

## NOTA CIENTÍFICA

**Discovery of *Podagrion brasiliense* Howard, 1894 (Hymenoptera: Torymidae) as a parasitoid of the oöthecae of *Musonia surinama* (Saussure, 1869) (Mantodea: Thespidae)**

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The oöthecae of praying mantids often show a high degree of parasitoidism by many kinds of organisms (for a detailed list see EHRMANN 2002), among which can be found microwasps belonging to the families Scelionidae, Eupelmidae and, especially, Torymidae. In this last family, the widely distributed and diverse genus *Podagrion* Spinola stands out and its species are known to be specialized parasitoids of mantid egg cases.

*Podagrion brasiliense* Howard, 1894 is a remarkable species found in the southern USA, Mexico and the West Indies islands of Grenada and St. Vincent (De SANTIS 1979, GRISELL & GOODPASTURE 1981). Even though its specific name suggests a South American origin (this being the result of confusion in the treatment of the type material), *P. brasiliense* has never been recorded in Brazil (GAHAN 1951).

*P. brasiliense* (fig. 1) is characterized by its small size (about 2 mm in length), a distinctive chromatic pattern in the antennal funicles and club, a propodeum with a partially polished area and a strongly petiolated abdomen (GRISELL & GOODPASTURE 1981). Specimens of this species were reared from an egg case of *Musonia surinama* (Saussure, 1869), a small mantid belonging to the family Thespidae, very common in Peruvian coastal valleys between Tumbes and Ica. This mantid is a ground-level inhabitant of low vegetation and grassy pastures. The egg cases of this species are small, straw-colored and rectangular in shape, making them difficult to distinguish from their surroundings. Females usually attach their egg cases to vegetation close to the soil or as high as 1 m (pers. obs.).

The specimens of *P. brasiliense* examined were reared from egg cases collected in Tumbes and Lima (the latter at the Universidad Nacional Agraria campus, on small orange trees). I noticed that the adult parasitoids left the egg case through perforations they had made on top of the oötheca, where young mantids normally emerge. Usually, other

species of *Podagrion* I have observed leave the egg case through lateral perforations.

This recording considerably extends the distribution of *P. brasiliense*, although it is possible that future studies show it to be a species complex (Grissell pers. com.). It is likely that *P. brasiliense* (or similar varieties) is found where *M. surinama* occurs, from Nicaragua to northern and northwestern South America, as far south as central Peru. It is also possible that *P. brasiliense* is parasitoidizing other species of mantids similar to *M. surinama* in size and egg case structure. This is the first record of *Podagrion* in Peru, as well as the first known host for *P. brasiliense*.

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### Literature

- De Santis L. 1979. Catálogo de los himenópteros calcidoideos de América al sur de los Estados Unidos. Buenos Aires, Comisión de Investigaciones Científicas de la Provincia de Buenos Aires. 488 pp.
- Ehrmann, R. 2002. Mantodea: Gottesanbeterinnen der Welt. Berlin, Natur- und Tier-Verlag. 519 pp.
- Gahan AB. 1951. Some synonymies and new combinations in Chalcidoidea. Can. Entom. 83: 170-176.
- Grissell EE, Goodpasture CE. 1981. A review of Nearctic Podagrionini, with description of sexual behavior of *Podagrion mantis* (Hymenoptera: Torymidae). Ann. entom. Soc. Amer. 74(2): 226-241.

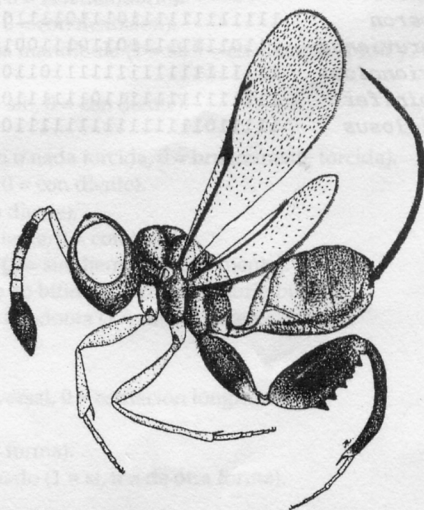


FIGURE 1.- Habitus of *Podagrion brasiliense* Howard, 1894 (female).

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