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Discovery of *Rhopobota* LEDERER, 1859 (Lepidoptera: Tortricidae) in the Neotropical Region, with description of four new species

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Abstract. The distribution of *Rhopobota* is discussed, 34 species are listed and grouped in the zoogeograophic units. Four new species (*cicatrix*, *macroceria, microceria, unidens*) are described from the Neotropical Region from which this genus has never been recorded.

Key words: Tortricidae, *Rhopobota*, World list, Neotropical.

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I. GENERAL

The three following genera, *Erinaea* MEYRICK, 1907, *Norma* HEINRICH, 1923, and *Kundyra* HEINRICH, 1923 were synonimized with *Rhopobota* LEDERER, 1859 by BROWN (1979). Then BROWN (1983) sunk *Eumarissa* CLARKE, 1976 in this genus. The genus *Griselda* HEINRICH, 1923 frequently used to contain some species of *Rhopobota* was synonymized by BROWN (1983) with *Epinotia* HÜBNER, [1825]).

In the last mentioned paper BROWN listed 26 species of *Rhopobota* from the Holarctic, Oriental Region and Oceania. RAZOWSKI (1999) listed 15 Palaearctic species. Only three species were recorded from Nearctic region, and there were no data from the Neotropical region to date.

The only four species discovered now in this region come from the Dominican Republic, Hispaniola. They do not differ much from the known species. In the male genitalia the neck of valva is slender and ventral portion of the cucullus is large. The differences between them are mainly in the distal processes of the tegumen. The number of species suggests that the speciation in Hispaniola is high. It is thus surprising that no species was found in the remaining islands of the Caribbean Sea neither in rather well explored Mexico. The number of Nearctic species is also very low. Now 34 species are included in *Rhopobota*.

One only can suppose that the center of distribution of this genus was in the Oriental region. The more accurate location is for the time being impossible on the basis of the present study. A discovery of four species in Vietnam suggests that it is widely spread throughout the region and further collections in any other territory shall bring many new data.

Sixteen species of *Rhopobota* are known from the Palaearctic. The genus is most abundant in East Asian Province (7 species). Two species have a wide distribution: One of them is Holarctic and one Oriental-Palaearctic. Only seven species are known from the New World, but one of them is introduced to North America. The distribution of this genus is certainly much wider as we can judge on the finding of one species in Oceania. Sixteen species are recorded from the Oriental Region. Some further species are expected in C. China. Surprisingly, the majority of the Oriental species comes from Sri Lanka. The species known to this date are distributed from Sri Lanka to Philippine Is and Sumatra.

The numbers of *Rhopobota* species in the zoogeographic units

Holarctic-Oriental: *R. naevana* (HÜBNER, [1814-17]), W Europe to Japan, China: Yunnan, India, Sri Lanka, Thailand, North America.

Palaearctic transcontinental: *R. myrtillana* (HUMPHREYS & WESTWOOD, 1845), W Europe to Siberia, introduced to North America; *R. stagnana* ([DENIS & SCHIFFERMÜLLER], 1775), W Europe to Siberia; *R. ustomaculana* (CURTIS, [1833]), Europe, with East Asian subspecies (*ilexi* V. KUZNETZOV, 1967), from Primorsk, Kuril Is, Sakhalin.

European: *R. resupinatana* (Kennel, 1901), Switzerland.

Unplaced West Asian: *R. cornuta* RAZOWSKI, 1995, Saudi Arabia; *R. safidana* (RAZOWSKI, 1963), Iran.

Palaearctic East Asian: *R. antrifera* (MEYRICK, 1935), China: Tien-mu-shan; *R. eclipticodes* (MEYRICK, 1935), China: *R. relicta* Chekiang; *R. falcata* NASU, 1999 Japan; *R. kaempferiana* (OKU, 1971), Japan; *R. macrosepalana* (OKU, 1971), Japan; *R. punctiferana* V. KUZNETZOV, 1988, Vietnam; (V. KUZNETZOV, 1968), Kuril Is, Japan; *R. shikokuensis* (OKU, 1971), Japan; *R. toshimai* (KAWABE, 1978), Japan; *R. visenda* (V. KUZNETZOV, 1973), C. China.

Oriental: *R. amphigonia* (DIAKONOFF, 1967), Philippine Is; *R. ancyloides* V. KUZNETZOV, 1988, Vietnam; *R. antecellana* V. KUZNETZOV, Vietnam; *R. argyrophenga* (DIAKONOFF, 1950), Assam; *R. bicolor* KAWABE, 1989, Thailand; *R. blanditana* V. KUZNETZOV, 1988, Vietnam; *R. falcata* NASU, 1999, Japan; *R. bostrichus* DIAKONOFF, 1983, Sumatra; *R. chlorantha* (MEYRICK, 1907), Sri Lanka; *R. clivosa* (MEYRICK, 1912), India: Assam; *R. falcigera* (DIAKONOFF, 1950), Sri Lanka; *R. grypodes* (MEYRICK, 1912), Sri Lanka; *R. hypomelas* DIAKONOFF, 1983, Sumatra; *R. metastena* DIAKONOFF, 1984, Sumba; *R. microrrhyncha* (MEYRICK, 1931), NW India; *R. multiplex* (MEYRICK, 1911), Sri Lanka; *R. scleropa* (MEYRICK, 1912), Sri Lanka; *R. symbolias* (MEYRICK, 1912), Assam, Japan.

Nearctic: *R. dietziana* (KEARFOTT, 1907), U.S.A.; *R. finitimana* (HEINRICH, 1923), U.S.A.

Neotropical: *R. cicatrix* sp.n., Hispaniola; *R. macroceria* sp.n., Hispaniola; *R. microceria* sp.n., Hispaniola; *R. unidens* sp.n., Hispaniola.

Oceanian:*R. leucognoma* (CLARKE, 1976), S. Mariana Is.

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II. DESCRIPTIONS OF SPECIES

Rhopobota macroceria sp.n.

Wingspan 15 mm. Head creamy, vertex greyer, labial palpus ca 2; thorax more brown-grey. Forewing slightly broadening medially, termen sinuate, weakly oblique. Ground-colour whitish

grey, glossy, whitish along markings, strigulated and suffused grey or creamy grey, more creamy ochreous from base of wing to apex, mostly subapically where a few black strigulae present. Costal strigulation brown followed by ochreous lines. Markings brown-grey edged or suffused brown-black. Tornal blotch of ground-colour paler than dorsal blotch. Fringes grey, whiter at tornus, brown at apex. Hindwing brownish grey, cilia paler and greyer. Variation: One specimen pale, with grey suffusions of ground-colour; markings browner than in holotype, with better developed basal blotch. Another paratype strongly suffused with brownish, with less visible markings.

Male genitalia (Fig. 1): Top of tegumen concave, distal processes long; socius long, drooping; valva broad to middle, with very slender neck and large ventral portion of cucullus.

Holotype, male: "Dominican Republic: Pedernales. 5 km NE Los Arroyos, 18-15N, 71-45W. 1680 m. 17-18 July 1990 C. YOUNG, J. E. RAWLINS, S. THOMPSON"; GS 10725. Paratypes, three males labelled as above, two dated, however, 28 July.

Rhopobota microceria sp.n.

Wingspan 18 mm. Head creamy tinged brownish; thorax more brown. Forewing ground-colour grey ochreous in costo-basal area, otherwise ochreous, tinged brown in apex half; tornal blotch silvery grey subdivided into two parts, the posterior of which accompanied by elongate, concolorous subterminal mark. Basal blotch brown, ochreous brown in dorso-basal part; median fascia brown with paler places, reaching tornal blotch. Cilia grey, mixed ochreous or creamy mainly near middle; basal line incomplete, blackish, concolorous with apical cilia. Hindwing grey; cilia paler. Paratype paler, with ground-colour greyer.

Male genitalia (Fig. 2) as in *macroceria* but with very small distal processes of tegumen, slenderer socii and smaller, rounded apically ventral part of cucullus.

Holotype, male: "Dominican Republic: Peravia, 3 km SW La Nuez, tributary to Rio Las Cuevas, 18-40N, 70-36W, 1870 m. 5-6 August 1990. J. RAWLINS, S. THOMPSON." Paratype (GS 10723), an identically labelled male.

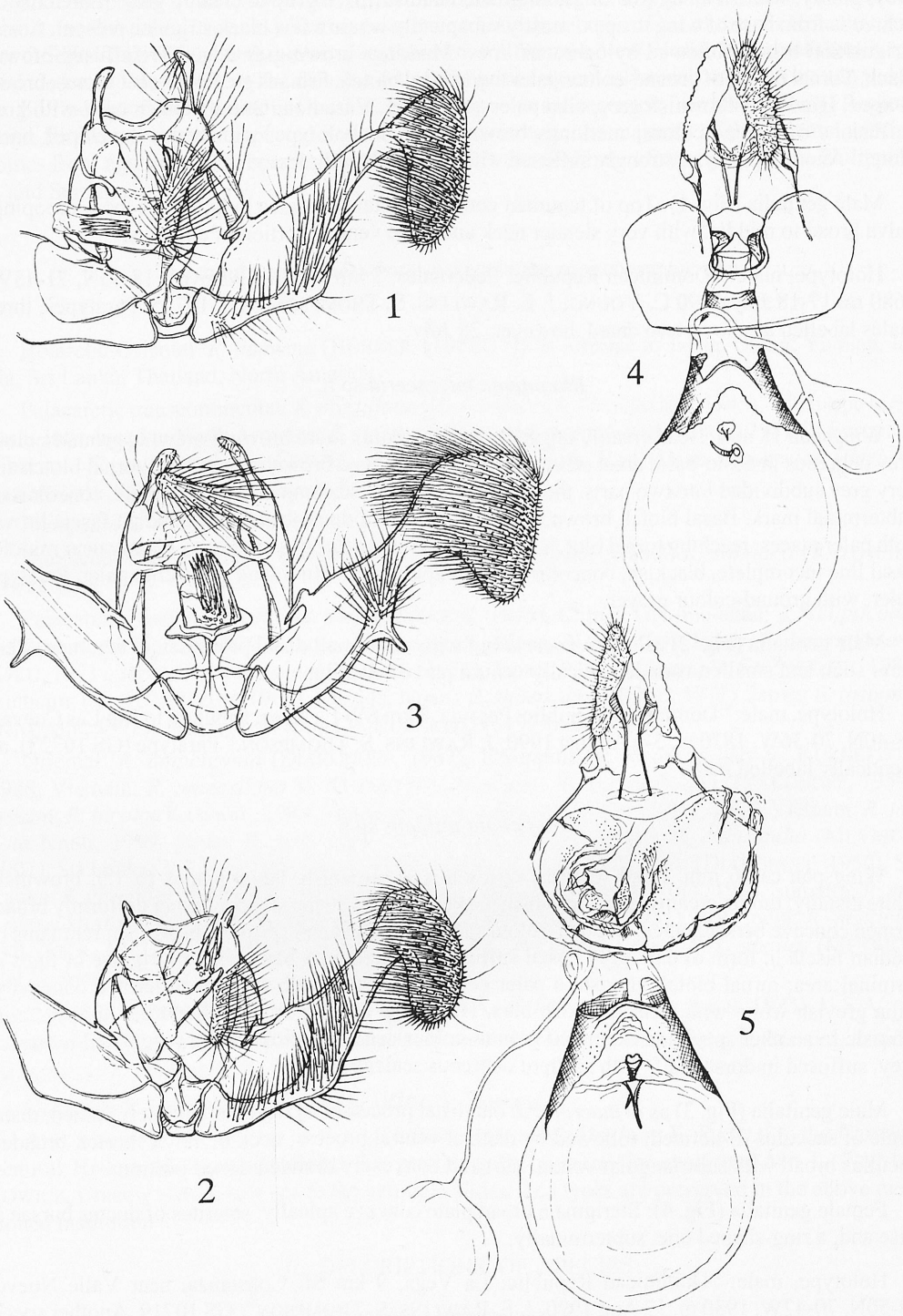
Rhopobota unidens sp.n.

Wingspan ca 16 mm. Head whitish, vertex mixed brownish, labial palpus ca 1.5, brownish, white distally; thorax creamy grey, brownish proximally. Forewing slender, rather uniformly broad; termen concave beneath apex. Ground-colour grey strigulated and sprinked brownish; remnants of median fascia in form of dark grey costal suffusion marked with black; black strigulae or lines in terminal area; tornal blotch greyish, a paler edged blackish blotch anterior to termen concavity. Cilia greyish white with weak blackish bars. Hindwing white-grey slightly darker at apex; cilia whitish. In another specimen examined ground-colour densely sprinkled and strigulated brownish grey, suffused in dorsal half, with scatterd ochreous scales.

Male genitalia (Fig. 3) as in *macroceria* but distal processes of tegumen minutely spined, distal angle of sacculus ill-defined, followed by distinct ventral process; neck of valva shorter, broader; cucullus broad with subtriangular ventral part and convexely rounded dorsal portion.

Female genitalia (Fig. 4): Sterigma a broad plate concave apically; sclerites of ductus bursae at base and, a ring-shaped one, subterminally.

Holotype, male: "Dominican Republic: La Vega, 9 km SE Constanza, near Valle Nuevo, 18-50N, 70-42W. 1930 m. 17 Aug 1990. J. E. RAWLINS, S. THOMPSON"; GS 10719. Another specimen, a female not included in the type-series labelled as follows: "Dominican Republic: Peravia, 3 km SW La Nuez, tributary to Rio Las Cuevas, 18-40N, 70-36W, 1870 m. 5-6 August 1990. J. RAWLINS, S. THOMPSON."



Figs 1–5. Male and female genitalia of *Rhopobota* LEDERER: 1 – *R. macroceria* sp.n., holotype; 2 – *R. microceria* sp.n., paratype; 3 – *R. unidens* sp.n., holotype; 4 – same species, female paratype; 5 – *R. cicatrix* sp.n., holotype.

Rhopobota cicatrix sp.n.

Wingspan 15 mm. Head creamy, vertex and thorax slightly mixed brown. Forewing not expanding terminally, termen slightly oblique. Ground-colour creamy tinged pale ochreous brownish strigulated and dotted with brownish; costal strigulae brown; markings and terminal parts of wing ochreous with dark brown suffusions, spots or strigulae consisting of costal half of median fascia and spot at apex; brown longitudinal strigulae before apex, paler ones anterior to median part of termen limided by brownish, straight line; tornal blotch paler than ground-colour. Cilia creamy, brown at apex. Hindwing pale brownish grey with paler cilia.

Female genitalia (Fig. 5): Subgenital sternite large, surrounding sterigma, weakly sclerotized distally; ductus bursae somewhat sclerotized distally, provided with large proximal sclerite.

Holotype, female: "A Central Valley, Dominica, VI.21. 1937, Roys"; GS 10720.

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