

## SCIENTIFIC NOTE

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**New distributional records and comments for the species of the genus *Queda* (Coleoptera: Dytiscidae)**

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■ **ABSTRACT.** New distributional records for the species of the genus *Queda* Sharp are presented based on the examination of the Dytiscid collection at the Museo Argentino de Ciencias Naturales. The presence of the genus in Paraguay is herein reported for the first time. Some additional data on the identified species are also provided.

**KEY WORDS.** Dytiscidae. Hydrovatini. *Queda*. Neotropical region.

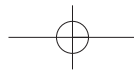
■ **RESUMEN.** Nuevos registros distribucionales y comentarios para las especies del género *Queda* (Coleoptera, Dytiscidae). Se aportan nuevos registros sobre distribución geográfica de las especies del género *Queda* Sharp, basados sobre el examen de la colección de Dytiscidae del Museo Argentino de Ciencias Naturales. La presencia del género en el Paraguay es reportada aquí por primera vez. Se proporciona información adicional sobre las especies identificadas.

**PALABRAS CLAVE.** Dytiscidae. Hydrovatini. *Queda*. Región Neotropical

The Neotropical genus *Queda* Sharp conforms, along with *Hydrovatus* Motschulsky, the Hydroporinae tribe Hydrovatini. According to Biström (1990) this tribe can be distinguished from other Hydroporinae by the following diagnostic combination: base of trochanter partially hidden by the laterodistal portion of metacoxal process; pronotum without longitudinal, lateral impressed lines; metatarsal claws similar; prosternal process triangular, with apex broad; mesocoxae widely separated; metacoxal process with an excision on the posterior margin. The genus *Queda* is distinguished from *Hydrovatus* by the following characters (Biström, 1990): metacoxal excision shorter longitudinally than transversally; labrum not visible; body not acuminate apically; lack of a stridulatory apparatus which is present ventrally in some *Hydrovatus* species.

Since Sharp (1882) created the genus, describing *Queda compressa* Sharp from Brazil (type species of the genus by monotypy) it has been treated by few authors. Zimmermann (1921) described *Queda hydrovatoides* Zimmermann from Brazil (Corumbá), and Biström (1990) revised the genus describing another species, *Q. youngi* Biström, from Brazil, Panamá, and Venezuela.

The phylogenetic placement of *Queda* within Hydrovatini has been questioned by Wolfe (1985, 1988). Based mainly on the shape of the eighth abdominal tergite, he suggested this resemble those found in more plesiotypic hydroporines. This point of view was recently rejected by other authors, whose results support the monophyly of *Hydrovatus* plus *Queda* based on characteristics of the female reproductive system (Miller, 2001) and the prosternal process (Biström, 1996; see also



**Fig. 1.** Distributional records for the species of the genus *Queda* Sharp. Star, *Q. youngi*; Dot, *Q. hydrovatooides*.

Biström, 1990). Though the phylogenetic position of members of Hydrovatini is a point of some controversy, the monophyly of *Queda* seems to be a topic of little discussion.

Examination of the Dytiscid collection held at the Museo Argentino de Ciencias Naturales allo-

wed us to identify some specimens of *Queda* coming from localities that are new distributional records for the genus. The specimens were identified using the key of Biström (1990).

Five specimens of *Q. youngi* and two of *Q. hydrovatooides* were identified. Regarding *Q. youngi*,

the measurements of the total length given by Biström (1990) range from 5.0 to 6.2 mm, but two of the examined specimens are somewhat smaller, their length are 4.8 and 4.9 mm. The collecting localities are the first records for the genus in Paraguay. Due to the proximity of Puerto Galileo to the Argentine boundary, and to the lack of a geographic barrier between both countries in that area, this species is expected to occur in the Northern provinces of Argentina.

Regarding *Q. hydrovatooides*, the labelling of the specimens suggests that they belong to the series on which Zimmermann (1921) described the species. Measurements of total length and maximum width for these individuals range 2.49–2.52 mm and 1.59–1.74 mm respectively.

#### Material examined:

*Queda youngi* Biström: **PARAGUAY:** 1 male, Pto. Guaraní, VII-1928, col. J.B. Daguerre; 1 male and 2 females, Dto. Concepción, Pto. Vallemí, VI-1952, col. A.O. Bachmann; 1 female, Dto. Pte. Hayes, Pto. Galileo, 23-II-2003, col. O.R. Di Iorio; 1 male, Aguará-ñú, 15-XII-03 Trampa luz mercurio, col. O.R. Di Iorio.

*Queda hydrovatooides* Zimmermann: **BRAZIL:** 2 specimens from Mato Grosso - Corumbá "Cotyplus" [light blue cardboard], "*Queda hydrovatooides* Zimmermann" [handwritten], "*Queda hydrovatooides* Zimm." [handwritten, probably by Zimmermann], col. C. Bruch.

#### Geographic distribution

*Q. compressa*: Brazil; *Q. hydrovatooides*: Brazil; *Q. youngi*: Panamá, Venezuela, Brazil, Para-

guay (new country record). New distributional records are shown in Fig. 1.

#### LITERATURE CITED

- BISTRÖM, O. 1990. Revision of the genus *Queda* Sharp (Coleoptera, Dytiscidae). *Quaest. entom.* 26: 211-220.
- BISTRÖM, O. 1996. Taxonomic revision of the genus *Hydrovatus* Motschulsky (Coleoptera, Dytiscidae). *Entomol. Basil.* 19: 57-584.
- MILLER, K. B. 2001. On the phylogeny of the Dytiscidae (Insecta: Coleoptera) with emphasis on the morphology of the female reproductive system. *Insect Syst. Evol.* 32(1): 45-92.
- SHARP, D. 1882. On aquatic carnivorous Coleoptera or Dytiscidae. *Sc. Trans. Roy. Dublin Soc.* 2: 179-1003.
- WOLFE, G. W. 1985. A phylogenetic analysis of plesiotypic Hydroporinae lineages with an emphasis on *Laccornis* Des Gozis (Coleoptera: Dytiscidae). *Proc. Acad. Nat. Sc. Philadelphia* 137: 132-155.
- WOLFE, G. W. 1988. A phylogenetic investigation of *Hydrovatus*, Methlini and other plesiotypic hydroporines (Coleoptera: Dytiscidae). *Psyche* 95:61-71.
- ZIMMERMANN, A. 1921. Beiträge zur Kenntnis der südamerikanischen Schwimmkäferfauna nebst 41 Neubeschreibungen. *Arch. Naturg.* 87A (3): 181-206.

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