

# First record of *Phyllocycla hamata* Belle, 1990 (Insecta: Odonata: Gomphidae), from Mato Grosso state, Brazil

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**ABSTRACT:** Six males of *Phyllocycla hamata* Belle, 1990 were collected in the Reserva Florestal da Usina Hidroelétrica Jauru, Salto da Fumaça, Mato Grosso state, Midwestern Brazil and represent the first record for that state. The specimens examined have been deposited in the Museu Nacional, UFRJ, Rio de Janeiro, RJ, Brazil. This species is included in the volsella group and can be separated from the other species in this group by the cerci shorter than segment 10 (S10), with a very long internal hook.

*Phyllocycla* Calvert (1948) was established based on *Cyclophylla signata* Hagen in Selys, 1854. Thirty one species of this genus are known to occur in the Neotropics (Garrison *et al.* 2006), 18 of them in Brazil (Heckman 2006). Belle (1988) separated *Phyllocycla* species in nine groups: 1) volsella group (six species, two in Brazil): *P. armata* Belle, 1977 (Pará State); 2) viridipleuris group (three species, all in Brazil): *P. pallida* Belle, 1970 and *P. propinqua* Belle, 1972 (Santa Catarina state), *P. viridipleuris* (Calvert, 1909) (Pernambuco, Rio de Janeiro, São Paulo, Minas Gerais, Santa Catarina and Rio Grande do Sul states); 3) malkini group (two species, one in Brazil): *P. malkini* Belle, 1970 (Maranhão state); 4) elongata group (four species, without records for Brazil); 5) bartica group (one species): *P. bartica* Calvert, 1948 (Pará state); 6) signata group (one species): *P. signata* (Hagen in Selys, 1854) (Rio de Janeiro state); 7) pegasus group (two species): *P. medusa* Belle, 1988 (Pará state), *P. pegasus* (Selys, 1969) (Amazonas, Pará, Goiás and Mato Grosso states); 8) diphylla group (eight species, six in Brazil): *P. argentina* (Hagen in Selys, 1878) (Minas Gerais and Porto Alegre states), *P. brasilica* Belle, 1988 (Sergipe state), *P. diphylla* (Selys, 1854) (Alagoas and Minas Gerais states) *P. gladiata* (Hagen in Selys, 1854) (Pernambuco state), *P. murrea* Belle, 1988 (Sergipe state), *P. sordida* (Selys, 1854) (Pará state); 9) ophis group (three species, two in Brazil): *P. modesta* Belle, 1970 (Pará state), *P. ophis* (Selys, 1869) (Amazonas and Pará states).

*Phyllocycla hamata* Belle, 1990 is included in the volsella group due to the following characters: (1) the apical inferior angles of S10 somewhat produced inward and downward and (2) the cerci in lateral view with a superior ante-apical tooth (Belle, 1990). It is characterized by a large hook which arises erect on the upper surface of the epiproct. This species is very similar to *P. armata* Belle, 1977. The principal difference between the male of

*P. hamata* and *P. armata* is in the morphology of the cerci which in the males of *P. armata* have a conspicuous ante-apical hook at the inner side.

Up to now, *P. hamata* is known only from Rondônia state (Belle 1990). However, we collected six specimens in the Reserva Florestal da Usina Hidroelétrica Jauru, Salto da Fumaça, Mato Grosso state (15°20'31"S, 58°51'59" W), in the riparian forest of the Jauru River. The specimens were captured with Malaise traps. The examined specimens have been deposited in collection of the Departamento de Entomologia, Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil.

The Jauru Reservatory is located in the state of Mato Grosso. It occupies an area belonging to municipalities of Jauru, Indavaí and Araputanga. From a geopolitical standpoint, the region belongs to the Legal Amazon. The vegetation in the region comprises: (1) sub-montane deciduous seasonal forest, (2) ecological ecotones between savannah and semi deciduous seasonal forest, (3) Cerrado, (4) floodplain fields, (5) riparian forest and (6) pastures. The tropical climate varies from wet to dry. Annual temperature varies between 22.2 and 24.3°C. The warmest month is January and the coldest is July. Annual rainfall varies from 1500 to 1800 mm (Maitelli 2005).

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