



FIRST RECORD OF *ANISOPTEROMALUS CALANDRAE* (HOWARD, 1881) (HYMENOPTERA: CHALCIDOIDEA: PTEROMALIDAE) FROM PARAGUAY

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Abstract.- The parasitoid species *Anisopteromalus calandrae* (Howard, 1881) (Hymenoptera: Chalcidoidea: Pteromalidae) is recorded for the first time for Paraguay. It was detected on *Zea mays* grains damaged by small beetles: *Sitophilus zeamais* and *Orizaephilus surinamensis* (Coleoptera: Curculionidae and Silvanidae).

Key words: Insecta, Coleoptera, Hymenoptera, parasitoid, biological control, first record, Paraguay.

Resumen.- La especie parasitoidea *Anisopteromalus calandrae* (Howard, 1881) (Hymenoptera: Chalcidoidea: Pteromalidae) se reporta por primera vez para el Paraguay. Se detectó en granos de *Zea mays* dañados por pequeños escarabajos: *Sitophilus zeamais* y *Orizaephilus surinamensis* (Coleoptera: Curculionidae y Silvanidae).

Palabras clave: Insecta, Coleoptera, Hymenoptera, parasitoide, control biológico, primer reporte, Paraguay.

In Paraguay, the Corn grains are damaged by several species of weevils (Coleoptera: Silvanidae, Tenebrionidae, Curculionidae, Bostrichidae and Laemophloeidae) among which are cited: *Catharthus quadricollis* (Guérin) [Silvanidae], *Oryzaephilus surinamensis* (Linnaeus) [Silvanidae], *Tribolium* spp. [Tenebrionidae], *Sitophilus zeamais* Motschulsky [Curculionidae], *Rhyzopertha dominica* (Fabricius) [Bostrichidae], and *Cryptolestes* spp. (Laemophloeidae) as the most frequent ones.

On november 9th, 2012, during routine testing of samples of corn grain for export, at the Laboratory of Entomology and Acarology, Directorate of National Service Laboratory Quality and Plant Health and Seeds, (SENAVE), we observed the emergence of wasps belonging to the species *Anisopteromalus calandrae* (Howard, 1881), which is a new record for the Republic of Paraguay, the wasps were located alongside two pest species, *Sitophilus zeamais* and *Orizaephilus surinamensis* (Coleoptera: Curculionidae and Silvanidae).

The specimens captured by mouth aspirator were placed in 70% alcohol in glass vials (2 ml) with screw cap and sent to the Biological Institute of Campinas, Brazil, where identification was confirmed. The genus was determined according to Boucek & Heydon (1997) while

species determination was performed according to the works of Rasplus (1988) and Sureshan (2010).

The insect (Fig. 1) is a parasitoid wasp of cosmopolitan distribution that attacks several species of weevils in stored grains. There are records of occurrence of this species in Argentina and Brazil. This finding adds Paraguay in the record. Further information, with a list of hosts and countries where the species occurs can be obtained from the "Universal Chalcidoidea Database" (Noyes 2012).

The specimens are deposited in the Insect Collection of Entomophages "Oscar Monte" in the Biological Institute of Campinas, SP, Brazil (IB/CBE n° 1809 to 1813), as well as in the Entomological Reference Collection of the Laboratory of Entomology and Acarology at the SENAVE, San Lorenzo, Paraguay (n° 008-012).

Material examined: *Anisopteromalus calandrae*: PARAGUAY, San Lorenzo. Central Department. Laboratory of Entomology and Acarology, SENAVE. 9-nov-2012, ex. *Zea mays* (grains): 5 males, 5 females, Benitez Diaz E.A. coll., and ex. *Zea mays* (grains): 4 females, 1 male, Benitez Diaz E.A. coll, Costa V.A. det., [Biological Institute, Campinas, Brazil (IB/CBE)].



Fig. 1. *Anisopteromalus calandrae*. Photography: E.A. Benítez Díaz, 2012.

LITERATURE

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