TROPICAL LEPIDOPTERA, 10(1): 19-24

TWO NEW SPECIES AND ONE SUBSPECIES OF RIODINID FROM SOUTHWEST BRAZIL (LEPIDOPTERA: RIODINIDAE)

JASON P. W. HALL[1] AND EURIDES FURTADO[2]

[1]Dept. of Entomology and Nematology, University of Florida, Gainesville, Florida 32611, USA; and
[2]Caixa Postal 97, 78400-000 Diamantino, Mato Grosso, Brazil

ABSTRACT.– Two new species and one subspecies in the riodinid genera *Xenandra* C. & R. Felder, 1865, *Argyrogrammana* Strand, 1932, and *Pachythone* Bates, 1868, are described from Mato Grosso and Rondônia states in south-west Brazil. The symmachiine species *caeruleata* Godman & Salvin, 1878, is transferred to the genus *Esthemopsis* C. & R. Felder, 1865, from *Xenandra* (**stat. rev.**).

KEY WORDS: Amazon, androconia, *Argyrogrammana*, ***Argyrogrammana talboti naranjilla*** n. ssp., Bolivia, Dioptinae, Ecuador, *Esthemopsis*, Guianas, Leguminosae, Mato Grosso, *Mesene*, *Mesenopsis*, Neotropical, *Pachythone*, ***Pachythone analuciae*** n. sp., Peru, Proteaceae, Rondônia, Sapindaceae, *Stichelia*, Symmachiini, taxonomy, *Xenandra*, ***Xenandra mielkei*** n. sp.

The purpose of this paper is to describe three new riodinid taxa in the genera *Xenandra* C. & R. Felder, 1865, *Argyrogrammana* Strand, 1932, and *Pachythone* Bates, 1868, to facilitate the compilation of butterfly checklists for the Alto Rio Arinos area of Diamantino in Mato Grosso state, Brazil (EF), and Ecuador (JPWH). P. J. DeVries, as the co-discoverer of the new *Pachythone* species, is included as an author on that taxon. All of the unstarred collections listed in Hall (1999) have been examined for relevant types and additional material of the taxa described here. The following collection acronyms are used throughout the text:

AMNH American Museum of Natural History, New York, USA
BMNH (British) Natural History Museum, London, England
EF Eurides Furtado collection, Diamantino, Mato Grosso, Brazil
PJD Philip J. DeVries collection, Eugene, Oregon, USA
UFPC Universidade Federal do Paraná, Departamento de Zoologia, Curitiba, Paraná, Brazil
USNM United States National Museum, Smithsonian Institution, Washington, USA

Xenandra mielkei Hall & Furtado, **n. sp.**

Fig. 1a-d; 4a-c

Description.– MALE: forewing length 15.5mm. Forewing costal margin shallowly convex towards base, distal margin strongly convex; hindwing angular, tornus pointed. *Dorsal surface*: forewing ground color dark brown; dark orange-red at very base of anal margin and along vein at lower edge of discal cell, becoming slightly broader in postdiscal region and extending to base of veins Cu_1 and M_3 and along discal cell end; fringe brown. Hindwing ground color dark brown, pale brown at very base of wing; large patch of dark orange-red extends from costal margin to a point in middle of cell 2A two-fifths distance from base to wing margin, and then as a semicircle to apex, small area of dark orange-red scaling in lower middle portion of cell 2A; long orange-brown, erectile, androconial setae along medial region of cell 2A extend towards anal margin; fringe brown. *Ventral surface*: ground color of both wings dark brown, paler brown at anal margin of forewing; orange-red dorsal pattern very faintly visible. *Head*: first and third segments of labial palpi brown, dorsal surface of second segment brown, ventral surface orange; third segment very short. Eyes brown and bare, margins with orange scaling. Frons orange. Antennal segments and tubular clubs entirely black. *Body*: both surfaces of thorax black, patagia orange. Dorsal surface of abdomen black, sides and ventral surface of distal half orange, except for narrow medial black line. A broad band of concealed androconial scales with a small gap dorsally on upper half of abdominal tergites 4 and 5 (Fig. 4c) (see Harvey, 1987, and Hall & Willmott, 1996a, for SEM illustrations of this scale type). All legs brown. *Genitalia* (Fig. 4a,b): uncus rounded at lower posterior corner, produced into point at dorsal tip; tegumen triangular with large rectangular lightly sclerotised region anteriorly; falci of medium size and width; vinculum a narrow ribbon, produced into broad, short saccus ventrally; valvae consist of well sclerotised lower portion produced into a single rounded point, and a more lightly sclerotised upper portion encircling aedeagus and produced into a rounded lobe; aedeagus of even width and slightly downwardly pointed, anterior opening directed ventrally, posterior opening directed ventrally and to right with tip curled inwards; a single large cluster of hair-like cornuti; pedicel large and well sclerotised, produced into a pronouncedly rounded posterior curve.

FEMALE: forewing length 15.5mm. Wing shape similar to that of male but both wings more narrow. *Dorsal surface*: forewing ground color brown; yellow longitudinal stripe extends and broadens from wing base to near distal margin, encompassing lower half of discal cell, upper basal half of cell 2A, and basal two-thirds of cells Cu_2 to M_3 (some brown scaling at upper edge of latter cell); fringe brown. Hindwing ground color brown; yellow longitudinal stripe extends and broadens from wing base to near distal margin, encompassing lower half of discal cell, upper basal half of cell 2A, basal half of cell Cu_2, and basal three-quarters of cells Cu_1 and M_3 (some brown scaling at upper edge of latter cell); costal and distal fringes brown, anal fringe yellow. *Ventral surface*: differs from dorsal surface in following respects: yellow scaling present on forewing as a band along base of costa and as a small fleck in tornus, and on hindwing as two small yellow spots at wing base above discal cell. *Head*: labial palpi a mixture of yellow and brown scaling on all segments. Eyes brown and bare, margins with yellow scaling. Frons yellow. Antennal segments and tubular clubs entirely black. *Body*: thorax brown with yellow scaling posteriorly at sides on dorsal surface and as a spot at middle of sides on ventral surface; patagia brown. Dorsal surface of abdomen brown, remainder yellow except for narrow medial brown line at sides and on ventral surface. All legs yellow-brown.

Types.– *Holotype* ♂: BRAZIL.– *Mato Grosso*, Alto Rio Arinos, nr. Diamantino, 400m, 2 Nov 1989 (E. Furtado); to be deposited in the USNM.

Allotype ♀: BRAZIL.– *Mato Grosso*, Alto Rio Arinos, nr. Diamantino, 400m, 24 Nov 1991 (E. Furtado); to be deposited in the USNM. *Paratypes*: BRAZIL.– *Mato Grosso*, same locality data as HT: 1 ♂: 18 Dec 1975; 1 ♂: 6 Oct 1990; 1 ♂: 21 Oct 1990; 1 ♂: 28 Oct 1990; 1 ♀: 5 Oct 1980; 1 ♀: 20 Oct 1998 (all E. Furtado); all in the EF. 1 ♂: 2 Nov 1989; 1 ♀: 21 Jul 1992 (both E. Furtado); to be deposited in the UFPC.

Etymology.– This species is named in honor of our friend, the eminent Brazilian lepidopterist, Olaf H. H. Mielke.