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The Neotropical *Yponomeuta* Latreille, 1796 moths (Lepidoptera: Yponomeutidae)

V. O. Becker

Abstract

The Neotropical species of *Yponomeuta* Latreille are revised. One new synonym is established: *Hyponomeuta eusoma* (Walsingham, 1914), syn. n., of *Yponomeuta triangularis* (Möschler, 1890), and one new species: *Yponomeuta acronops* Becker, sp. n. is described from Cuba. Illustrations of adults and genitalia are presented.
Key Words. Lepidoptera, Yponomeutidae, new species, new synonym, taxonomy, Neotropical.

Los *Yponomeuta* Latreille, 1796 Neotropicales (Lepidoptera: Yponomeutidae)

Resumen

Se revisan las species Neotropicales del género *Yponomeuta* Latreille, 1796. Se establece una nueva sinonimia *Hyponomeuta eusoma* (Walsingham, 1914), syn. n., de *Yponomeuta triangularis* (Möschler, 1890) y se describe de Cuba una nueva especie: *Yponomeuta acronops* Becker, sp. n. Se presentan ilustraciones de los adultos y genitalias.
PALABRAS CLAVES: Lepidoptera, Yponomeutidae, nueva especie, nueva sinonímia, taxonomía, Neotropical.

Yponomeuta Latreille 1796 is a cosmopolitan genus comprising over 80 species (DUGDALE *et al.,* 1999: 122), most of them Palaearctic. Eight species are known from North America (HEPPNER & DUCKWORTH, 1983) and now three from the neotropics. *Y. eusoma* (Walsingham, 1914) from Mexico is here declared a synonym of *Y. triangularis* (Möschler, 1890) from the Greater Antilles, Puerto Rico and Virgin Islands. The European *Y. mahalebellus* (Guenée, 1845) was reported from Cuba (GUENÉE, 1879: 282; WALSINGHAM, 1891: 532, 1897: 117), but as there has been no further record from the region it is considered to have been based on a misidentification of *Y. triangularis*, a species with similar wing pattern.

The Neotropical species are revised here, including a new one from Cuba. The material studied belongs to the following institutions: The Natural History Museum, London (BMNH); Instituto de Biología y Sistemática, Habana, Cuba (IES); The National Museum of Natural History, Washington (USNM); Col. Becker, Reserva Serra Bonita, Camacan, Bahia, Brazil (VOB).

Yponomeuta triangularis (Möschler) (Figs. 1, 3-5)

Yponomeuta mahalebella; Guenée, 1879; Walsingham, 1892: 532, 1897: 117 [probable misidentification].

Hyponomeuta triangularis Möschler, 1890: 339. Syntypes ♂♂, PUERTO RICO: [No further data] (MNHU) [not examined].

Hyponomeuta eusoma Walsingham, 1914: 325. Holotype ♀, MEXICO: Veracruz, Jalapa (*Trujillo*) (BMNH) [examined]. **Syn. n.**

Hyponomeuta triangularis; Walsingham, 1892: 532, 1897: 117, Hedemann, 1896: 10, Meyrick, 1914: 17, Wolcott, 1936: 484, 1951: 713;

Yponomeuta triangularis; Forbes, 1930: 99, 1931: 356; Martorell, 1945a: 177, 1945b: 540; Heppner, 1984: 56.

Yponomeuta eusoma; Heppner, 1984: 56.

Material studied: 62 ♂♂, 28 ♀♀, 5 genitalia slides. 43 ♂♂, 10 ♀♀, BRITISH VIRGIN IDS.: Guana Id., 80 m, 9-23-VII-1987 (Becker & Miller), 10-25-VII-1988 (Miller & O´Connell), X-1989 (Becker); 14 ♂♂, 7 ♀♀, USA VIRGIN IDS.: St. Thomas, 300 m, 25-30-VII-1987 (Becker); PUERTO RICO: 7 ♀♀, Maricao, 15-VIII-1987 (Becker); 4 ♂♂, 4 ♀♀, Guanica, 170 m, 20-VIII-1987 (Becker); 9 ♂♂, 8 ♀♀, CUBA: Santiago, Sierra Maestra, Pico Cuba, 1500 m, 31-VII-1990 (Becker, 73511). (VOB, USNM).

Description: Male forewings length 5-8 mm, female 8-11 mm. Pale grey, covered with multiple small, black dots: pair between antenna, three on thorax forming a triangle, one at base of tegulae, several [17-32] on forewing, one on base of fore coxa, one on each articulation of fore and mid leg.

Genitalia male (Figs. 3, 4): Socii short, bent ventrad, flat laterally, tapering distad to sharp point, with a dorsal, triangular expantion. Gnathos absent. Valvae three times as long as wide, costa concave, ventral margin plus apex evenly convex, sacculus thin, one third lengh of valve. Saccus a thin, long rod -as long as length of genitalia- ending in a diamond shaped expansion. Aedoeagus a thin, longer than valva, bent rod, distal third gradually tapered to sharp apex. Vesica with no cornuti.

Genitalia female (Fig. 5): Papillae analis half the lengh of appophyses posteriors. Ostium and antrum narrow. Apophyses anteriores same lengh as apophyses posteriors. Ductus bursae long, thin, basal third expanding gradually towards corpus bursae. Corpus bursae, smooth, spherical, signum absent.

Immatures: According to WOLCOTT (1936, 1951) "the full-grown larva is 14 mm, long, with an orange-yellow head. Body is canary yellow; an irregular medio-dorsal black spot on each abdominal segment, laterally bordered with white, lateral of which is much larger irregular, black, grey bordered spot. On the second and third thoracic segments, these larger later spots are broken in two by median white bands; on the first segment are two black crescents only. True legs black, spiracles black, lateral hairs with black areas at base, prolegs black and white banded."

Host-plant: The larvae feed on the leaves of "coscorrón" (*Cassine* [or *Elaeodendron*] *xylocarpa* Vent.) (Celastraceae), a tree growing in coastal woods and thickets in Puerto Rico and the Virgin Islands (MARTORELL, 1976), making "nests" between the leaves (MARTORELL, 1945, 1976, WOLCOTT, 1936, 1951).

Diagnosis: Very similar to *Y. calcarata* but easily distinguished from it by the presence of a transluscent area at the base of hindwings, below CuA.

Distribution: Puerto Rico, Virgin Islands, Cuba, Mexico.

Remarks: The species was described from two male syntypes (not examined). However the detailed description and the fact that there is only one species in the Antilles which matches it, leaves no doubt about its identity. The large series studied here -105 specimens- vary greatly both in size (forewings 5mm to 11mm long), and numbers of spots (17 to 32 on specimens from a single locality in Puerto Rico).

Yponomeuta calcarata (Meyrick)

Hyponomeuta calcarata Meyrick, 1924: 117. Lectotype ♂, BERMUDA: Bayley's Bay (*Ogilvie*) (BMNH), designated by Clarke, 1965: 320 [examined].

Hyponomeuta calcarata; Clarke, 1965: 320, pl. 159, figs. 4-4b.

Teinoptila calcarata; Heppner, 1984: 56.

Yponomeuta calcarata; Ferguson, Hilburn & Wright, 1991: 24, figs. 37-39, 204c-f.

Diagnosis: Pattern and colour almost identical to *Y. triangularis,* but readily distinguished by lacking the transluscent area at the base of hind wings, below CuA.

Remarks: This species was fully illustrated by FERGUSON, HILBURN & WRIGHT, 1991. Due to their external similarity this species was regarded by the author, in a previous version of this manuscript, as a junior synonym of *Y. triangularis.*

The differences, especially in the transluscent area on hind wings, were pointed by J.-F. LANDRY (Agriculture Canada, Ottawa), to whom the author is greatly indebted.

***Yponomeuta acronops* Becker, sp. n.** (Figs. 2, 6-8)

Material studied: Holotype ♂, CUBA: Santiago, Sierra Maestra, Pico Cuba, 1500 m (Becker, 73512) (USNM); Paratypes 20 ♂♂, 17 ♀♀, same data as holotype (VOB, USNM, BMNH, IES); 1 ♀, CUBA: Pico Turquino, summit, 10-29-VI-1936 (Acuña), g. s. A[ugust] B.[usck] (USNM).

Description: Male forewings length 9-11 mm, female 11-13 mm. Pale grey. Tegula with small black mark at base. Forewing with a thin, black line from base of costa to just beyond fold, a round black dot near apex. Fore and mid legs with black dots: one on fore coxa, one on each articulation, one half way along tibiae.

Figs. 1, 2.– *Yponomeuta*: **1.** *Y. triangularis* (Möschler) (B. V. I. Guana Id.); **2.** *Y. acronops* Becker, sp. n., holotype, (Cuba).

Genitalia male (Figs. 6, 7): Socii thin, long - half as long as tegument- tapering distad, ending in curved, sharp point, covered with sparse setae dorsally. Gnathos thin with a small triangular expantion at middle. Valvae broad, half as wide as long, costa slightly concave, ventral margin evenly convex, apex round, sacculus narrow, one third as long as valve. Saccus a long rod, half lenght of valvae, round at tip. Aedoeagus a thin, straight rod, longer than length of valva; vesica with a thin, long, sharp pointed cornutus.

Genitalia female (Fig. 8): Papillae analis half the length of appophyses posteriors. Ostium and antrum narrow. Apophyses posteriores same length as apophyses anteriores. Ductus bursae very long, thin, distal half coiled. Corpus bursae smooth, spherical, signum absent.

Diagnosis. Distinguished from the former by the two single marks on forewing, one on costa close to base the other near apex.

Etymology: From the Greek *ἀκρον* (akron) = tip, end; *ὀψ* (ops) = eye.

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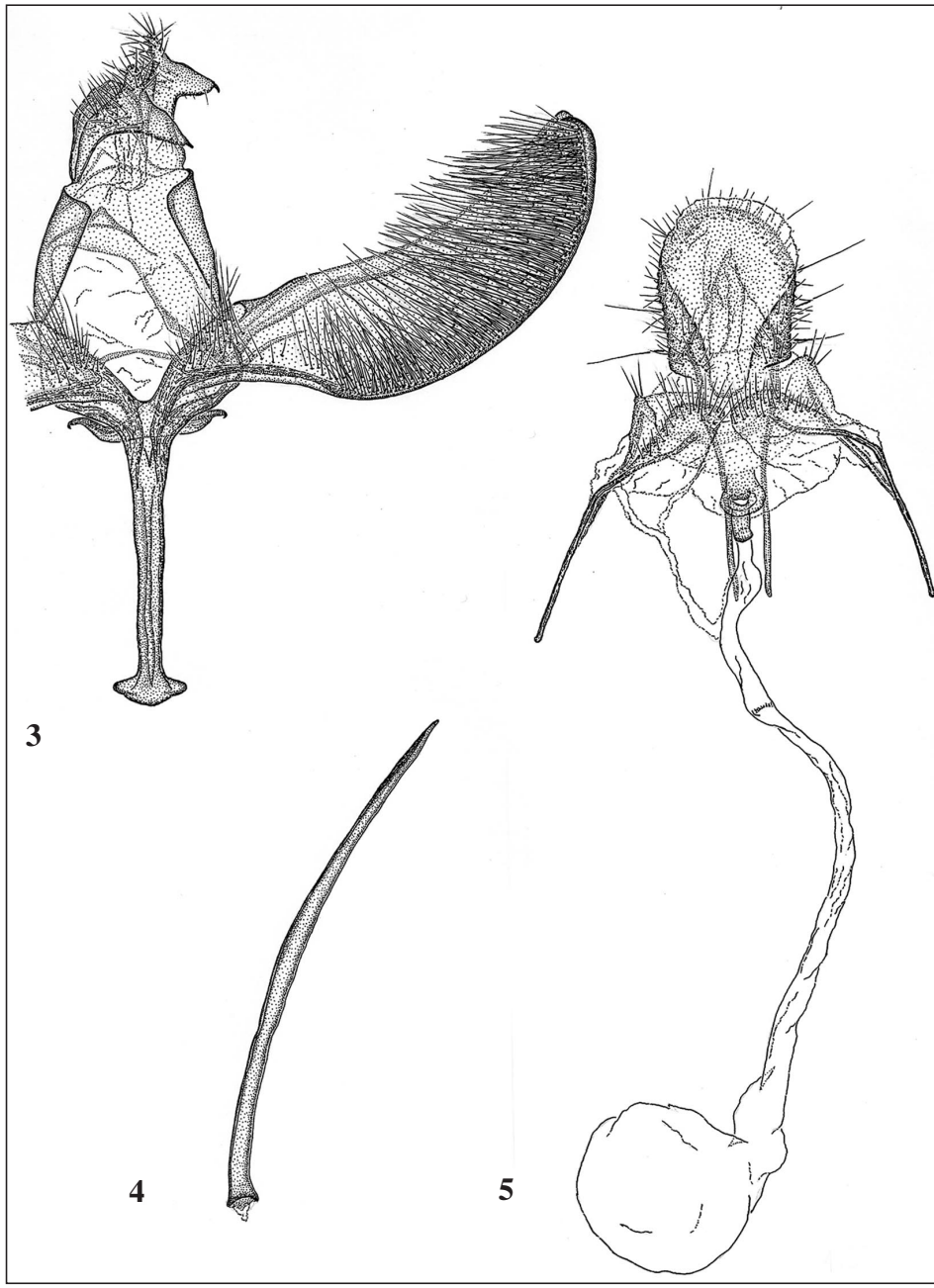
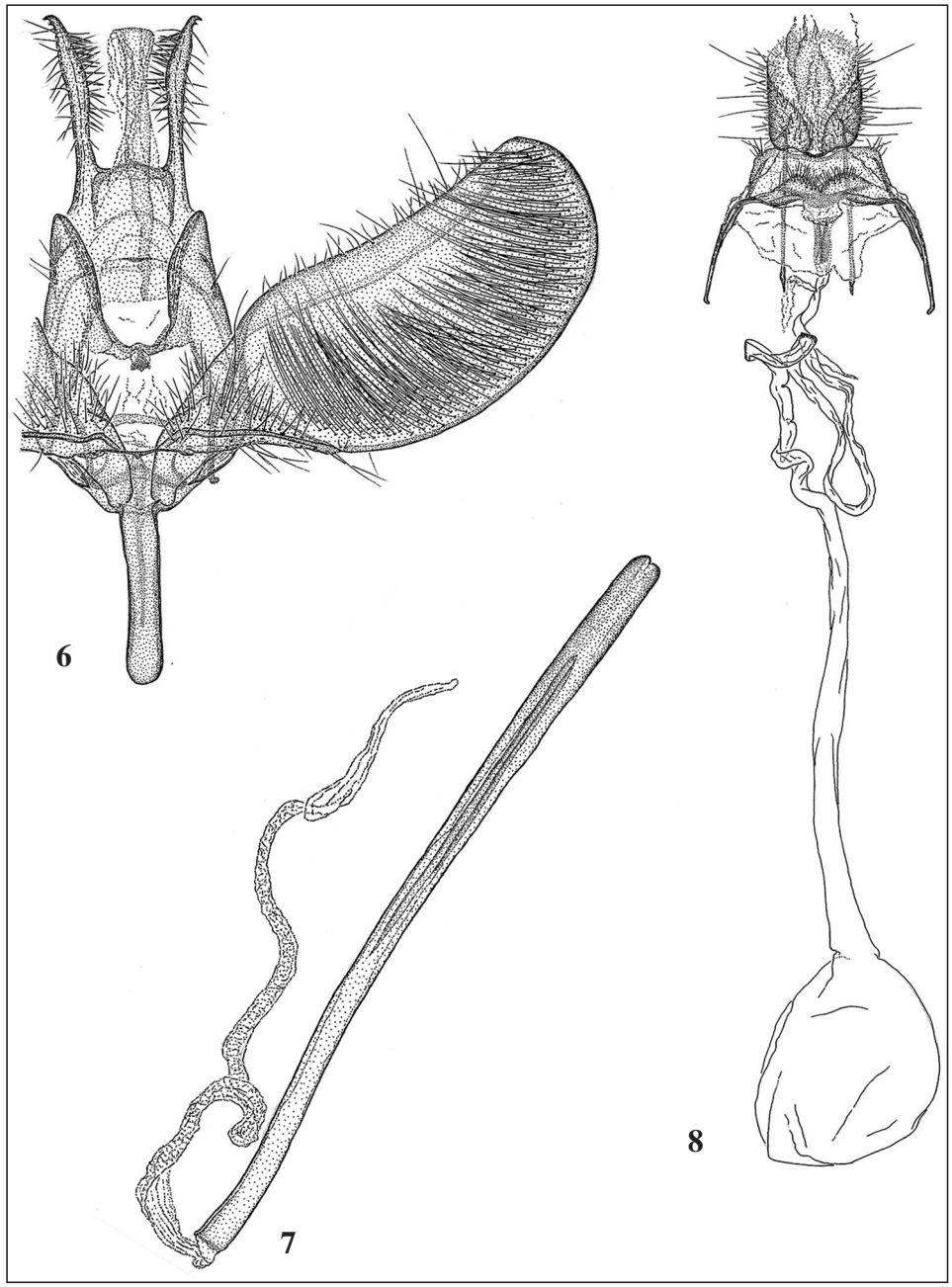


Figs. 3-5.– *Yponomeuta triangularis* (Möschler): **3.** Male genitalia, ventral view, aedeagus and left-hand valve excluded; **4.** Aedeagus, lateral view; **5.** female genitalia, ventral view.



Figs. 6-8.– *Yponomeuta acronops* Becker, sp. n.: **6.** male genitalia, ventral view, aedeagus and left-hand valve excluded; **7.** aedeagus, lateral view; **8.** female genitalia, ventral view.