

A NEW SPHINX MOTH FROM THE WEST INDIES (SPHINGIDAE)

MRS. C. REED CARY¹

Several years ago the late Mrs. C. Reed Cary prepared a manuscript in which the following, interesting new sphinx moth was described. The publication of her paper was withheld pending the completion of more extensive works, dealing with the Macrolepidoptera of the West Indies, to which it was hoped this description could be appended. Because the appearance of the larger papers will be delayed I take this opportunity to present the following for the late Mrs. Cary.

Some editing of Mrs. Cary's paper has been undertaken and drawings have been prepared by Mr. Andre del Campo Pizzini, staff artist of the Smithsonian Institution.

J. F. G. Clarke
U.S. National Museum

In April, 1956, J. F. Gates Clarke, while a member of the Smithsonian—Bredin Caribbean Expedition, collected five specimens of the genus *Cautethia* at light on the small, isolated, and sparsely settled island of Barbuda, in the Lesser Antilles. In 1958, while on another Smithsonian—Bredin expedition he collected eight more of this moth on Antigua. The 13 specimens collected by Clarke differ so sharply from known forms that I describe them as follows:

***Cautethia noctuiformis bredini* Cary, new subspecies**

(Figures 2, 4-4a)

Alar expanse 28-34 mm.

Labial palpus white basally, suffused and irrorate grayish toward apex, the second segment with large grayish fuscous blotch on outer side. Antenna gray; bases of scales somewhat darker and tips of scales narrowly edged with sordid white. Head gray, suffused fuscous; tips of scales white. Thorax gray, collar narrowly edged with grayish fuscous; tegula with broad grayish-fuscous, longitudinal stripe. Forewing ground color gray, antemedial line strongly outwardly curved, double, blackish fuscous; postmedial line double, grayish fuscous; inner element outwardly curved to vein 5 then nearly straight to outer dorsum; outer element very strongly dentate to vein 2 then broadened to tornus; terminal line very narrowly dark gray; on apical third of costa a dark gray triangle, its base on costa, extends one-third distance across wing; cilia mixed gray and sordid white. Hind wing basal half mikado orange, terminal half grayish fuscous; cilia mixed grayish fuscous and sordid white. Legs sordid white speckled and suffused with grayish fuscous; tarsi marked with grayish fuscous. Abdomen gray dorsally, buff ventrally; fifth segment with grayish-fuscous blotch laterally.

Male genitalia (slides Cary No. 76; JFGC. No. 12080). Harpe broadest basally, gently tapered to a narrowly rounded cucullus; sacculus moderately sclerotized, terminating in a cupped process set with small teeth. Gnathos stout, enlarged distally and divided postero-distally into two blunt, short, heavily sclerotized protuberances. Uncus very stout terminating in a heavily sclerotized blunt point. Vinculum very

¹ Deceased

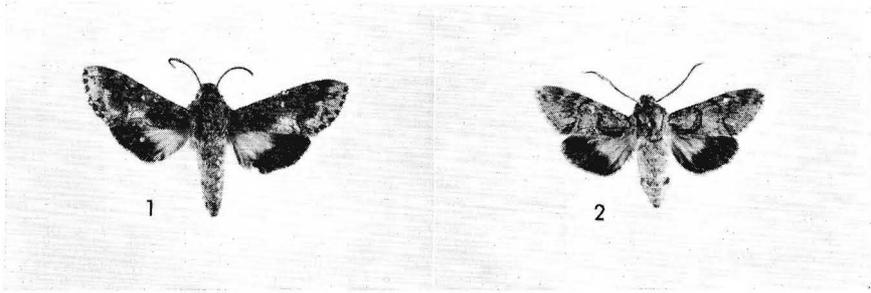


Figure 1. *Cautethia noctuiformis noctuiformis* (Walker)

Figure 2. *Cautethia noctuiformis bredini*, new subspecies

narrow; saccus produced as a linguiform process. Tegumen broad basally, narrowed posteriorly. Anellus a broad band, narrowed laterally. Aedeagus longer than harpe, slightly curved, dorso-apically produced as sharp point; vesica armed with two small clusters of slender cornuti.

Holotype: U. S. National Museum No. 70895.

Type locality: British West Indies, Antigua, English Harbor.

Distribution: Antigua, Barbuda.

Described from the holotype (IV. 1958, J. F. G. Clarke), and 11 ♂ paratypes from Antigua with same data as holotype, and Barbuda, Oyster Pond (6. IV. 1956, J. F. G. Clarke).

Unfortunately, no females of *bredini* were collected so only the male genitalia can be illustrated for comparison.

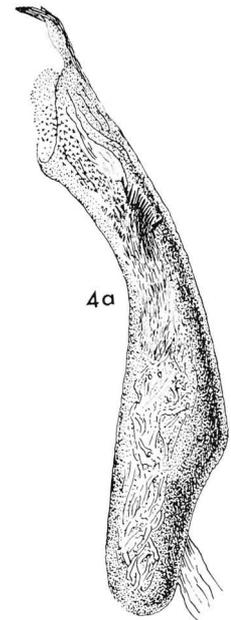
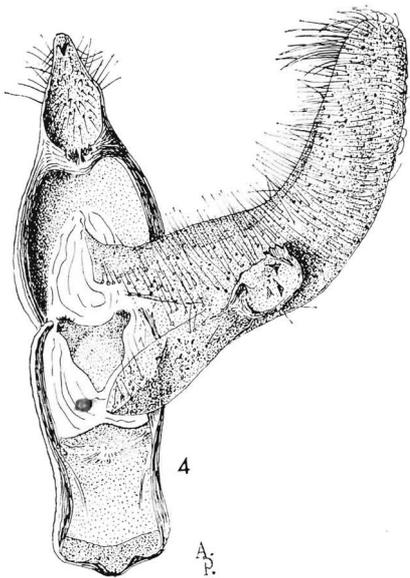
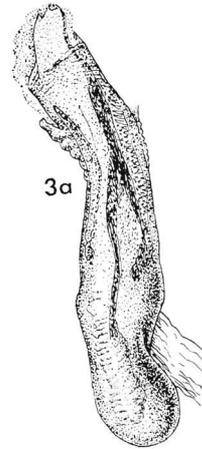
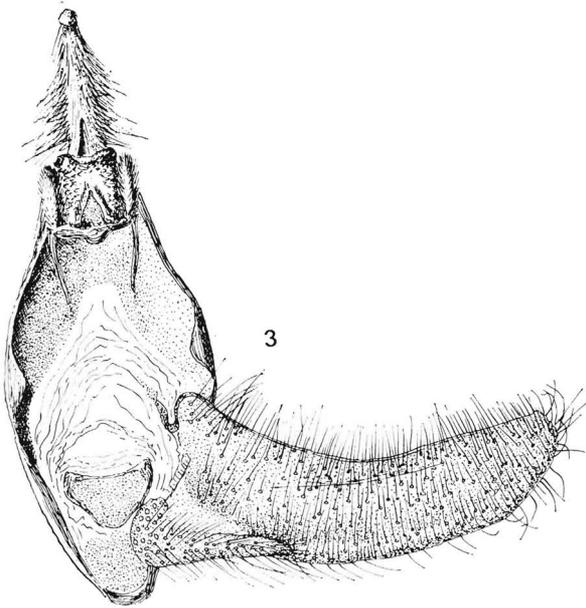
In superficial appearance *Cautethia noctuiformis noctuiformis* (Walker) and *C. grotei grotei* Edwards are similar species, but they are easily differentiated by their genitalia (see Figures 3 and 4). *C. n. bredini* clearly belongs with *n. noctuiformis* but can be distinguished from the typical subspecies by its paler ground color and the more contrasting transverse markings. The transverse markings of *bredini* are sharply defined (Figure 2) and the preapical dark gray triangle stands out in contrast to the light gray of the forewing. On the other hand *noctuiformis* is strongly suffused with very dark gray, the transverse markings are obscured and the preapical triangle fuses with the dark coloring (Figure 1).

Our knowledge of the distribution of *grotei* and *noctuiformis* is too fragmentary to permit generalizations, but for the time being we can state that *grotei* (and its subspecies) is the dominant species in Cuba, Jamaica,

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Figure 3. *Cautethia grotei grotei* Edwards: 3, Ventral view of male genitalia with left harpe and aedeagus removed; 3a, aedeagus.

Figure 4. *Cautethia noctuiformis bredini*, new subspecies: 4, Ventral view of male genitalia with left harpe and aedeagus removed; 4a, aedeagus.

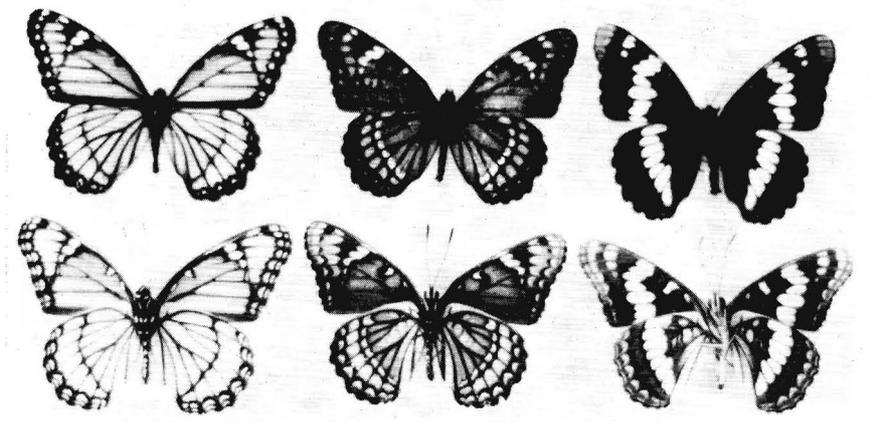


Cayman Islands and Hispaniola, and *noctuiiformis* is dominant on Puerto Rico, Virgin Islands, and a few of the Lesser Antilles.

It gives me great pleasure to name this subspecies for Mr. and Mrs. Bruce Bredin who sponsored the expedition on which the specimens were collected.

A RECORD OF A NATURALLY OCCURRING *LIMENITIS* HYBRID
(NYMPHALIDAE)

A suspected hybrid between *Limenitis archippus* Cramer and *Limenitis lorquini* Boisduval was collected two miles south of the Richland Y on Amon wasteway, Benton County, Washington. On July 6, 1969, three further hybrids were caught at the junction of Amon wasteway and the Yakima River by J. C. Montgomery.



Left: *Limenitis archippus*. Centre: Suspected hybrid between *Limenitis archippus* and *L. lorquini*. Right: *Limenitis lorquini*.

The four specimens of the *Limenitis* hybrids vary in color and markings. *Limenitis archippus* and *lorquini* both fly in this locality and they are the only species of the genus *Limenitis* in the area.

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