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A redefinition of the genus *Hemichaeta* Steyskal, new status (Diptera; Micropezidae; Taeniapterinae)

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Abstract

We here reconsider the status of subgenus *Hemichaeta* Steyskal, concluding that there is no justification to keep it in the genus *Poecilotylus* Hennig. *Hemichaeta* is thus removed from *Poecilotylus* and elevated to generic status with *Hemichaeta scutellata* (Cresson) as the type and only included species. *Hemichaeta scutellata* is fully redescribed, including the previously undescribed male and female terminalia.

Key words: Neotropical Diptera, *Poecilotylus*, Micropezidae, Taeniapterinae, stilt-legged flies

Introduction

When Hennig (1934) named the genus *Poecilomyia* and the subgenus *Hemichaeta* (as *Hemicheta*), he defined the subgenus on the basis of the appearance and chaetotaxy of the head, at the same time explicitly expressing doubt about the relationships of the species included in the group. His main key character, the reduction of the fronto-orbital bristles from two to one, is subject to homoplasy throughout the Taeniapterinae and routinely varies within genera or even species. The other defining character given by Hennig is the relatively flat frontal vitta that contrasts with the more convex pre-ocellar frontal vitta of other *Poecilomyia*, also a variable character in the Taeniapterinae. The name *Poecilomyia* was preoccupied by *Poecilomyia* Hendel, 1911, and the genus was later renamed *Poecilotylus* (Hennig, 1934: 294). Hennig failed to designate a type species for his subgenus *Hemicheta*, so the name was not validated until Steyskal (1968) assigned *Grallomyia scutellata* Cresson as the type species of the subgenus (as *Hemichaeta*). We here elevate *Hemichaeta* to generic status and redescribe it based on the type specimens as well as newly collected material of the highly distinctive type species.

Hennig (1934) and Steyskal (1968) include four species in *Hemichaeta*: *Grallomyia scutellata*, *Mimegralla landrocki* Czerny, *Grallomyia quinque maculatus* Czerny, and *Poecilomyia similis* Hennig. *Grallomyia scutellata* is unique among this group for its small size, compact body and short abdomen, and wing venation including a relatively short anal vein and R_{4+5} and M_{1+2} meeting well before the wing tip. We have seen no other species with this combination of characters. We could not examine the types of the other three species because they were destroyed during World War II, but the descriptions of these species do not suggest a relationship to *H. scutellata*. We thus restrict the name *Hemichaeta* to *H. scutellata*, and leave the remaining species in the large, poorly defined genus *Poecilotylus*.

Material and methods

Male and female terminalia were examined after clearing abdomens (entire abdomen of male, oviscapae only of females) in hot 10% KOH solution and subsequent neutralization in glacial acetic acid. Cleared structures were preserved in glycerin and pinned below specimens in microvials.

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APPENDIX 1. Species formerly included in *Poecilotylus* (*Hemichaeta*), now treated as *Poecilotylus*.

- Mimegralla landrocki* Czerny, 1932:297. Type-locality: Brazil, Sao Paulo, Alto da Serra
- Grallomyia quinque maculatus* Czerny, 1932:283. Type-Localitiy: Costa Rica, San Jose.
- Poecilomyia similis* Hennig, 1934: 104. Type-locality: Brazil, Sao Paulo, Alto da Serra.