

The Generic Concepts of *Dischistus* Loew and *Bombylisoma* Rondani Revisited, with Discussion of the Status of South American "Bombylius" (Diptera: Bombyliidae)

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ABSTRACT

Based on an earlier subsequent type designation for the genus *Dischistus* than previously recorded, the generic concepts of *Dischistus* and *Bombylisoma* are re-evaluated. As a result of re-examination of morphological characters, the South American *Bombylius* (*Semistoechus*) is transferred to the tribe Dischistini. The resultant status of *Bombylius* in South America is corrected.

DISCHISTUS VERSUS BOMBYLISOMA

Determination of the taxonomic limits of the genera *Dischistus* Loew, 1855, and *Bombylisoma* Rondani, 1856, has a complicated history due to various type species being designated for *Dischistus* by different authors. Workers dealing primarily with Afrotropical taxa of Bombyliidae followed the type designation for *Dischistus* given by Becker (1913:494), who designated the southern African species, *Bombylius mystax* Wiedemann, 1818. Contrastingly, workers dealing primarily with the Palearctic and Oriental bombyliid fauna followed the type designation for *Dischistus* given by Brunetti (1920:273), who designated the Palearctic species, *Bombylius minimus* Schrank, 1781. The taxonomic history and generic concepts of *Dischistus* and *Bombylisoma* were discussed in detail by Bowden (1973) in context with his review of African genera of the tribe Dischistini. Bowden's (1973) discussion and resultant clarification of the generic concepts of these 2 genera centered around the commonly cited subsequent type designations for *Dischistus* by Becker (1913) and Brunetti (1920). However, an earlier valid type designation apparently missed by Bowden and others leads to a different conclusion regarding the generic concepts of *Dischistus* and *Bombylisoma*.

Rondani (1856:164) in volume I of his *Diptera Italicae Prodromus* described *Bombylisoma* and gave the Palearctic species, *Bombylius sulphureus* Fabricius, 1805, as the type species by original designation. One year earlier, Loew (1855:45) described *Dischistus* as a subgenus of *Bombylius* and included *Bombylius sulphureus* Fabricius, 1805 (in synonymy with *Bombylius minimus* Schrank, 1781), the southern African *Bombylius mystax* Wiedemann, 1818, the Middle Eastern *Bombylius melanocephalus* Fabricius, 1794, and 8 other new species, but he failed to designate a type species.

In volume IV of Rondani's *Prodromus*, Rondani (1861:8) in his "Notanda corrigenda et mutanda" made back reference to his 1856 work and stated "pro *Bombylisoma* R.—pone *Dischistus* Loew, 1855" (p. 164). By making this correction and reading the corrected lines, *Bombylius sulphureus* Fabricius, 1805, is distinctly mentioned as being the type species for

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Dischistus. Rondani (1861:8) can thus be construed as the earliest valid subsequent designation of *Bombylius sulphureus* as the type species of *Dischistus*.

Rondani never intended *Bombylisoma* to be sunk as a junior synonym of *Dischistus* as evidenced by remarks and actions taken in his *Diptera exotica* . . . (Rondani 1863). In that paper, Rondani states (1863:68) that the type species of his *Bombylisoma* must be duly transferred to *Dischistus* Loew. However, he complicates matters by wishing to retain the genus *Bombylisoma* as distinct from *Dischistus* for his new species from South America, *Bombylisoma decorata*. Nomenclaturally, this is impossible because the type species of *Bombylisoma* had already been transferred by Rondani (1861:8; 1863:68) to *Dischistus*.

Acceptance of the Rondani (1861:8) designation once again causes a drastic change in the generic concepts of *Dischistus* and *Bombylisoma*. With *Bombylius sulphureus* as the type species of *Dischistus*, *Bombylisoma* becomes an objective junior synonym of *Dischistus* and the species formerly in *Dischistus* sensu Becker (1913), Hesse (1938), Bowden (1973), and subsequent authors must take the next available generic name, which is *Acanthogeron* Bezzi, 1925. Because such a change in generic concepts would result in numerous new combinations for species currently in *Dischistus* and *Bombylisoma* and much confusion among current and future workers in this field, an application to the I.C.Z.N. is being prepared to suppress all type designations for *Dischistus* Loew previous to Becker (1913).

THE GENUS BOMBYLIUS IN SOUTH AMERICA

Bowden (1985), in his review of the genera of Dischistini, discussed South American species previously placed in the genus *Bombylius* Linnaeus by Hall (1976). In his monograph on the Bombyliidae of Chile, Hall (1976) proposed 2 new subgenera of *Bombylius* (*Parasystoechus* and *Semistoechus*). Bowden made the correct conclusion that the species placed in *Parasystoechus* are not members of *Bombylius*, nor are they of the tribe Bombyliini, and raised *Parasystoechus* to generic status, based on the absence of pile on the metapleuron (= Bowden's laterotergite). However, based on the assumption that *Bombylius* (*Semistoechus*) *ovatus* Hall had pile on the metapleuron, Bowden (1985) retained it as the only species of *Bombylius* in South America. Having had access to a rather long series of species of *ovatus* Hall from Chile I found that, though there appears to be pile on the metapleuron, they are actually long hairs of the pteropleuron. Without denuding the thorax to verify their point of origin, the positioning of these hairs can easily deceive an uninitiated observer of South American "Bombylius" into believing that the hairs originated from the metapleuron.

This finding results in *Semistoechus* Hall being a member of the tribe Dischistini and I here raise it to generic status with *Semistoechus ovatus* (Hall), **new combination**.

Previous to this study, the southernmost record of true *Bombylius* in the Neotropics was a specimen from Nicaragua recorded in Evenhuis (1984). I have recently seen a specimen of the subgenus *Parabombylius* from Colombia in the Canadian National Collection, Ottawa. Barring further records from the western Cordillera south of this Colombian record, this is probably the southernmost occurrence of *Bombylius* in South America.

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