A NEW *PSEUDODIRPHIA* FROM COSTA RICA AND PANAMA

(LEPIDOPTERA: SATURNIIDAE: HEMILEUCINAE)

CLAUDE LEMAIRE1 AND DANIEL H. JANZEN

La Croix des Baux, F-84220, Gordes, France; and Dept. of Biology, University of Pennsylvania, Philadelphia, Pennsylvania 19104, USA

ABSTRACT.— Pseudodirphia lacsa Lemaire is described from upper montane areas of Costa Rica and Panama. It is distinct from its closest relative, Pseudodirphia biremis (Draudt) by a combination of characters that are indicated below. Male and female are illustrated in color, genitalia figured, and taxonomic relationships discussed. The geographic distributions of Pseudodirphia lacsa and Pseudodirphia biremis are defined.

RESUME.— Pseudodirphia lacsa Lemaire est décrit du Costa Rica et de la République de Panama. Il diffère de l'espèce la plus voisine, Pseudodirphia biremis (Draudt) par un ensemble de caractères qui seront precisés. Le mâle et la femelle sont figurés en couleurs et leurs armures génitales représentées. La position taxonomique de l'espèce nouvelle est indiquée. Les habitats respectifs de Pseudodirphia lacsa et de Pseudodirphia biremis sont définis.

KEY WORDS: Amazon, Andes, Brazil, Central America, Colombia, *Dirphia, Dirphiopsis*, distribution, Ecuador, genitalia, Mesoamerica, Mexico, *Ormiscodes*, South America, taxonomy.

Pseudodirphia was established by Bouvier (1928) for a group of species previously placed either in *Dirphia* Hübner or in *Ormiscodes* Blanchard. It was synonymized with *Dirphiopsis* Bouvier, itself considered to be a subgenus of *Dirphia* by Michener (1952), and reinstated to full generic rank by Lemaire (1982).

There are now about 30 species in the genus. They are characterized by the outlines of the ante- and postmedial lines, and the respective positions of these lines on the forewing as shown in Fig. 1-2. The lines are white and bordered in black on both sides or the distal side. The veins are accented with yellow at the point of their intersection of the lines, which usually gives the lines a broken appearance. Other distinctive features of Pseudodirphia are the black antennae, which are bipectinate in the male and narrowly bidentate in the female; the female with an epiphysis; the abdomen with black rings on the dorsal side; the forewings without a graphical discal spot on the forewings (unlike Dirphiopsis); and the non-distinctive vague markings on the upperside of the hind wing and underside of all wings. The most distinctive traits of the male genitalia are pistol-shaped hypertrophied aedeagus and the long spine-like cornutus at the apex of the vesica. The most distinctive traits of the female genitalia are the wide bipartite corpus bursae.

Pseudodirphia is widely distributed, ranging from Mexico to Bolivia and southeastern Brazil. In spite of having a large predominance of montane species, it is, unlike Dirphiopsis, well-represented in the Guiano-Amazonian region.

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

Pseudodirphia lacsa Lemaire, new sp.

Diagnosis.— This new species is one of the largest known in *Pseudodirphia. Pseudodirphia lacsa* is a close relative of *Pseudodirphia biremis* (Draudt), from which it can be separated by a combination of relatively minor but quite consistent external characters. *Pseudodirphia lacsa* has less intensely black male antennae, lighter yellow-beige ground color on the upperside of all four wings, narrower forewing ante- and postmedial lines, forewing ante- and postmedial lines less broadly underlined with black, and the forewing postmedial line less convex and with a less broken appearance. A decisive diagnostic trait of *Pseudodirphia lacsa* is the yellow of the venation on the underside of the wings, and especially on the costa of the forewing. In *Pseudodirphia biremis* the venation is black or dark brown on the underside of the wings. The underside of the forewing of *Pseudodirphia lacsa* usually has a black-shaded baso-median area that is lacking in *Pseudodirphia biremis*.

Description.- Wingspan: ♂ 78-88mm, ♀ 100mm. Forewing length: ♂ 41-44mm, 9 53mm. MALE (Fig. 1): Antennae black. Labial palpi dark brown, frons yellow, thorax dorsally light orange-brown and ventrally black with a tuft of yellow hairs at the base of all four wings. Legs black. Abdomen dorsally yellow, ringed with black, and ventrally black. Spiracles white. Forewing slightly elongate, outer margin convex. Forewing ground color yellowish-brown, more or less suffused with brown on the baso-median and postmedian areas; lines broad, the postmedial convex, proximally and distally bordered with black. Submarginal band brown, interrupted between veins M3 and M2. Hindwing ground color like the forewing. Hindwing postmedial line whitish, broad but with little contrast. Underside of wings yellowish-brown with weak markings, usually suffused with black on the baso-median area of the forewing. Male genitalia (Fig. 3): Uncus bifid, ventral plate of the transtilla deeply posteriorly V-notched; valves short, broadly fused to the tegumen; juxta membranous, aedeagus very large. The genitalia of Pseudodirphia lacsa differs from Pseudodirphia biremis by the former having a more deeply notched ventral plate of the trans-

