

A NEW *PARADIRPHIA* FROM CENTRAL AMERICA (LEPIDOPTERA: SATURNIIDAE: HEMILEUCINAE)

KIRBY L. WOLFE

3090 Cordrey Drive, Escondido, CA, 92029, USA

Field Associate, San Diego Natural History Museum, P.O. Box 1390, San Diego, California, 92112

ABSTRACT.— *Paradirphia rectilineata* n. sp. is described from the departments of Ocotepeque in northern Honduras and Metapán in northern El Salvador. It is distinctive from other members of the genus in having a well defined, straight postmedial line on the forewing, and does not appear to be closely related to other known species. It is a montane species associated with cloud forest. Male and female imagines are illustrated in color, their genitalia are figured, known distribution is indicated, and specific characters are discussed.

RESUMEN.— Se describe *Paradirphia rectilineata* sp. nov. de los departamentos de Ocotepeque en el norte de Honduras y Metapán en el norte de El Salvador. Se distingue de otros miembros del género por la línea postmedial recta y bien definida de la ala anterior, y no se muestra estrecho parentesco con otra especie. Es una especie montañesa asociada con el bosque neblinoso. Se ilustran a colores el imago de macho y de hembra, se figuran sus genitales, se indica su distribución conocida y se discuten sus caracteres específicos.

KEY WORDS: Bolivia, distribution, El Salvador, Guatemala, Honduras, Mesoamerica, Mexico, *Paradirphia rectilineata* n. sp., taxonomy.

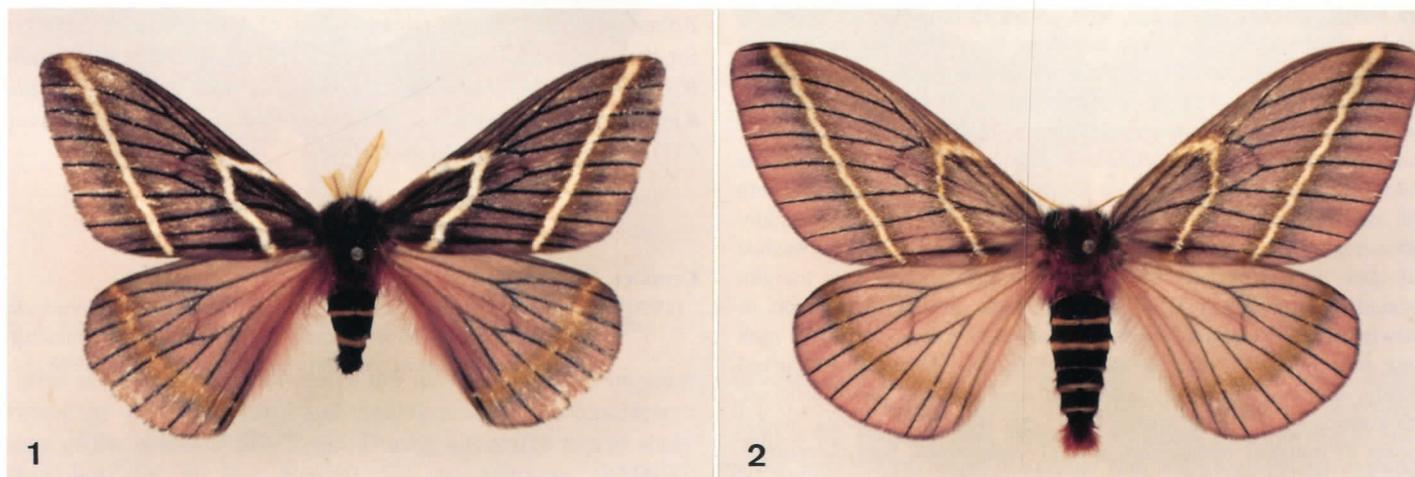


Fig. 1-2. *Paradirphia rectilineata* n. sp.: 1) holotype ♂ (wingspan 55mm); 2) allotype ♀ (wingspan 61mm).

Paradirphia Michener is restricted to the New World. It is represented by 15 or 16 species including the new one (Lemaire, pers. comm.), ranging from Mexico to Bolivia, and is mostly montane (Lemaire and Wolfe, [1990]). Members of the genus are characterized by typical lines on the upper surface of the forewing. The antemedial line is solid or interrupted, angular, bent sharply inward toward the costa, and the postmedial may be similar and quasiparallel or wavy and less defined. Until now there have been no species which display a well defined, straight postmedial line. Most species lack a discal spot. There is little sexual dimorphism.

This paper describes a distinctive new species of *Paradirphia* which possesses a vivid, straight postmedial line. In July and August of 1994, David C. Hawks, Guy P. Bruyey and Roberto Cordero collected in northern areas of Honduras and El Salvador.

They employed mercury vapor lights in cloud forests there for perhaps the first time, encountering a number of Saturniidae species previously unrecorded for those two countries. While examining their material, I found five specimens of this undescribed species.

Paradirphia rectilineata Wolfe, new sp.

Diagnosis.— This new species is not closely allied to any other *Paradirphia* species. Its small size, pinkish coloration and straight yellowish white postmedial line readily distinguish it from all other Saturniidae species.

Description.— Wingspan: ♂ 53-55mm, ♀ 61-65mm. No discal spots on wings. **MALE** (Fig. 1).— *Head:* Dark gray, pink dorsally; palpi dark gray. *Antennae* dull yellow, quadripectinate to the apex. *Thorax:* Dark

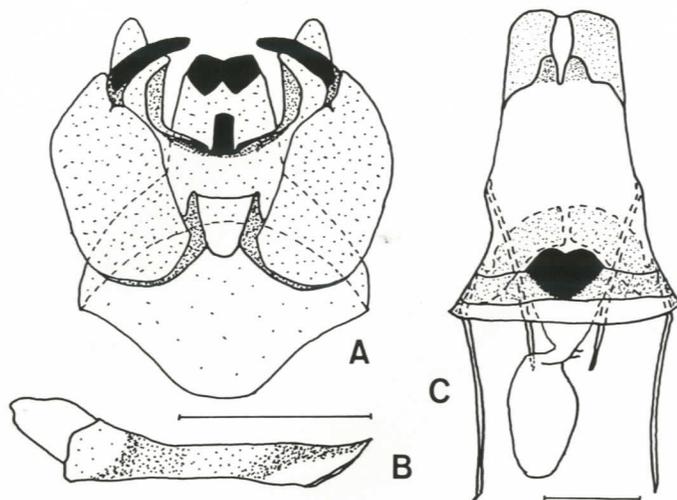


Fig. 3. *Paradirphia rectilineata* n. sp. genitalia: a) ♂, ventral view, aedeagus removed; b) Lateral view of aedeagus, c) ♀, ventral view.

pink, with a broad black middorsal line; tegulae dark gray to black interspersed with longer hairlike white scales. Legs dark gray shading to light gray on the tarsi, laterally and posteriorly densely scaled with long pink hairs; epiphyses large; no subapical spur on metathoracic leg. *Abdomen*: dorsally black, ringed with orange; ventrally brownish gray and black ringed with dark pink. *Forewing*: Length 28-29mm; above dark mauve, paler on the fringe, with yellowish brown on the proximal costal margin and in wide bands bordering the sharply defined creamy white ante- and postmedial lines; antemedial line slightly wavy, in two sections joining at a sharp angle at the anterior of the cell; postmedial line straight or almost imperceptibly wavy, terminating near the apex; veins contrastingly black. Underside of forewing brown, antemedial line white and postmedial blurred and broadly suffused with yellow, both with same trajectory as on upper surface; veins black, especially contrasting on the forewing. *Hindwing*: Above lighter mauve, washed with dark pink, especially on basomedian area and on anal margin; postmedial line dark yellow, blurred; veins black. Underside of hindwing and postmedial line colored as in forewing, with dark pink along anal margin. *Male genitalia* (Fig. 3): Uncus down-curved apically, simple, slightly notched at the apex. Valves broad, trilobed, with a strong curved spine arising from inner side of the valvula; medial process of transtilla rectangular, strongly sclerotized, bent posteriorly. Aedeagus straight, pointed, simple; vesica without cornuti, not produced; length of bulbous ejaculatorius about a third as long as aedeagus.

FEMALE (Fig. 2).—Forewing length 31-33mm. Antennae shortly bipectinate to the apex, yellow. Tibia of foreleg with long, slender epiphysis. Same markings as in male, but overall color lighter, more pink, less brown on forewing, resulting in ante- and postmedial lines less contrasting on upper and underside of wings. *Female genitalia* (Fig. 3): slight sclerotization of eighth sternum with postvaginal lamella widely cardiform and strongly sclerotized; sclerotization of eighth tergum bipartite; ductus bursae funnel-shaped; bursa ovoid, short; ductus seminalis arising dorsally on the right, close to ductus bursae; anapophyses and postapophyses of equal length.

Immature Stages.—Unknown.

Types.—*Holotype* ♂: Honduras, Ocotepeque Dept., El Güisayote Biological Reserve, elev. 2000m, 3 Aug 1994, D. Hawks, G. Bruyey, R. Cordero; *Allotype* ♀: same locality, data, and collectors;

Paratypes: 1 ♂, El Salvador, Metapán Dept., Montecristo-El Trifinio International Park, elev. ca. 2150m, 27 Jul 1994, D. Hawks, G. P. Bruyey, R. Cordero; 1 ♀, same data as paratype male; 1 ♀, same data as holotype ♂.

The holotype and allotype will be deposited in the National Museum of Natural History in Washington, one paratype ♂ and ♀ will be in the Muséum national d'Histoire naturelle, Paris, and one paratype female will remain in the author's collection.

Etymology.—This species is named for the straight postmedial line of the forewing.

Distribution.—This new species is known from only two localities near mountaintops at about 2000-2150m elevation in cloud forest of broadleaved trees and scattered pines in Ocotepeque Department of northern Honduras and in slightly drier cloud forest containing more pines in Metapán Department of northern El Salvador. It likely occurs on similar nearby mountaintops in Guatemala.

Flight Period.—The type series was collected from 27 July to 3 August 1994 using mercury vapor lights. All five specimens came to the light within one hour after dark. Further information regarding its flight period is not known.

Variation.—Very little difference in size and color was observed either in the male or female specimens.

Remarks.—Females were devoid of eggs, having previously oviposited.

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