

## **A09 - DARWIN WASPS (HYMENOPTERA: ICHNEUMONIDAE) ASSOCIATED WITH THE OLIVE CATERPILLAR *PALPITA FORFICIFERA* (LEPIDOPTERA: CRAMBIDAE) IN SOUTH OF BRAZIL**

Rodolfo V. Castilhos, Dori E. Nava, Daniell R. R. Fernandes, Eduardo C. Brugnara, Tiago Scheunemann

*Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina (Epagri) - Centro de Pesquisa para Agricultura Familiar (Cepaf), Chapecó, Brazil*

*Empresa Brasileira de Pesquisa Agropecuária - Embrapa Clima Temperado, Pelotas, Brazil*  
*Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Brazil.*

E-mail: [rodolfocastilhos@epagri.sc.gov.br](mailto:rodolfocastilhos@epagri.sc.gov.br)

The olive caterpillar *Palpita forficifera* (Lepidoptera: Crambidae) is the main pest of olive orchards in Brazil and Uruguay. The damage of this pest is characterized by young leaves and branches consumption by larvae, which reduces leaf area and limits the growth of branches responsible by flowering in the next season. Most of growers usually prevent high infestations of *P. forficifera* with insecticide sprays (Castilhos; Brugnara, 2019). However, some Hymenopteran wasps can exert parasitism on the olive caterpillar, and must not be neglected since they can contribute to integrated pest management in olive orchards (Scheunemann, 2022). Here we report the parasitism of Darwin wasps species (Hymenoptera: Ichneumonidae) on *P. forficifera* larvae collected in olive orchards from the municipality of Chapecó, Santa Catarina and Pelotas, Rio Grande do Sul, in the South Region of Brazil. Infested shoots were sampled and taken to laboratory for inspection and collection of larvae. Collected larvae were individualized in glass tubes and feed with olive leaves in controlled conditions ( $25 \pm 2^{\circ}\text{C}$  temperature,  $60 \pm 10\%$  relative humidity and 14 hours photophase). The emerged parasitoids were kept in glass vials containing alcohol 70% and were further sent to a specialist taxonomist for identification. Insects were identified based on morphological characters on mesosoma, head, antennomers and wings areolate, using the taxonomic key of Gauld (2000). Three Darwin wasps species were identified parasitizing *P. forficifera* larvae. *Eiphosoma* sp. nov. and *Temelucha* sp. nov. are new species to the science and were found in Chapecó, SC, while *Temelucha hilux* Gauld, 2000 was found in Pelotas, RS. These species are recorded for the first time in South Brazil, and this is the first association of *Temelucha* species with *P. forficifera* larvae. These findings are important to prospect natural biological control of the olive caterpillar in olive orchards.

### **References:**

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