

A new *Hylesia* from Guatemala (Lepidoptera: Saturniidae, Hemileucinae)

Claude LEMAIRE¹, Kirby L. WOLFE², and José MONZÓN S.

Dr. Claude LEMAIRE, La Croix des Baux, F-84220 Gordes, France; email: Lemaire.C@wanadoo.fr

Kirby L. WOLFE, 3090 Cordrey Drive, Escondido, California 92029, U.S.A.; email: kirwolfe@pacbell.net

José MONZÓN S., Laboratorio de Entomología Sistemática, Universidad des Valle de Guatemala, Apartado Postal 82, 01901 Guatemala; email: jmonzon@uvg.edu.gt

Abstract: *Hylesia hawksi* n. sp. is described from Guatemala, Huehuetenango Department, where the four known specimens, all males, were collected by José MONZÓN SIERRA at km 353 from Guatemala City on the road from Huehuetenango to Aguacatán, at 2000 m elevation. General comments on the genus *Hylesia* HÜBNER [1820] are given. The new species belongs to the small Central American subgroup of *Hylesia* that is characterized by the presence, at least in the male, of an eye-like discal spot with a red iris on the upper surface of the hindwing. The specific characters of *Hylesia hawksi* n. sp. are indicated, the male is illustrated in color and the male genitalia are figured. The male holotype is deposited in the collection of the Muséum national d'Histoire naturelle, Paris.

Key words: Guatemala, Hemileucinae, *Hylesia hawksi*, new species, Saturniidae, taxonomy.

Un *Hylesia* nouveau du Guatemala (Lepidoptera: Saturniidae, Hemileucinae)

Résumé: *Hylesia hawksi* n. sp. est décrit du Guatemala, Département Huehuetenango, où les quatre spécimens connus, tous des mâles, ont été récoltés par José MONZÓN SIERRA entre Huehuetenango et Aguacatán, km 353 NE de Guatemala City, alt. 2000 m. La description est précédée de considérations générales sur le genre *Hylesia* HÜBNER [1820]. L'espèce nouvelle appartient au sous-groupe centraméricain d'*Hylesia lineata* DRUCE 1886, reconnaissable à la présence, au moins chez le mâle, d'un tache discocellulaire à iris rouge sur la face dorsale des ailes postérieures. Le mâle et l'armure génitale mâle sont figurés. L'holotype est déposé dans la collection du Muséum national d'Histoire naturelle, Paris.

Una *Hylesia* nueva de Guatemala (Lepidoptera: Saturniidae, Hemileucinae)

Resumen: Se describe *Hylesia hawksi* n. sp. de Guatemala, Departamento de Huehuetenango, donde los cuatro ejemplares conocidos, todos machos, fueron colectados por José MONZÓN SIERRA al km 353 de la ciudad de Guatemala en el camino de Huehuetenango a Aguacatán, a 2000 m snm. Se hace comentario general sobre el género *Hylesia* HÜBNER [1820]. La nueva especie pertenece al pequeño subgrupo centroamericano de *Hylesia lineata* DRUCE 1886, reconocible por la presencia, por lo menos en el macho, de una mancha discocelular como ojo con iris rojo en la superficie dorsal del ala trasera. Se indican los caracteres específicos de *Hylesia hawksi* n. sp., se ilustra el macho en color y se figuran los genitales del macho. El macho holotipo está depositado en la colección del Muséum national d'Histoire naturelle, Paris.

Eine neue *Hylesia* von Guatemala (Lepidoptera: Saturniidae, Hemileucinae)

Zusammenfassung: *Hylesia hawksi* n. sp. wird von Guatemala, Departement Huehuetenango, beschrieben, wo die vier bekannten Exemplare (alles Männchen) von José MONZÓN SIERRA 353 km nordöstlich von Guatemala City auf der Straße von Huehuetenango nach Aguacatán auf 2000 m Höhe gefangen wurden. Einige allgemeine Anmerkungen zur Gattung *Hylesia* HÜBNER [1820] werden gebracht. Die neue Art gehört zur kleinen zentralamerikanischen Artengruppe um *Hylesia lineata* DRUCE 1886, die, zumindest beim ♂, gekennzeichnet ist durch einen augenähnlichen Zellschlußfleck mit roter Iris auf der Oberseite der Hinterflügel. Die Artmerkmale von *Hylesia hawksi* n. sp. werden beschrieben, das ♂ wird farbig abgebildet, die männlichen Genita-



Fig. 1: *Hylesia hawksi* n. sp., ♂ paratype, upperside (wingspan 40 mm). **Fig. 2:** *Hylesia hawksi* n. sp., ♂ paratype, underside. **Fig. 3:** *Hylesia lineata*, ♂ upperside (Costa Rica). **Fig. 4:** *Hylesia subaurea*, ♂ upperside (Mexico, Veracruz).

¹ Correspondant du Muséum national d'Histoire naturelle, Paris, France

² Research Associate, Natural History Museum of Los Angeles County, California, U.S.A.

lien werden dargestellt. Der ♂ Holotypus befindet sich im Muséum national d'Histoire naturelle, Paris.

Introduction

Hylesia HÜBNER [1820] with about 110 included species is the second largest genus of Hemileucinae after *Auto-meris*. It consists mostly of small moths, the markings of which are usually weak and devoid of significant characters; it is exclusively neotropical, ranging from Mexico to Bolivia and Argentina. Two basic groups are recognized in the most recent arrangement of the genus (LAMY & LEMAIRE 1983), depending on the number of tibial spurs: 0-2-3 (group I, ca. 70 species) or 0-2-4 (group II, ca. 40 species). A few species, all belonging to group I, deviate from the usual monotony of the habitus in having an eye-like discal spot on the upperside of the hindwing; they are assigned to three different subgroups: one South American (subgroup of *Hylesia nanus* (WALKER 1855), 3 species), two Central American, subgroup of *Hylesia gamelioides* MICHENER 1952 (one species) and subgroup of *Hylesia lineata* DRUCE 1886 (6 species, including the new one).

The genus is known for the severe dermatitis in man provoked by the urticating barbs among the hairs on the ♀ abdomen (LAMY & LEMAIRE 1983) with which the ♀ covers the egg mass after oviposition. The disease known as "Caripito itch" in Venezuela and "papillonite" in French Guiana was first recorded in 1912 (FLOCH & ABONNENC 1944) and since reported from Argentina (JORG 1933), Venezuela (ORFILA 1951), Surinam (HUDSON 1985), and Mexico (BEUTELSPACHER [1986]).

Hylesia hawksi n. sp.

Holotype: ♂, Guatemala, Huehuetenango Department, rd. Huehuetenango to Aguacatán, at km 353 from Guatemala City, el. 2000 m, 30 May 2000 (J. MONZÓN S.).

Paratypes: 3 ♂♂, same locality, date and collector as holotype.

The holotype is deposited in the collection of the Muséum national d'Histoire naturelle, Paris, France, two paratypes will remain in the collection of the Universidad del Valle, Guatemala City, Guatemala, and one paratype is deposited in the collection of Kirby L. WOLFE, Escondido, California, U.S.A.

Etymology: This species is named in honor of David HAWKS, who has greatly helped to further knowledge of Central American Saturniidae by contributing specimens and data to appropriate institutions and researchers, and providing pertinent literature to students of the Saturniidae in Guatemala and Honduras.

Description ♂ (Fig. 1): Wingspan: 37–42 mm, forewing length: 22 mm. Antennae dull yellow, quadripectinate (ca. 31 segments). Head gray, labial palpi three-segmented, dark brown; thorax gray, becoming black on the metathorax, legs grayish, tibial spurs number 0-2-3; abdomen dark gray, interspersed with yellow hair-like scales, anal tuft yellow. Forewing subtriangular, apex rounded, not produced, outer margin slightly convex;

ante- and postmedian areas grayish brown, median area dark brown, discal spot concolorous, ante- and postmedial lines concave, dark brown, bordered with light gray; submarginal band very faint, undulate, distally bordered with light gray. Outer margin of the hindwing convex, ground color smoky gray, lighter between the postmedial line and the submarginal band; these two markings black, convex; iris of the eyespot dull red, white pupil and outer black ring almost indistinct. Underside (Fig. 2) light grayish brown with an orange tinge on the forewing; the only markings on this side are a straight dark brown line on fore- and hindwing and a very vague rounded discal spot on the forewing.

♀: Unknown.

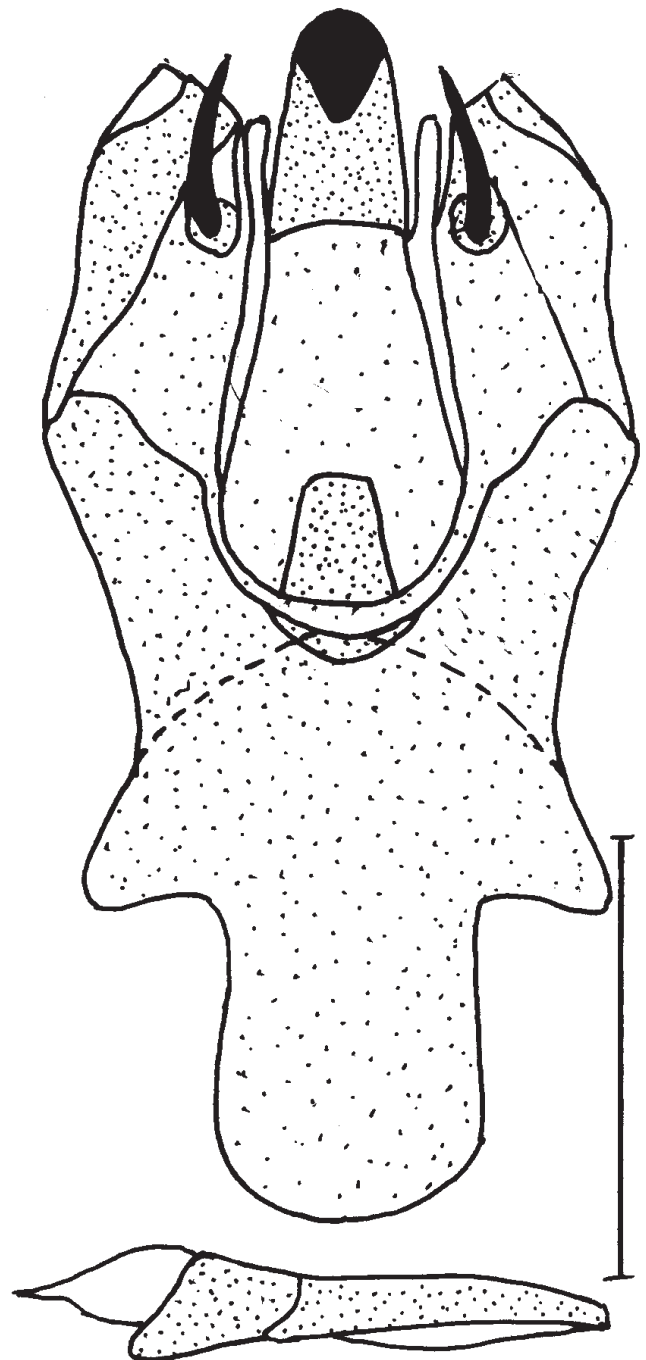


Fig. 5: *Hylesia hawksi* n. sp., ♂ genitalia. — Scale 1 mm.

♂ **genitalia** (Fig. 5): Armature typical of *Hylesia* species of group I. Eighth segment without differentiated sclerotization; eighth sternum bilobed. Uncus simple, down curved apically. Valves bilobed, sacculus hardly prominent and broadly fused with the costa; inner spine relatively long, strongly sclerotized, arising near the apex with base directed anteriorly and apical half curved posteriorly, projecting slightly above the uncus. Median plate of the transtilla broad, subtrapezoidal. Juxta membranous. Saccus very broad and anteriorly produced. Aedeagus straight, vesica without cornutus, bulbus ejaculatorius short.

Immature stages: Unknown.

Distribution: *Hylesia hawksii* is known only from the type locality, at 2000 m elevation. The biotope is dry pine-oak forest with pine predominant, oaks occurring only along small streams where the new species was collected (MONZÓN, pers. obs.).

Discussion

Five species were previously included (LAMY & LEMAIRE 1983) in the subgroup of *Hylesia lineata*: *H. lineata* (Fig. 3), *H. subaurea* SCHAUS 1900 (Fig. 4), *H. iola* DYAR 1913, *H. hubbelli* LEMAIRE 1982, and *H. bertrandi* LEMAIRE 1982. *Hylesia hawksii* is very closely allied to the three former from which it conspicuously differs by the contrastingly dark brown instead of concolorous median area of the forewing and by the loss or extreme reduction of the outer black ring of the eyespot on the hindwing. The outer margin of the hindwing is only softly (as in *H. iola*) instead of strongly (as in *H. lineata* and *H. subaurea*) angled at the apex of vein CuA1. On the underside the discal spot of the forewing is much less conspicuous than

in the three other species. As usual in group I of *Hylesia* there is no significant character in the male genitalia.

Acknowledgements

We thank CONAP for the legal research permits for working in Guatemala, and the Universidad del Valle de Guatemala and David HAWKS for support.

References

- BEUTELSPACHER-BAIGTS, C. R. ([1986]): Ciclo de la vida de *Hylesia frigida* SCHAUS (Lepidoptera: Saturniidae), una plaga forestal en Chiapas. — Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Seria Zoología **56** (1985): 465–476, 10 figs.
- FLOCH, H., & ABONNEC, E. (1944): Sur la papillonite guyanaise. Description du papillon pathogène: *Hylesia urticans*. — Institut Pasteur de Cayenne et du Territoire de l'Inini **89**: 1–7, 4 figs.
- HUDSON, J. E. (1985): Trial of yellow lamps for reducing plagues of itch moths in Suriname. — IPLE Lighting Journal **50**: 42–44.
- JORG, M. E. (1933): Nota previa sobre el principio activo urticante de *Hylesia nigricans* (Lepidoptera Hemileucidae) y las dermatitis provocadas por el mismo. — 8 Reunión de la Sociedad Argentina de Patología, Región del Norte (Buenos Aires) **3**: 1617–1635.
- LAMY, M., & LEMAIRE, C. (1983): Contribution à la systématique des *Hylesia*: étude au microscope électronique à balayage des “fléchettes urticantes” [Lep. Saturniidae]. — Bulletin de la Société entomologique de France (Paris) **88** (150ème anniversaire): 176–192, 5 figs., 3 tabs.
- ORFILA, R. N. (1951): Notas sobre Lepidoptera Saturnioidea 2. Una especie nueva de *Hylesia* (Hemileucid.) dermatitogena de Venezuela. — Publicaciones de la Misión de Estudio de Patología regional Argentina (Jujuy) **23**: 119–121, 1 fig.

Received: 23. v. 2001

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Nachrichten des Entomologischen Vereins Apollo](#)

Jahr/Year: 2001

Band/Volume: [22](#)

Autor(en)/Author(s): Lemaire Claude, Wolfe Kirby L., Monzón José

Artikel/Article: [A new Hylesia from Guatemala 171-173](#)