

FIRST RECORD OF THE GENUS *GRYONELLA* DODD FROM BRAZIL, WITH THE DESCRIPTION OF A NEW SPECIES (HYMENOPTERA: PLATYGASTRIDAE)¹

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ABSTRACT: A new species of *Gryonella* Dodd, 1914, is described and illustrated based on specimens from Brazil (Mato Grosso do Sul). *Gryonella matogrossensis* sp. nov. is similar to *G. bruesi* Dodd but can be distinguished mainly by its lighter color, rounded vertex, striated cheeks and large metanotal teeth. A key to the described species of *Gryonella* is provided. Taxonomic notes on the genus are included.

KEY WORDS: Hymenoptera, Platygastriidae, Teleasinae, *Gryonella matogrossensis* sp. nov., *Oryza sativa*, Brazil

Gryonella Dodd, 1914 is a small genus in the tribe Teleasini (Teleasinae) and belongs to *Teleas*-group (Masner, 1976). The genus is distinguished from other related genera by the metanotum medially with two separate teeth, large mandibles, swollen posterior femora and spiny legs. *Gryonella* includes five described species: *G. affinis* Dodd, *G. bruesi* Dodd, *G. crawfordi* Dodd, *G. magnidens* Dodd and *G. platythorax* Dodd, all from the Australian Region, although Dodd (1930) suggested that *G. crawfordi*, known only from the male, may be conspecific with either *G. bruesi* or *G. affinis*. The *Gryonella* species described below is the first known representative of the genus from the Neotropical Region and was collected from *Oryza sativa* (Poaceae) in Brazil.

In this paper we have accepted the synonymy of families Platygastriidae and Scelionidae established by Sharkey (2007) noting that the former name has priority.

METHODS

Specimens were collected by sweeping and preserved in 70% alcohol. All material in this study is deposited in Museu de Zoologia da Universidade de São Paulo, Brazil (MZSP) and Museo de La Plata, Argentina (MLP). Congeneric specimens were borrowed from the South Australian Museum, Adelaide, South Australia (SAM). Morphological terminology follows that of Masner (1976) and Dodd (1930). Observations and measurements were made with a Leica S8 Apo stereomicroscope with an ocular micrometer in the eyepiece. Absolute measurements are used for body length; relative ones are used for other dimensions. Unless otherwise noted, all ratios are of length:width. All illustrations were made with a Leitz SMLux microscope with a drawing tube. The abbreviations A and T are used for antennal segments and metasomal terga, respectively; LOL, the lateral ocellar line, indicates the shortest distance between the inner margins of the anterior and posterior ocelli; POL, the posterior ocellar line, indicates the short-

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est distance between the inner margins of the posterior ocelli; OOL, ocular ocellar line, indicates the shortest distance between the outer margin of the posterior ocellus and inner orbit of the eye.

Key to the described species of *Gryonella* Dodd

1. Mesosoma flattened, forewings narrowed.....*G. platythorax* Dodd
- 1'. Mesosoma not flattened, forewings moderately broad.....2
2. Scutum and scutellum with large punctures (not reticulate)
.....*G. magnidens* Dodd
- 2'. Scutum and scutellum reticulate3
3. Posterior margin of propodeum rather deeply concave, segment 1 of metasoma more than twice as wide posteriorly as basally.....*G. affinis* Dodd
- 3'. Posterior margin of propodeum gently concave, segment 1 of metasoma about twice as wide posteriorly as basally4
4. Metanotal teeth large.....*G. matogrossensis* Margaria et Loiácono sp. nov.
- 4'. Metanotal teeth small.....5
5. Frons longitudinally striate; male.....*G. crawfordi* Dodd
- 5'. Frons transversely striate; females.....*G. bruesi* Dodd

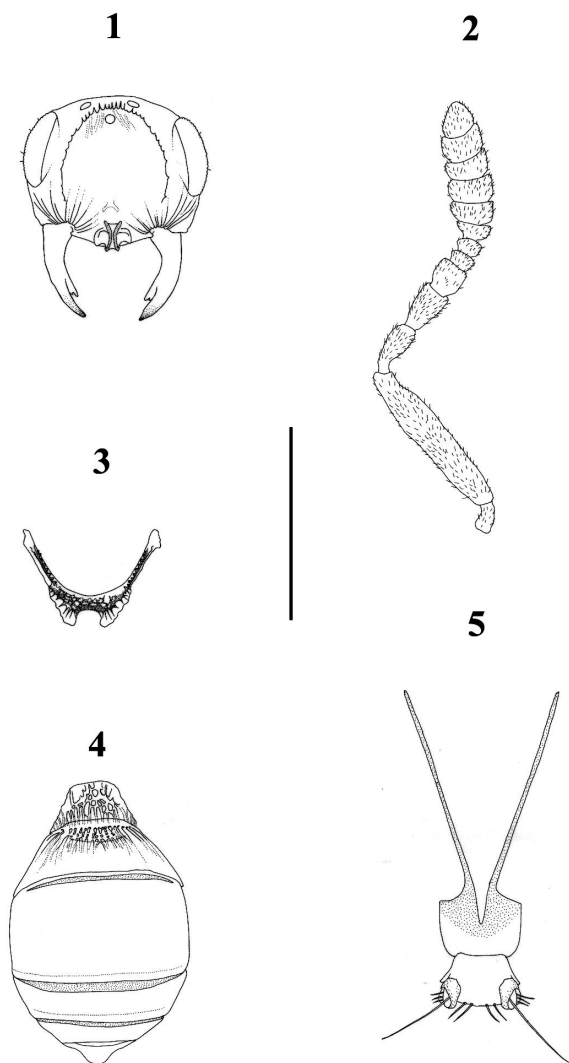
Gryonella matogrossensis Margaria et Loiácono sp. nov.

Figs. 1-5

Description: Female: Body length 1.4 mm, color chestnut brown, metasoma lighter; A1, femora, tibiae and mandibles yellowish, mandibular teeth pale orange.

Head (Fig. 1) in frontal view slightly wider than high (40:37), predominantly smooth and shining, posteriorly longitudinally striated, with short hairs, vertex broadly rounded, cheeks near mandibular base with longitudinal striae; mandibles bidentate, lower tooth sub-bidentate, palpal formula 2-1; eyes distinctly hairy, eye height:malar space (18:9); LOL:OOL:POL (5:9:9), antennal segments in the following relative proportions: A1 (40:8), A2 (13:5), A3 (11:6), A4 (8:8), A5 (4:6), A7 (4:8), A8 (5:10), A9 (5:10), A10 (4:10), A11 (5:9), A12 (8:7); clava narrowed apically (Fig. 2).

Mesosoma slightly longer than wide (35:30), pronotum narrowly visible at the lateral angles, mesoscutum and scutellum finely scaly reticulate, metanotum irregularly sculptured, bidentate, teeth with irregular margins (Fig. 3). Mesoscutum and scutellum densely setose. Propodeum short, visible laterally, finely sculptured, the posterior margin gently concave, the posterior angles subacute. Fore, mid femora somewhat swollen, posterior femora much swollen (4:2), fore and mid tibiae outwardly with row of dense spines. Fore wings (37:12), lightly stained brownish apically, venation dark, slightly surpassing the tip of metasoma,



Figs. 1-5. *Gryonella matogrossensis* Margaría et Loíacono sp. nov. Female. 1. Head in frontal view. 2. Antenna. 3. Metanotum in dorsal view. 4. Metasoma in dorsal view. 5. T7+8 and lateral apodemes in dorsal view. Scale: 1 mm.

marginal cilia longer than stigmal vein (3:2), lengths of submarginal:marginal:stigmal veins (35:10:2).

Metasoma (Fig. 4) longer than wide (69:43). T1 narrowed at base, almost as long as its basal width, twice as wide posteriorly as basally (10:20), densely irregular striate; T2 predominantly smooth, with some delicate striae laterally, its basal

one-third with rather dense short narrow longitudinal striae; T3-T6 smooth; T1-T3 with scattered hairs laterally, T3 also with posterior hairs, T4-T6 densely setose. Metasomal terga in the following relative proportions T1 (9:20), T2 (10:40), T3 (22:43), T4 (10:39), T5 (4:25), T6 (4:15); T7+8 with cerci large, leaf-like, moderately long sensory hairs, lateral apodemes sharply divergent (Fig. 5). Male: unknown

Distribution: Brazil, Mato Grosso do Sul.

Biology. Unknown. The relatively scanty biological data indicate that the species of this tribe are strictly parasitoids of eggs of Carabidae (Coleoptera) (Masner, 1976).

Material examined: Holotype female: BRAZIL, Mato Grosso do Sul, Campo Verde, 8-III-2004, Sylvie col., in crops of *Oryza sativa* (Poaceae), MZSP; Paratype female, same data except 17, 21-XI-2003 (microscopic slide), MLP.

Other material examined: *Gryonella bruesi* Dodd, holotype female, Queensland, Cairns district, Australia, I-1914, SAM. *Gryonella crawfordi* Dodd, holotype male, Queensland, Proserpine, Australia, X-1914, SAM.

Remarks: The ovipositor assembly belongs to the *Ceratobaeus* type-system; it is similar to *Teleas* sp. (Austin and Field, 1997) by the moderately delicate form. Tergites 7+8 differs from *Teleas* by the number and length of hairs (Fig. 5).

Gryonella matogrossensis sp. nov. is related to *G. bruesi* Dodd but differs mainly by the lighter body color, rounded vertex, striated cheeks and large metanotal teeth. Dodd (1930) considered that it is possible that *G. crawfordi* may be the male of either *G. bruesi* or *G. affinis*. On basis of morphological differences observed herein in the type material of *G. crawfordi* and *G. bruesi*, we consider that both are valid species.

The name *Gryonella matogrossensis* sp. nov. refers to the name of the state of Brazil from which the species is known.

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