

Revision of the genus *Exoletuncus* Razowski, 1988 (Euliini, Tortricidae, Lepidoptera), with description of four new species and *Colosyta* n. gen.

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Revision of the genus Exoletuncus Razowski, 1988 (Euliini, Tortricidae, Lepidoptera), with description of four new species and Colosyta n. gen.— The Neotropical genus *Exoletuncus* is reviewed. Six species are included in the genus, four of which are described: *musivus*, *consertus*, *artifex*, *cretatus*. *Exoletuncus trilobopa* (Meyrick), a new combination, is transferred to the genus on the basis of facies; the holotype lacks the abdomen. *Colosyta* n. gen. is described to accommodate *Eulia ocystola* Meyrick, previously included in *Exoletuncus*.

Key words: Lepidoptera, Tortricidae, *Exoletuncus*, Neotropical, *Colosyta* n. gen.

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Introduction

As with many Neotropical tortricids, the tribe Euliini has been poorly studied and its biology is unknown.

The majority of Neotropical genera of the Euliini tribe were described as monotypic, and currently are mostly treated as such (Powell et al., 1995).

Exoletuncus was described (Razowski, 1988) to accommodate a single species from Colombia, *E. exoristus* Razowski. A second species, *Eulia ocystola* Meyrick, was later transferred to the genus (Razowski, 1990).

The purpose of this paper is to describe four new species of *Exoletuncus* and provide additional details on the morphology and geographic distribution of the genus.

Material and methods

The paper is based on eight specimens deposited in the following institutions: American Museum Natural History, New York (AMNH); the Canadian National Collection, Ottawa (CNC); the Natural History Museum London (NHML); the United States National Museum, Smithsonian Institution, Washington D.C. (SI); Naturhistorisches Museum, Wien (NHMW); and the Zoological Museum Copenhagen (ZMC).

Results

Exoletuncus Razowski, 1988

Exoletuncus Razowski, 1988. *Acta zool. cracov.*, 31(10): 390.

Type-species: *Exoletuncus exoristus*, Razowski, 1988, by original designation.

All known species of *Exoletuncus* are similar in coloration and pattern. The head and part of the thorax (tegula) are white; the forewing has a white ground colour, with a pattern of black or brownish black pattern in the form of a series of spots forming incomplete basal, median, and subapical-terminal groups corresponding with typical pattern elements of Tortricinae. The fringe is concolorous with the ground colour, with a black apical mark.

Male genitalia

Characterized by a highly sclerotized terminal portion of the tegumen; uncus well developed only in *exoristus*, in other species the distal parts of tegumen form a small prominence with a distinct median slit accentuated by inner edge of socius; socius membranous, long hairy, drooping; tuba analis well sclerotized in most species, especially along edges, membranous; gnathos arms slender, simple, extending into variably developed, usually long terminal tip; vinculum simple, fully sclerotized; valva in type-species slender, in others broad in basal part, with species-specific terminal portion and group of spines on disc usually beyond sacculus; sacculus without free termination, more or less convex submedially; transtilla a simple band-shaped sclerite somewhat ex-

panded basally; aedeagus with slender ventral termination, without cornuti; caulis very small; group of setae on anellus above zone.

Remark

Female unknown.

Distribution and biology

The genus is exclusively Neotropical distributed in western South America from Colombia to Central Chile and Rio Grande do Sul, Brazil. The biology is unknown.

Diagnosis

Autapomorphies for the genus include the configuration of the socius, the inner edge of which reaches the top of tegumen, and the sclerotized edges of the tuba analis (at least one of these two characters is absent in *exoristus* and *consertus*). The presence of the spines of the disc of the valva and the forewing of the pattern are of convergent importance. The genus is closest to *Chilips* Razowski, 1988; the shape of the ventral termination of the aedeagus and the position of the spines of the valva are probable synapomorphies. The differences among the species are slight in pattern and genitalia.

Exoletuncus exoristus Razowski, 1988

Exoletuncus exoristus Razowski, 1988. *Acta zool. cracov.*, 31(10): 390, figs. 7-9.

Type-locality: Colombia: Cauca: Paramo de Parace (Lake San Rafael); coll. USNM.

Exoletuncus trilobopus (Meyrick, 1926), n. comb.

Eulia trilobopa Meyrick, 1926, *Exotic Microlepid.*, 3: 249.

Type-locality: Brazil: Rio Grande do Sul; coll. NHML.

Eulia triloba [sic!] Clarke, 1958, *Cat. Microlepid. Meyrick*, 3: [140], pl. 70, fig. 4 [photogr. of holotype].

Clarkeria trilobopa: J. W. Brown, 1989, *J. Lepid. Soc.*, 43(4): 318.

Alar expanse ca 24 mm; labial palpus and abdomen missing.

Head, thorax and ground-colour of forewing with slight yellowish-olive hue. Fore-

wing termen not sinuate. Pattern black consisting of rather small blotches; distal edge of terminal blotch straight. Hind-wing brownish cream, suffused and spotted brown.

Remarks

Based on forewing pattern, BROWN (1989) included it in *Clarkenia*. However, the pattern elements indicate more appropriate assignment to *Exoletuncus*.

Exoletuncus musivus n. sp.

Alar expanse 26 mm; labial palpus 2.5, blackish; head and thorax white cream; forewing ground-colour white. Termen sinuate. Pattern elements black, broader than in *trilobopa*; distal edge of terminal fascia slightly concave, oblique to termen; hind-wing paler.

Male genitalia (figs. 1, 2)

Uncus atrophied; distal part of tegumen and socius tapering apically; tuba analis distinctly sclerotized, tapering apically; valva broad, weakly narrowing terminally, with spined area expanding in distal portion dorsally; sacculus angulate; aedeagus fairly broad.

Material studied

Holotype, male, 'Aqualani, Carabaya, 9000 ft., Dec. [19]05, wet season (G. R. Ockenden)'; genitalia slide: 6775 [NHML], in the collection of the NHML.

Exoletuncus consertus n. sp.

Alar expanse 22-24 mm. Similar to preceding species but labial palpus cream-grey, forewing distinctly expanding terminally, pattern of forewing broader.

Male genitalia (figs. 3, 4)

As in *musivus* but tuba analis membranous, arms and terminal plate of gnathos slenderer, valva more elongate, slender in distal third, with spined area slender, oblique and sacculus slender, not angulate distally and aedeagus slender, with long ventro-terminal process.

Material studied

Holotype, male, 'Ecuador, Napo-Pastaza: E. of Papallacta, October 6-8, 1977, L. E. Pena'. Paratype with identical label; coll. AMNH.

Exoletuncus artifex n. sp.

Alar expanse 20 mm; as preceding species but labial palpus blackish to before end, forewing ground-colour yellowish white, pattern black consisting of small elements, with subterminal blotch long.

Male genitalia (figs. 5, 6)

As in *musivus* but top of tegumen somewhat elongate forming an uncus-like structure, terminal part of gnathos strong, socius not tapering apical, rounded terminally, valva much slenderer, with very slender terminal portion and slenderer, less angulate sacculus; aedeagus shorter, with long terminal process.

Material studied

Holotype, male, 'Peru: Dept. Apurimac 47: 12 km N Abancay Cerro Turon mocco, 17.-18.III.1987, 3500 m, O. Karsholt leg. Zool. Mus. Copenhagen'; coll. ZMC.

Exoletuncus cretatus n. sp.

Alar expanse 26 mm; similar to *trilobopa*, with somewhat different shapes of the black blotches of forewing.

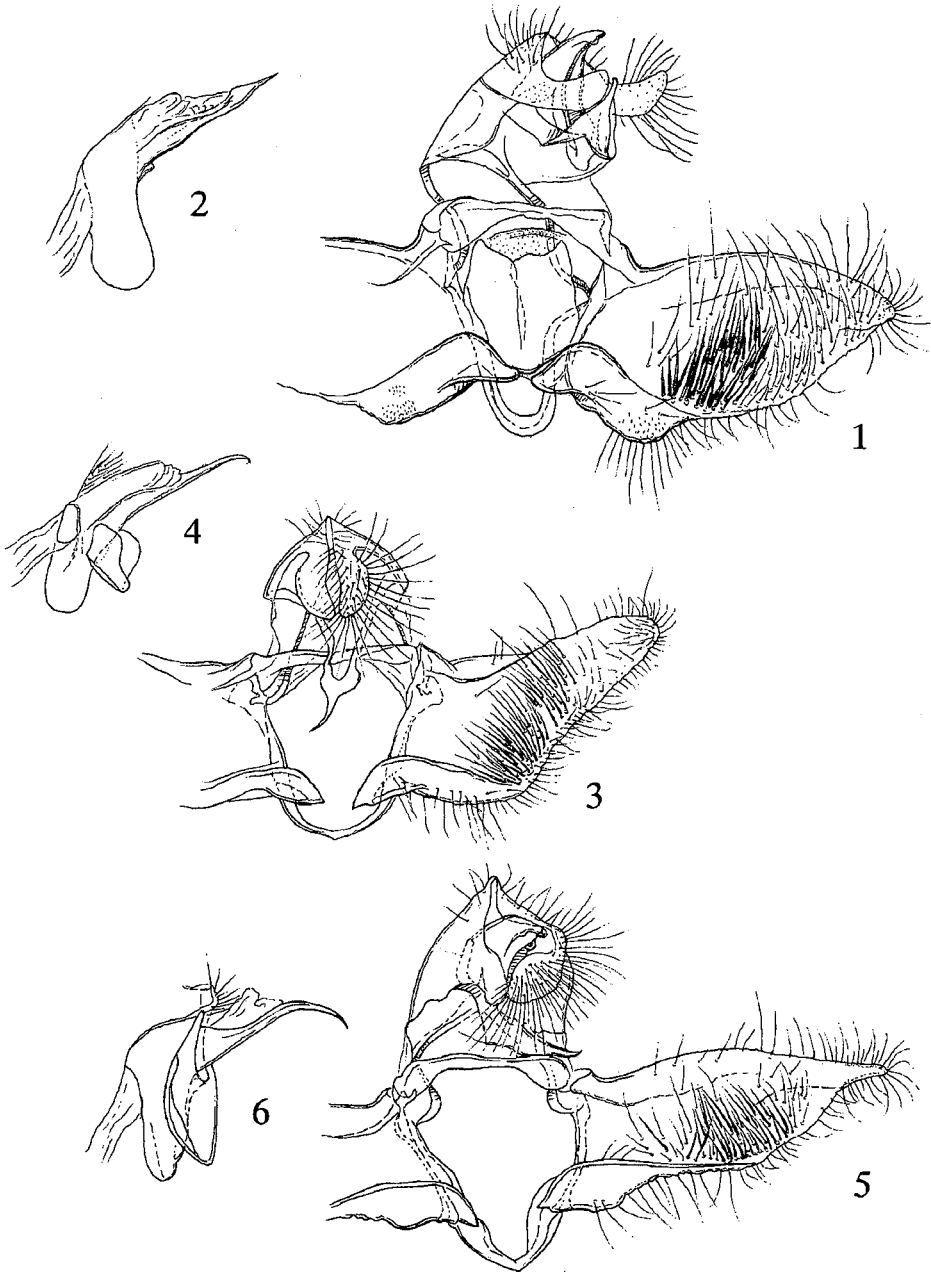
Male genitalia (figs. 7, 8)

As in *artifex*, but without uncus-like prominence of tegumen, with slender, delicate terminal part of gnathos, spined edges of well sclerotized tuba analis, ovate terminal part of valva, rounded sacculus and slender aedeagus.

Material studied

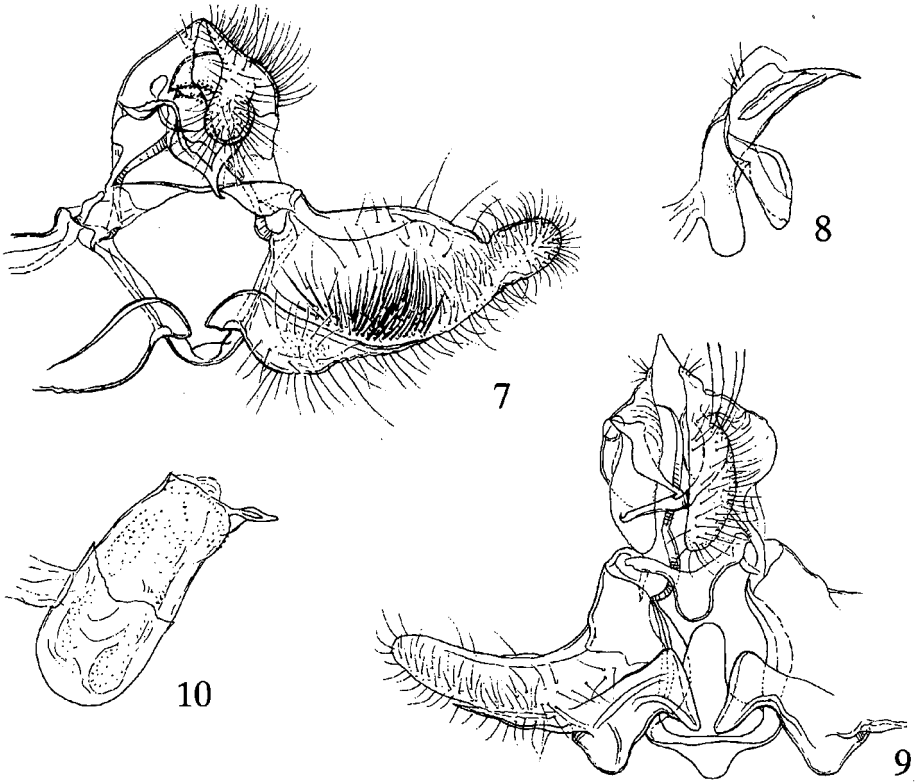
Holotype, male, 'El Limbo, Prov. Chapare, Dep. Cochabamba, Bolivia, 2000 m, NW, 1962, Through F. M. Walz'; coll. CNC.

Eulia ocytola Meyrick was transferred to *Exoletuncus* on the basis of similarities in the male genitalia (RAZOWSKI, 1990). However, this species does not belong to this genus, and a new genus is described below.



Figs. 1-6. Male genitalia of *Exoletuncus* Razowski holotypes: 1, 2. *E. musivus* n. sp.; 3, 4. *E. consertus* n. sp.; 5, 6. *E. artifex* n. sp.

Genitalia masculina de *Exoletuncus* Razowski, holotipos: 1, 2. *E. musivus* sp. n.; 3, 4. *E. consertus* sp. n.; 5, 6. *E. artifex* sp. n.



Figs. 7-10. Male genitalia: 7, 8. *Exoletuncus cretatus* n. sp., holotype; 9, 10. *Colosyta ocystola* (Meyrick), holotype.

Genitalia masculina: 7, 8. *Exoletuncus cretatus* sp. n., holotipo; 9, 10. *Colosyta ocystola* (Meyrick), holotipo.

Colosyta n. gen.

Type-species: *Eulia ocystola* Meyrick, 1932

Coloration cryptic, grey with brown-grey and blackish remnants of pattern. Venation: in forewing all veins separate, R4, R5 and M1 close to one another; in hindwing Rs-M1 stalked to beyond middle, stock of M2-M3 very short, Cu1 distinctly separated.

Male genitalia (figs. 9, 10)

Tegumen broad, rather well sclerotized in distal third, laterally membranous towards ends of pedunculi; uncus triangular; vincu-

lum extending in middle, ventrally; gnathos slender, with slender, long terminal part; socius large, drooping; valva slender except for basal third, sacculus broad to middle, angulate, then slender, provided with thin free termination; median part of transtilla large, without spines; aedeagus stout, with small ventral termination; vesica spined, without distinct cornutus.

Remarks

Female unknown.

Distribution

Costa Rica.

Diagnosis

In the structure of tegumen resembling *Exoletuncus* and *Chilips* Razowski, 1988 but differing in transtilla, juxta and valva. The shapes of the uncus, terminal part of gnathos (with tip hooked) and the aedeagus which resembles that in some cochylinas (e. g. *Aethesoides* Razowski, 1964).

Colosyta ocystola Meyrick, n. comb.

Eulia ocystola Meyrick, 1932, *Exotic Microlepid.*, 4: 259.

Type-locality: Costa Rica: Irazu; coll. NHMW.-Razowski, 1964, *Annls zool.*, 22(21): 462, figs. 28, 29

Exoletuncus ocystolus: Razowski, 1990, *ibid.*, 43(20): 402.

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Resumen

Revisión del género *Exoletuncus* Razowski, 1988 (*Euliini*, *Tortricidae*, *Lepidoptera*), con descripción de cuatro nuevas especies y de *Colosyta* gen. n.

Se revisa el género Neotropical *Exoletuncus*. En él se incluyen seis especies, de las cuales cuatro se describen: *E. musivus*, *E. consertus*, *E. artifex* y *E. cretatus*. *Exoletuncus trilobopa* (Meyrick), una nueva combinación, se transfiere al género en base a su facies; el holotipo carece de abdomen. *Colosyta* gen. n. se describe para emplazar a *Eulia ocystola* Meyrick, hasta ahora incluida en *Exoletuncus*.

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