A NEW AUTOMERELLA FROM SOUTHEASTERN BRAZIL
(LEPIDOPTERA: SATURNIIDAE: HEMILEUCINAE)

CLAUDE LEMAIRE1 AND CARLOS G. C. MIELKE2

ABSTRACT. — Automerella miersi Lemaire & C. Mielke, n. sp., is described from the state of Santa Catarina in southeastern Brazil. It is known only from the female which differs from its closest relative, Automerella flexuosa (R. Felder and Rogenhofer) by its much smaller size and the hypertrophy of the discal spot of the forewing. The female holotype is illustrated in color, female genitalia are figured and taxonomic relationship is discussed.

RESUME. — Automerella miersi Lemaire et C. Mielke sp. n. est decrit de l'état de Santa Catarina au sud-est du Bresil. La femelle, seule connue, diffère de celle de l'espèce la plus proche, Automerella flexuosa (R. Felder et Rogenhofer) par sa taille très inférieure et par l'hypertrophie de la tache discocellulaire des ailes antérieures. L'holotype femelle est illustré en couleur et l'armature génitale femelle est figurée; la position taxonomique de l'espèce nouvelle est indiquée.

KEY WORDS: Argentina; Automerella miersi n. sp.; Automeris; distribution; genitalia; Hyperchiria; Molippa; Neotropical; South America; taxonomy.

Automerella was proposed as a subgenus of Automeris for flexuosa R. Felder and Rogenhofer (originally in Hyperchiria) by Michener (1949); a second species, Automeris rubrcunda Schaus (a junior subjective synonym of aurora Maassen and Weyding) was included by Michener (1952) in Automerella; this was raised to full generic rank by Lemaire (1973). The most distinctive traits of the genus are the presence of very long lanceolate scales interspersed in the vestiture of the meso- and metathorax, the abdomen (at least in female) black, dorsally ringed with yellow or light gray, the anterior apical angle of hindwing strong and slightly produced, the costa of the hindwing straight or concave and the pericellular area usually pink. The lanceolate scales on the upperside of the thorax, the habitus and the structure of the male genitalia are suggestive of closer relationship with Molippa than with Automeris, although the larva of A. flexuosa, illustrated by Lemaire (1971: PI 1, Fig. 1, 2), unexpectedly resembles those of some Automeris of the species-group of A. cecrops Boisduval (e.g., Automeris naranja Schaus).

Automerella species are endemic to southeastern Brazil with probably an extension of the range to adjacent Argentina.

Automerella miersi Lemaire and C. Mielke, new sp.

Diagnosis. — This new species is by far the smallest of the genus; based on female phenotype, it is nearer A. flexuosa than A. aurora, with its most distinctive feature the very large dark brown discal spot of the forewing.

Description. — Wingspan: 45-7mm. Forewing length: 24-26 mm.

FEMALE (Fig. 1-2): Antennae dark orange, shortly bidentate, each tooth provided with one or two apical bristles. Frons and labial palpi dark brown; thorax dark brown, dorsally interspersed with long yellowish lanceolate scales; legs dark brown, clothed with pinkish scales on the tarsi; abdomen black, dorsally banded with light gray, anal tuft light gray. Forewing (dorsal): moderately elongate, not apically produced; ground color brown, shaded with light gray, almost uniformity brown on the antemedian area; antemedial line whitish, extremely irregular; postmedial line dark brown, bordered proximally with white, distally with yellow, luminate between the costa and M3, and from there slightly sinuate to outer two-thirds point of the inner margin; submarginal band dark brown, distally bordered with whitish and forming two distinct lobes between Calb and M3; discal spot very large, dark brown, distally broadly and irregularly lobed, narrowly surrounded with white; fringes black dotted with white at the ends of the veins; venation accented with yellow on the postmedian area. Hindwing (dorsal): costa moderately concave, apex strongly angulate, slightly produced; basal median area pink.
becoming dark grayish under the costa and along the anal margin; postmedial line black, tending to vanish between the costa and M1; submarginal band as above but less in contrast to the terminal area; fringes black with some white dots at the ends of the veins; venation accented with yellow on the distal half of the median area and on the postmedial area. Hindwing (ventral): ground color more uniformly dirty gray than on forewing; discal spot a tiny white streak (eyespot of upperside more or less showing through); postmedial line and submarginal band black, the former very irregular, very faint; fringes whitish.

Female genitalia (Fig. 3): slightly smaller structure than in A. flexuosa; genital plate circumvaginal, bilobed, laterally connected to eighth tergum by a narrow sclerotized ribbon; ductus bursae membranous very short; corpus bursae narrow, about one and one-half as long as the anapophyses; ductus seminalis arising from right-hand side of base of bursa.

Immature stages. - Unknown.


Etymology. - Automerella miersi is named for Herbert W. Miers who collected the type material with the junior author at Urubici, Santa Catarina.

Distribution. - The new species is known only from Urubici, near Lages and São Joaquim, Santa Catarina. It is very likely endemic to southeastern Brazil.

Remarks. - Automerella miersi can be very easily separated from the two previously known Automerella, especially from its most closely relative A. flexuosa, by the indicated above characters. Based on the non-collecting of males, there is a remote possibility that this species is diurnal.

LITERATURE CITED

Lemaire, C.


Michener, C. D.