Description of a new *Automeris* from Bolivia (Lepidoptera: Saturniidae, Hemileucinae).

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Abstract: A new *Automeris* species is described from Bolivia. ***A. sylviae* new species** is closely related to *A. duchartrei*, from which it differs by the ornamentation and colour pattern of the wings. It is probably a low elevation Andean forest species. The holotype ♂ will be deposited in the Muséum national d'Histoire naturelle of Paris, France.

Résumé: Un nouvel *Automeris* est décrit de Bolivie. ***A. sylviae* nov. species** est proche de *A. duchartrei* dont il diffère morphologiquement par l'ornementation et la couleur des ailes. Il s'agit probablement d'un représentants de la faune des forêts andines de basse altitude. L'holotype ♂ est déposé au Muséum national d'Histoire naturelle de Paris, France.

Resumen: Se describe un nuevo *Automeris* boliviano. ***A. sylviae* nov. species** es cercano de *A. duchartrei* del cual se distingue por la ornamùentación y el colour de las alas. Esa especie pertenece probablemente a la fauna silvatica de la cordillera andina de baja altura. El holotipo ♂ de depositara en el Muséum national d'Histoire naturelle de Paris, Francia.

Zusammenfassung: Eine neue *Automeris*-Art aus Bolivien wird beschrieben. ***A. sylviae* nov. species** ist eine nahe Verwandte von *A. duchartrei*, von der sie sich durch Details in der Flügelzeichnung und die Färbung unterscheidet. *A. sylviae* ist wahrscheinlich ein Bewohner der Flachlandwälder der Anden. Der Holotypus wird in das Muséum national d'Histoire naturelle in Paris, Frankreich gelangen.

Key Words: Andes, Bolivia, *Automeris sylviae*, new species, taxonomy, Neotropical entomofauna.

Introduction

The genus *Automeris* HÜBNER, 1819 ("1816") is a morphologically rather homogeneous group, mostly characterized by the cryptic leaf-like pattern of the forewings and the presence of a large eyespot on the hindwing upperside. The genus is the most diversified of Hemileucinae, with, to date, about 135 described species (LEMAIRE 1996, LEMAIRE 2002). Although chiefly neotropical, it is distributed throughout the New World from Canada to Argentina, and can be found in a wide range of habitats from savannas and dry woodlands to evergreen forests and high altitude cloud forests.

About 35 species of *Automeris* are actually known from Bolivia, where they occur in a wide variety of biotopes from the North to the South of the country (DECAËNS et al. unpublished data). Most species (about 20) are present in the North-East of the country, where the dominant habitats are low-elevation Andean forest, Amazonian rain-forest and flooded savannas. The species described in this paper was collected in this region, at the foothills of the Cordillera.

Automeris sylviae DECAËNS, new species

Holotype: ♂ Bolivia, Beni department, province of General José Ballivian, Rurrenabaque, 380 m, xi 1991, UV light, leg. G. Lecourt and T. Decaëns in coll. T. Decaëns (genitalia perp. T. Decaëns # 02).

Paratypes: 2 ♂♂, same data as holotype, in coll. T. Decaëns (genitalia prep. T. Decaëns # 03); 1 ♂, Bolivia, La Paz department, province of Iturralde, Ixiamas, 310 m, vi 1991, UV light, leg. G. Lecourt and T. Decaëns in coll. T. Decaëns.

Type deposition: The holotype will be deposited in the Muséum national d'Histoire naturelle of Paris, France (donation # 1085). Paratypes will remain in the author's collection.

Etymology: This species is named in honor of Sylvie Colas, the so kind wife of G. Lecourt, for her valuable support in most of the collecting trips the author and them made in Bolivia.

Description: Wingspan: ♂ 79–82 mm.

♂ (figs. 1–5). Head: Antennae yellow brown, with a sharp asymmetry and reduction of the pectination in the 12 apical segments of the flagella. Front and labial palpi brownish covered with reddish scales on their ventral side. Body: Legs brown; dorsal side of the thorax dark brown, bottom of the body and abdomen orange brown. Forewings: Length 41–42mm; sharp and slightly prominent apex; straight external edge; dorsal background colour brown, rather homogenous although slightly suffused with pink scales on the subapical triangle; both lines rather fine, black, bordered with beige on their facing edges, the postmedial slightly subapical (5–6 mm), straight or slightly convex, the antemedial angulate, largely oblique when reaching the anal edge; median band diffuse; discal spot dark brown, rectangular and elongated; submarginal band wavy, reduced to a fine strip between M3 and the apex, clearly contrasting with the darker marginal area; underside reddish brown (fig. 2); postmedial line, fringe and apical part of the submarginal band black and contrasting; discal spot brown, marked with a white point in its center and bordered with a wide black margin. Hindwings: periocellar area orange brown; eyespot large, quite distant from the postmedial line, successively bordered by a large black ring, then by a yellow and a black one; small pupilla (2–3mm), crossed by a white discocellular line; iris brown; postmedial line black, lunulate, with both edges bordered with yellow, then with dark brown; submarginal band lunulate, marginal band with a light zone on its proximal margin; underside reddish brown; postmedial line black; discal spot present as a white point; submarginal band distally suffused with black scales.

♀. Unknown.

♂ **genitalia** (figs. 12 & 13). Structure similar to those of *Automeris duchartrei* BOUVIER, 1936 (Lemaire 1971, 2002): uncus apically sclerotized and terminated by a simple and rounded protuberance; valves large and wide, of equal posterior development as the uncus, apical process medium-sized, harpes sclerotized and well developed; gnathos with a sharply sclerotized median plate; juxta large and profoundly concave with protruding and sclerotized lateral edges.

Immature stages: Unknown.

Distribution: *A. sylviae* is known from the two typical localities, located on the Oriental foothills of the Andean Cordillera. This area is covered by evergreen tropical rain forest (fig. 6), which constitutes a small band bordered to the west by Andean forests and to the east by the flooded savannas of the Llanos of Moxos. It may be seen as an ramification of the Amazonian forest, which extend to the south of the country up to Santa Cruz de la Sierra. This new species thus should belong to the Amazonian fauna, although its presence in the nearby Brazilian states needs to be confirmed, or more likely to the South Andean fauna which comprise a number of endemics restricted to the Carabaya Cordillera (South-Eastern Peru) and the north of Bolivia.

Diagnosis: Within the group of *Automeris hamata* SCHAUS 1906 (Lemaire, 1971), *A. sylviae* is closely related to *A. duchartrei* (figs. 7–11). It is however easily distinguished due to a few morphological attributes that were particularly constant among all the specimens of the typical series (Table 1).

Colour figs. 1–11:

Fig. 1: *Automeris sylviae* new species, holotype ♂ (dorsal, wingspan 78 mm).

Fig. 2: *A. sylviae* new species, holotype ♂ (ventral).

Figs. 3–5: *A. sylviae* new species, paratypes ♂♂ (dorsal).

Fig. 6: light trapping in the evergreen forest of Rurrenabaque (Bolivia, Beni department).

Fig. 7: *A. duchartrei* ♂, typical morph (dorsal, wingspan 86 mm) (Bolivia, La Paz department, province of the Nor Yungas, Carrasco, 1300m, UV light, ii 1990, leg. G. Lecourt in coll. T. Decaëns).

Fig. 8: same specimen ♂ ventral.

Fig. 9: *A. duchartrei* ♂ (dorsal, wingspan 67 mm) (Colombia, Meta department, research station of Carimagua, 170m, public light, iv 1995, leg. T. Decaëns in coll. T. Decaëns).

Fig. 10: *A. duchartrei* ♂, morph with contrasting black lines (dorsal, wing-span 72 mm) (Bolivia, Beni department, province of General José Ballivian, Yucumo, 600m, UV light, xii 1991, leg. T. Decaëns & G. Lecourt in coll. T. Decaëns).

Fig. 11: *A. duchartrei* ♂, light morph (dorsal, wingspan 85 mm) (Bolivia, La Paz department, province of Iturralde, Ixiamas, 310 m, UV light, xi 1991, leg. T. Decaëns & G. Lecourt in coll. T. Decaëns).

Genitalia drawings (figs. 12-13):

Figs. 12: *Automeris sylviae* new species, holotype ♂ genitalia, ventral view, aedeagus removed (gen. Prep. T. Decaëns # 02).

Fig. 13: lateral view of the aedeagus.

Decaens-Automeris

The constancy of the ornamentation and colour pattern of *A. sylviae* is quite remarkable, and singularly contrasts with the polymorphism observed in *A. duchartrei*. This gives a congruent scientific evidence that confirms the validity of this new species. The presence of two different species with similar genitalia is not an exception within the Saturniidae family (Lemaire 1978, 2002), and several examples may be found inside the *Automeris* genuswith morphologically similar pairs of species, e.g. *A. janus* (CRAMER, 1775) and *A. exigua* LEMAIRE, 1977, *A. illustris* (WALKER, 1855) and *A. amoena* (BOISDUVAL, 1875) or *A. cinctistriga* (R. FELDER, 1874) and *A. midea* (MAASSEN, 1885). The possibility of considering *A. sylviae* as a sub-species of *A. duchartrei* was dismissed because both species were sympatric in the typical localities, the latter being dominant in term of abundance.

Table 1. Morphological differences between *A. sylviae* new species and *A. duchartrei*.

External characters	***A. duchartrei***	***A. sylviae* new species**
Antennae	Robust, slight reduction of the pectinations in the last 10 apical segments	Slender, sharp reduction of the pectinations in the last 12 apical segments
Forewings		
Apex	Not or slightly prominent	Sharp and prominent
Antemedian line	Not angulate	Angulate
Postmedial line	Straight or concave	Straight or convex
Background colour	Variable: grey brown to orange grey beige	Constant: brown
Discal spot	Homochromatic and not elongated	Darker and elongated
Hindwings		
Periocellar area	Vivid orange	Orange brown
Underside		
Background colour	Vivid orange	Reddish brown
Submarginal bands and postmedial lines	Orange brown, somewhat diffuse	Black,wharply marked

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