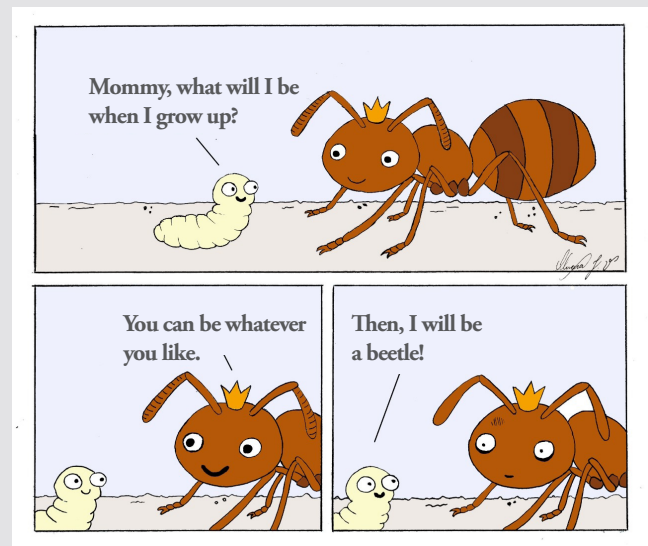
Biologist – Collaborator at the Universidade Estadual de Londrina



Comic Strip

Author:

João Vitor de Oliveira
Masters – Postgraduate program in Biological sciences – UEL



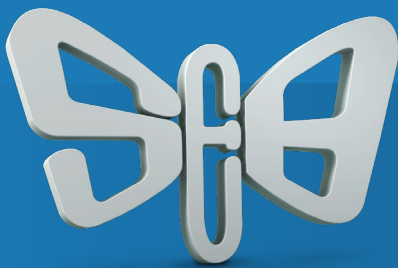
Your Picture



Hemiptera - Coreidae
Photographer: José Milton Jacob Mariano
Location: São José do Rio Claro

Hemiptera - *Fulgora laternaria*
Photographer: Lucas Mastellini Theodoro
Undergraduate in Biological Sciences – UEL





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Entomological Society of Brazil

NEWSLETTER



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