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PHAENOCHITONIA PSEUDODEBILIS (LEPIDOPTERA: RIODINIDAE): FIRST DESCRIPTION OF THE FEMALE AND UPDATED GEOGRAPHIC DISTRIBUTION

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Phaenochitonia Stichel, 1910 (Riodinidae: Symmachiini) contains 7 species distributed on Neotropics, and they are easily confounded with species of *Comphotis* (Incertae Sedis section) but can be distinguished by the presence of concealed androconial scales in the abdominal tergites of the males (an exclusive character of Symmachiini) and the Sc vein not fused with R_1 (Hall & Willmott 1996; Callaghan & Lamas 2004). The females, usually with orange or red transverse bands on the forewings or on both wings, are very different from the males which possess red markings traversing both wings or restricted to the inner margins of the hind wings (Hall & Willmott 1996).

Phaenochitonia pseudodebilis Hall & Willmott, 1996 was described based on a single male specimen from Cuiabá - River System, Mato Grosso, Brazil (Hall & Willmott 1996). Since then, the female of *P. pseudodebilis* has been unknown. Here we provide the first description of the female of *P. pseudodebilis* and an update on its geographical distribution, which until now was known only from its type locality.

DESCRIPTION OF *PHAENOCHITONIA PSEUDODEBILIS* FEMALE

Description (Figs. 1 and 2): Forewing length 7 mm. Ground color of dorsal and ventral surfaces dark brown with an orange transverse band on both wings. The basal area of both wings on ventral surface with general spot pattern similar to male. Abdomen entirely brown, different from that of the male, which has a red stripe on dorsum. Female genitalia: sterigma formed by a rectangular lamella antevaginalis and an inverted U-shaped postvaginalis lamella; ductus bursae thinned, with apical third sclerotized and about three times length of bursa copulatrix; bursa copulatrix totally membranous, with a hook-shaped signum dorsally.

REMARKS ON THE DISTRIBUTION OF *PHAENOCHITONIA PSEUDODEBILIS*

The only known record of *P. pseudodebilis* was from its type locality, Cuiabá - River System, Mato

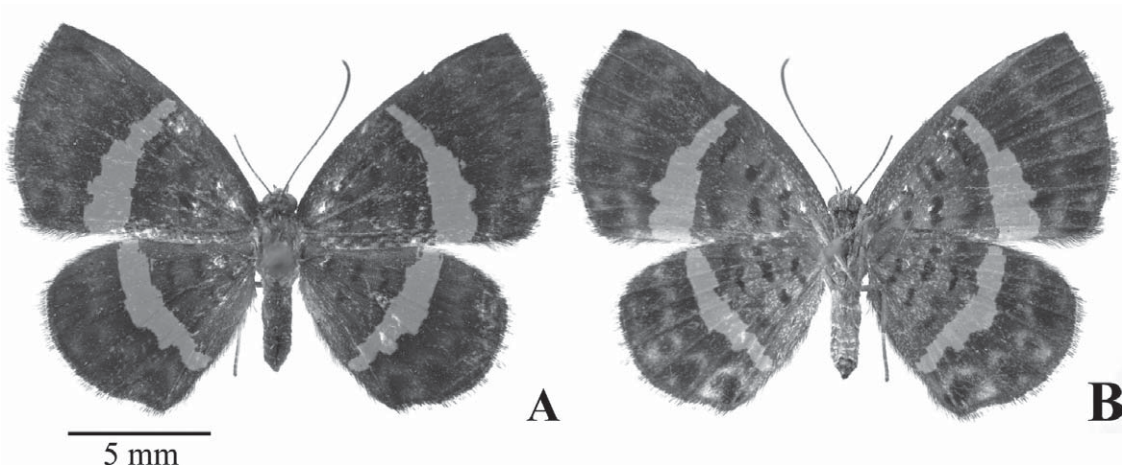


Fig. 1. Female of *Phaenochitonia pseudodebilis* Hall & Willmott, 1996: A, dorsal view, and B, ventral view.

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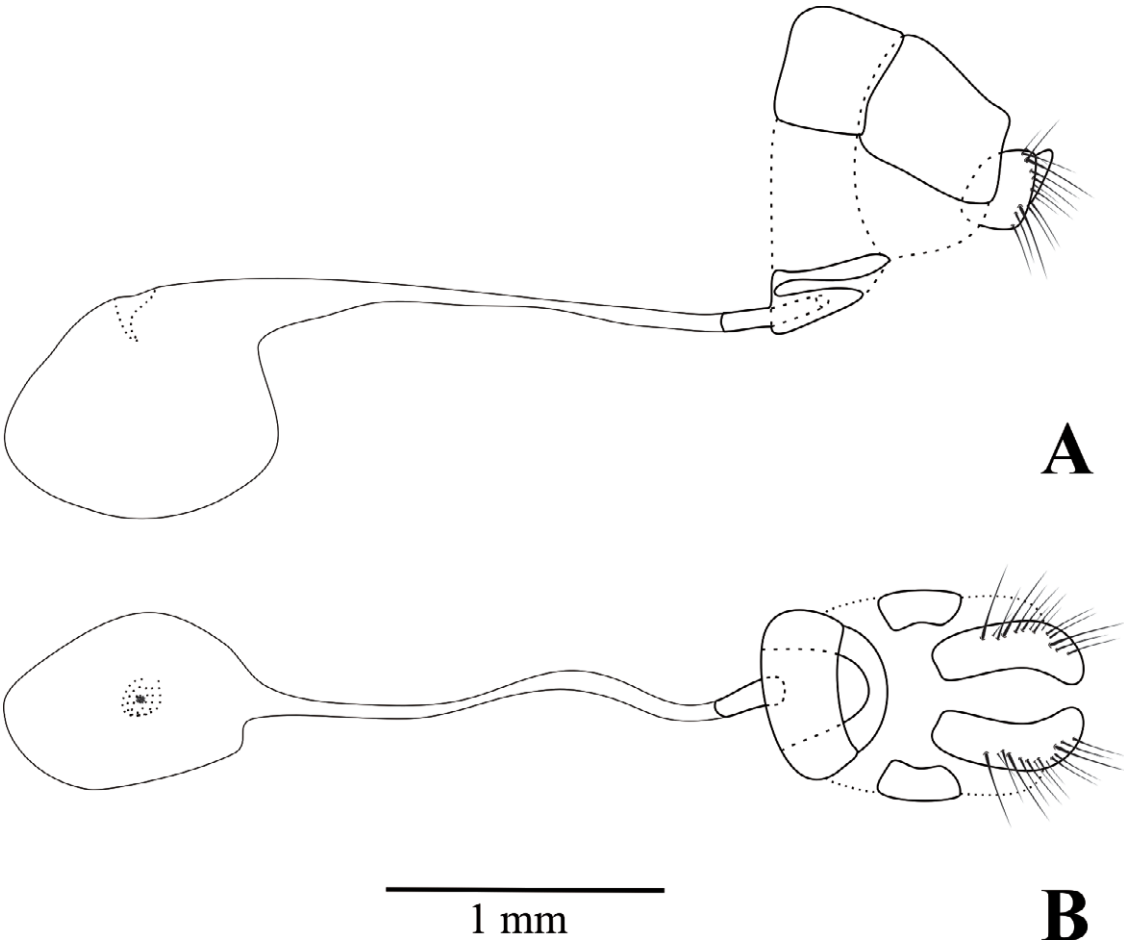


Fig. 2. Female genitalia of *Phaenochitonia pseudodebilis* Hall & Willmott, 1996: A, lateral view, and B, ventral view.

Grosso, Brazil. However, by the examination of the Riodinidae deposited in the Collection of Entomology Padre Jesus Santiago Moure, Department of Zoology of the Federal University of Paraná (DZUP), 13 specimens of *P. pseudodebilis* collected in the 1970s at Alto Rio Arinos, Diamantino, Mato Grosso, were identified. Later, in the 1990s, 5 males and 1 female were also observed and collected in gallery forests about 18 km from Ribeirão Cascalheira, which is 530 km northeast of Diamantino. The individuals were always associated with a gallery forest, a humid forest characteristic of the Cerrado (Brazilian savanna) vegetation.

The Cerrado domain has a heterogeneous physiognomy, ranging from open areas to dense forests, and is highly threatened due the loss of many of its native areas (Myers et al. 2000). The gallery forests play an key role in the maintenance of diversity of the Lepidoptera of the Cerrado (Camargo 2001; Brown & Giffordi 2002; Scherrer et al. 2013), which underscores the importance of preserving these habitats.

The records of *P. pseudodebilis* are scarce, as are those of many other butterflies that occur in the Cerrado biome. Thus it is important to emphasize the need to intensify the development of well-sampled inventories of butterflies in the Cerrado domain, as well as in the transitional areas between the Cerrado and Amazonia. Probably new records of *P. pseudodebilis* will be revealed as new inventories are performed in this area, enabling a better assessment of its distribution and its conservation status.

Material Examined

BRAZIL – *Mato Grosso:* Diamantino - Alto Rio Arinos, S 14° 24' -W 56° 25', Faz. S. João, 28-VIII-1976,1 male, Mielke & Furtado *leg.*, DZUP

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26.492 (DZUP). 15-I-1978, 1 female, Mielke & Furtado *leg.*, DZUP 26.489 (DZUP). 16-I-1978, 1 male, Mielke & Furtado *leg.*, DZUP 26.493 (DZUP). 17-I-1978, 1 male and 1 female, Mielke & Furtado *leg.*, DZUP 26.494, DZUP 26.495 (DZUP). 20-I-1978, 1 male and 1 female, Mielke & Furtado *leg.*, DZUP 26.496, DZUP 26.490 (DZUP). 3-IX-1978, 6 males, Mielke & Furtado *leg.*, DZUP 26.497, DZUP 26.498, DZUP 26.499, DZUP 26.500, DZUP 26.501, DZUP 26.502 (DZUP). *Ribeirão Cascalheira:* 11-18 KM N Ribeirão Cascalheira, S 12° 56' -W 51° 49', 21-23-VIII-1997, 5 males and 1 female, Mielke *leg.*, DZUP 26.503, DZUP 26.504, DZUP 26.505, DZUP 26.506, DZUP 26.507, DZUP 26.508 (DZUP).

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Summary

Phaenochitonia pseudodebilis Hall & Willmott, 1996 (Lepidoptera: Riodinidae) was described based on a single male specimen from Mato Grosso State, Brazil. Here we provide the first description of the female of *P. pseudodebilis* as well an update on its geographical distribution

Key Words: Cerrado, *Comphotis,* concealed androconial scales, Neotropical, Symmachiini

Resumo

Phaenochitonia pseudodebilis Hall & Willmott, 1996 (Lepidoptera: Riodinidae) foi descrita com base em um único exemplar macho proveniente do estado de Mato Grosso, Brasil. O objetivo deste estudo é descrever pela primeira vez a fêmea de *P. pseudodebilis* bem como fornecer novos registros de ocorrência da espécie.

Palavras-Chave: Cerrado, *Comphotis,* escamas androconiais ocultas, Neotropical, Symmachiini

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