

Gypona parvula Tesón, 1972 (Hemiptera, Cicadellidae, Gyponini): a new synonym and the first record from Paraná State

Gypona parvula Tesón, 1972 (Hemiptera, Cicadellidae, Gyponini): um novo sinônimo e o primeiro registro para o Estado do Paraná

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Abstract

This study aims to contribute to the taxonomy of the genus *Gypona* by providing a new synonymy, *Gypona parvula* Tesón, 1972 equal to *Gypona nasua* DeLong & Freytag, 1975. In addition, the first record from Paraná State, Southern Brazil is reported.

Keywords: Auchenorrhyncha, distribution, leafhoppers, Brazil, taxonomy

Resumo

Esse estudo visa contribuir para a taxonomia do gênero *Gypona* fornecendo uma nova sinonímia, *Gypona parvula* Tesón, 1972 igual a *Gypona nasua* DeLong & Freytag, 1975. Em adição, o primeiro registro para o Estado do Paraná, Sul do Brasil é reportado.

Palavras-chave: Auchenorrhyncha, distribuição, cigarrinhas, Brasil, taxonomia

The leafhopper genus *Gypona* Germar, 1821 is the largest genus of Gyponini with approximately 320 species distributed in six subgenera: *Elevanosa* DeLong, 1977 (1 sp.), *Gypona* Germar, 1821 (~87 spp.), *Marganalana* Metcalf, 1949 (~178 spp.), *Obtusana* DeLong & Freytag, 1964 (20 spp.), *Paragypona* DeLong & Freytag, 1964 (1 sp.), and *Ruana* McKamey, 2006 (1 sp.) (Domahovski et al., 2015; Gonçalves, 2016). Diagnostic characters are the head moderately produced, with crown usually longer medially than near to eyes, the crown surface with striae

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between ocelli longitudinal or oblique, the transition crown-face definite, subfoliaceous or nearly rounded, with transverse striae, the male pygofer commonly bifid at apex, and the aedeagus without apodemal processes (DeLong & Freytag, 1964). The genus is widely distributed from North to South America, including the Caribbean islands and in Brazil, currently are recorded 118 species, with representatives in all biomes (DeLong & Freytag, 1964; Takiya et al., 2023).

Gypona (Marganalana) parvula was described by Tesón (1972) based on three male specimens from Municipality of Loreto, Misiones Province, Argentina, collected by A. A. Ogloblin (Fig. 1A–I). DeLong & Freytag (1975) described *Gypona (Marganalana) nasua* with five males and four females collected by A. A. Ogloblin in the municipality of Loreto (Fig. 1J–Q). Azevedo-Filho & Carvalho (2002) recorded *Gypona parvula* from Rio Grande do Sul State, Brazil, and provided detailed electron microscopy images of the male genitalia. Azevedo-Filho et al. (2016) provided new records for the states of Santa Catarina and São Paulo, Brazil.

We studied the holotype of *G. parvula* deposited in the Colección del Museo de La Plata, National University of La Plata, Buenos Aires, Argentina (MLP) (Fig. 1A–C), the holotype of *G. nasua* deposited in the Smithsonian Institution, National Museum of Natural History, Washington DC, USA (USNM) (Fig. 1J–L), and 15 males deposited in the Coleção Entomológica Pe. Jesus Santiago Moure, Universidade Federal do Paraná, Curitiba, Paraná, Brazil (DZUP), representing the first record from Paraná State (Fig. 1R–S). After comparing the images of the holotypes, original descriptions and illustrations of the male genitalia (Fig. 1D–I, M–Q), additional specimens, and because both species were collected in the same locality and by the same collector, we concluded that there are no differences to separate these species and therefore *Gypona nasua* should be treated as junior synonym of *Gypona parvula*.

The genus *Gypona* needs an extensive taxonomic revision because the generic diagnosis lacks strong characters and many of the species included there disagree with the diagnosis. In an unpublished phylogenetic analysis for the tribe Gyponini based on 182 morphological characters combined with DNA sequence data (28S and 16S rDNA and cytochrome oxidase subunit I), provided by Gonçalves (2016), where 14 species of *Gypona* were included, the genus

was recovered as polyphyletic. Besides that, the number of undescribed species of *Gypona* from the Neotropical region currently available in the Brazilian collections far surpasses one hundred. In that respect, our work is a small but important contribution to the taxonomy of the genus.

Material examined

Gypona parvula Tesón, 1972 — 1♂, holotype of *G. parvula*, Loreto, Misiones, Rep. Argentina, Dr. A.A. Ogloblin (MLP-3796); 1♂, holotype of *G. nasua*, Loreto, Misiones, Arg., XII-10-1931 A.A. Ogloblin (USNM01513875); 15♂, Brasil, Paraná, Palmas, Fazenda Cerro Chato, 26°29'S 51°39'W, malaise trap, A.C. Pereira leg., dates between 13.II.2014 and 09.IX.2014 (DZUP).

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Conflicts of interest

The authors declare that this contributions was carried out without any conflict of interest.

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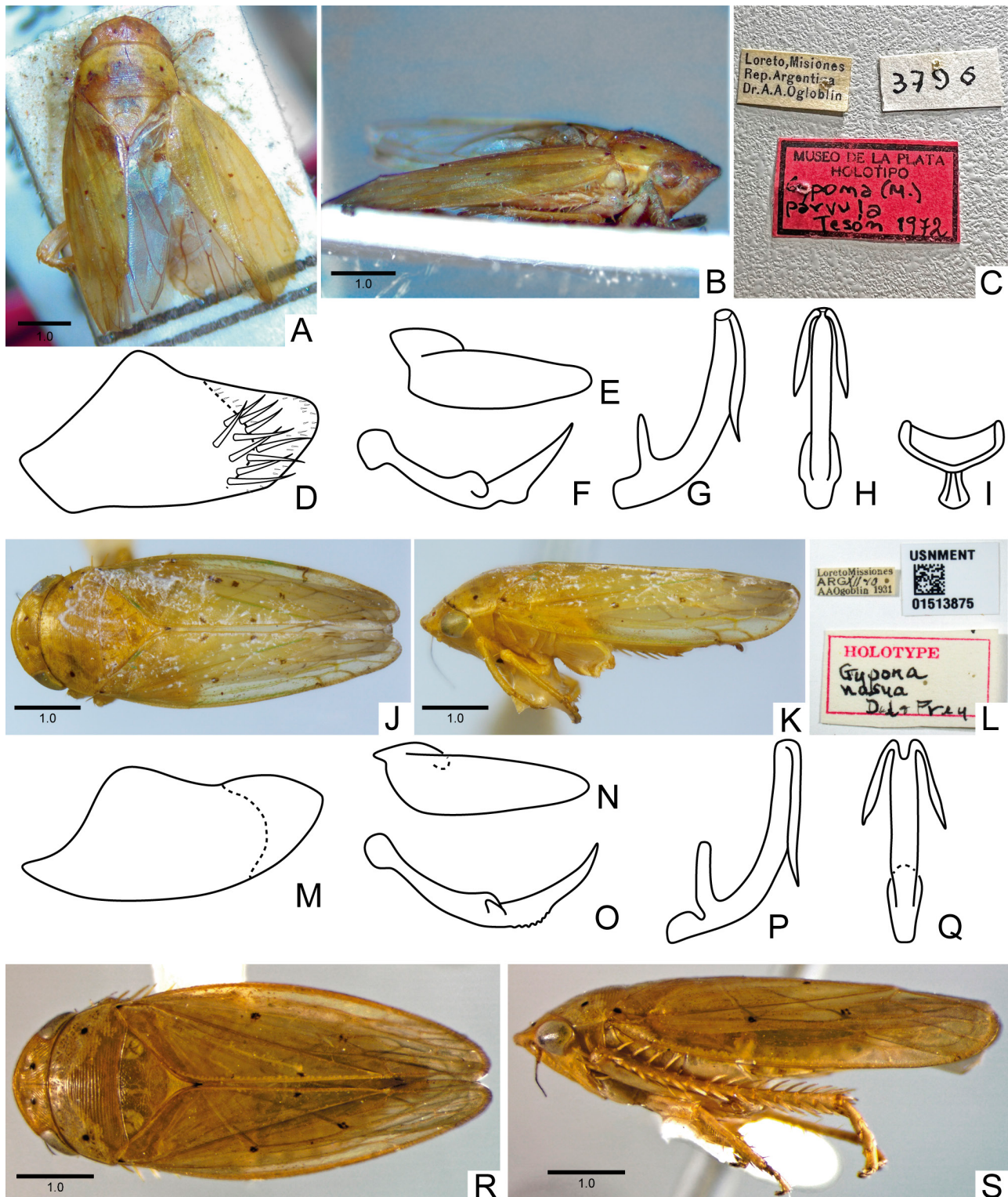


Figure 1 A–I. *Gypona (Marganalana) parvula* Tesón (1972). A–C, holotype male of *G. parvula* (MLP). D–I, drawings of the male genitalia adapted from Tesón (1972). J–L, holotype male of *G. nasua* syn. nov. (USNM). M–Q, drawings of the male genitalia adapted from DeLong & Freytag (1975). R–S, specimen male (DZUP). A, J, R, habitus, dorsal view. B, K, S, habitus, lateral view. C, L, labels. D, M, pygofer, lateral view. E, N, subgenital plate, ventral view. F, O, style, lateral view. G, P, aedeagus, lateral view. H, Q, aedeagus, posterior view. I, connective, dorsal view. Scale bars in mm.

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