

**Systematics and faunistics of Neotropical Olethreutini, 4  
(Lepidoptera: Tortricidae): Accessions**

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**ABSTRACT.** Eight species are described as new: *Eumarozia borbae* sp. n., *Tsinilla diversa* sp. n., *Hedya pocadia* sp. n., *H. heptera* sp. n., *H. alagoasia* sp. n., *H. baezae* sp. n., *Neopotamia oblita* sp. n., and *N. niveicollis* sp. n. Notes on *Eumarozia hermosa*, “*Argyroploce*” *platyzona*, and *Neopotamia streblopa* are included.

**KEY WORDS:** Tortricidae, Olethreutini, Lepidoptera, Neotropical, new species.

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INTRODUCTION

The present paper is the last in the series “Systematics and faunistics of Neotropical Olethreutini.” Parts 1, 2, and 3, written by RAZOWSKI & BECKER (2016a, 2016b, 2017), are complementary to a study of Neotropical *Megalota* DIAKONOFF, 1966 by RAZOWSKI & BECKER (2011) and a revision of *Episimus* WALSINGHAM, 1892 by RAZOWSKI & BROWN (2010). Other recent publications on Neotropical Olethreutini include a monograph of *Megalota* by BROWN (2009) and a short paper on *Cacocharis* WALSINGHAM, 1892 by BROWN (2008). POWELL et al. (1995) listed nine olethreutine genera, and the above-mentioned papers discuss eleven genera.

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## MATERIAL

The specimens examined for this paper were collected by the second author. The types of the newly described species are temporarily housed in the Becker Collection, Camacan, Brazil (VOBC), and will eventually be deposited in one of the Brazilian museums. A few specimens have been kindly donated to the Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Kraków (ISEZ). The numbers cited on the labels of the specimens are the entry numbers in the register book of the VOBC.

Abbreviations used: GS – genitalia slide, WZ – Witold ZAJDA.

## RESULTS

### *Eumarozia borbae* sp. n.

(Figs 1, 12)

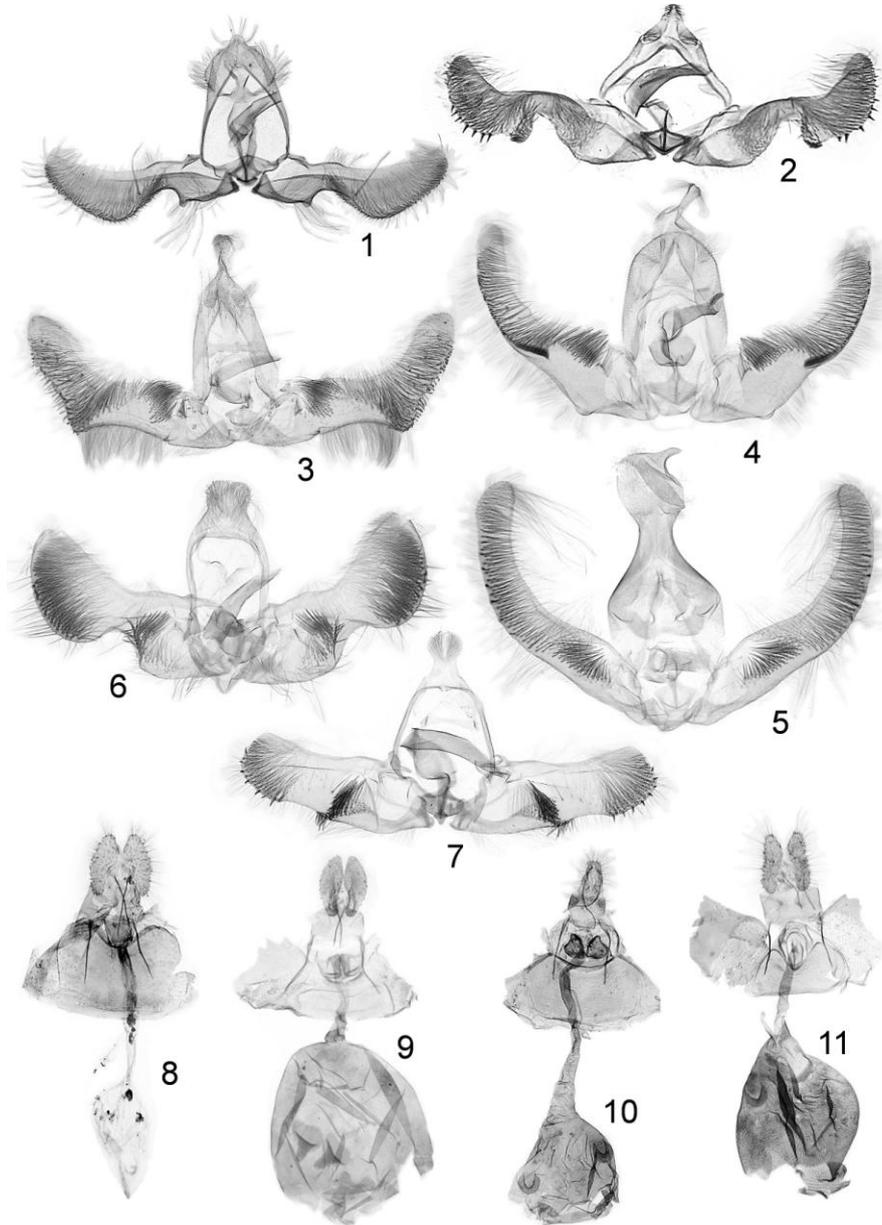
#### Diagnosis

In facies, *Eumarozia borbae* is similar to *E. malachitana* (ZELLER, 1875) from Missouri, USA, but is distinguished by a proximally concave median forewing blotch and the lack of a basal blotch. *E. borbae* differs from *E. atrotincta* RAZOWSKI et BECKER, 2014 chiefly in the pale colouration of the forewing, which in *E. atrotincta* is black, and in its slenderer socii, smaller uncus, and broader, subtriangular cucullus.

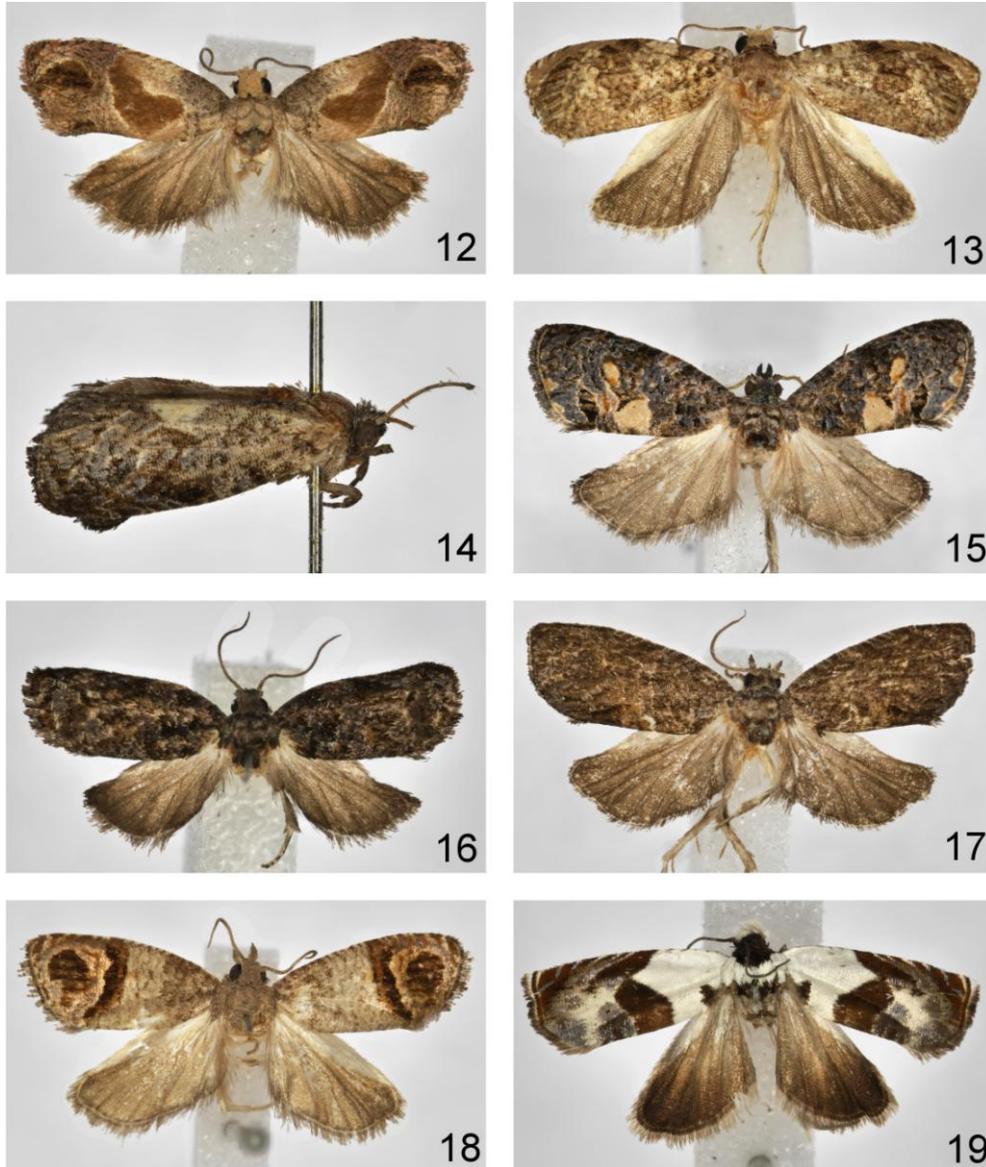
#### Description

Wingspan 14 mm. Head cream; thorax brownish grey, browner proximally. Forewing slightly expanding terminad; costa bent at 2/3; termen almost straight below apex to middle. Ground colour creamish in costal area submedially, grey finely dotted grey-black in basal area, pale brownish grey partially tinged cinnamon in distal area; costal strigulae whitish, divisions brown. Markings rust brown consisting of cream edged median blotch extending proximally towards middle of basal area, tapering towards costa, weakly convex posteriorly and subterminal browner blotch with straight dorsal edge medially. Cilia brownish. Hindwing brown, cilia paler.

Variation. Forewing ground colour of paratype in basal area dark blackish grey, paler, tinged pinkish in posterior half of wing. Median blotch yellowish brown mostly straight posteriorly.



**Figs 1-11.** Male and female genitalia: 1 – *Eumarozia borbae* sp. n., holotype; 2 – *Tsinilla diversa* sp. n., holotype, 3 – *Hedya pocadia* sp. n., holotype, 4 – *Hedya heptera* sp. n., holotype, 5 – *Hedya baezae* sp. n., holotype, 6 – *Neopotamia streblopa* (MEYRICK, 1936), Puerto Rico, 7 – *Neopotamia oblita* sp. n., holotype, 8 – *Hedya alagoasia* sp. n., holotype, 9 – “*Argyroploce*” *platyzona* MEYRICK, 1917, Brazil, 10 – *Neopotamia streblopa*, Puerto Rico, 11 – *Neopotamia niveicollis* sp. n., holotype.



**Figs 12-19.** Adults: 12 – *Eumarozia borbae* sp. n., holotype; 13 – *Tsinilla diversa* sp. n., holotype, 14 – *Hedya pocadia* sp. n., holotype, 15 – *Hedya heptera* sp. n., holotype, 16 – *Hedya alagoasia* sp. n., holotype, 17 – *Hedya baezae* sp. n., holotype, 18 – *Neopotamia oblita* sp. n., holotype, 19 – *Neopotamia niveicollis* sp. n., holotype.

Male genitalia (Fig. 1). Uncus small, rounded; socius fairly long, tapering terminad; basal part of valva subsquare, broad; neck broad, ventral incision distinct; sacculus with lobe at the angle; cucullus broad to middle with long seta anterior to ventral lobe; aedeagus approximately as long as sacculus.

#### **Material examined**

Holotype male: "Brasil: P[a]R[aná], 750 m, 13-19. X. 1995, Telemaco Borba, V.O. BECKER Col, Col. BECKER 97799"; GS 786 WZ. Paratype female (with abdomen missing), data identical to holotype.

#### **Etymology**

The specific name refers to the type locality Telemaco Borba.

### ***Eumarozia hermosa* HEPPNER, 2010**

#### **Material examined**

Two specimens from Pinar Rio, Cuba (Sierra Rosario 400 m, 5-15. VI. 1990, VOBC 71438; GS 1326 WZ, 1327 WZ).

#### **Remarks**

Based on the male genitalia, RAZOWSKI & BECKER (2016a) considered these specimens to be conspecific with *E. beckeri* CLARKE, 1973. The female genitalia are identical to those of the paratype of *E. hermosa*, and the male genitalia are very similar to those of *E. beckeri*.

### ***Tsinilla diversa* sp. n.**

(Figs 2, 13)

#### **Diagnosis**

In facies, *Tsinilla diversa* is similar to *T. lineana* (FERNALD, 1901) from the USA, but they differ from the latter in having a row of longitudinal lines in the subterminal fascia of the forewing. In the male genitalia *T. diversa* resembles the Colombian *T. isoperca* (MEYRICK, 1927), but *T. diversa* has a short sacculus and a broad, setose, ventral lobe of the cucullus lacking a pulvinal spine.

**Description**

Wing span 14 mm. Head brownish cream, frons whiter, labial palpus and thorax pale cream brown. Forewing expanding posteriorly; costa gradually convex; apex broadly rounded; termen slightly convex and oblique. Ground colour creamish, in distal and dorsal parts of wing mixed brownish, with brown marbling; costal strigulae weak, whitish, divisions brownish. Markings pale brown with darker parts; basal blotch ill-defined; postbasal fascia in form of costal spot; median fascia broad, atrophying in dorsal area of wing; subterminal fascia pale brownish with numerous brown lines. Remnants of cilia brownish. Hindwing pale brown; cilia paler.

Male genitalia (Fig. 2). Uncus broad basally, setose posteriorly with broad basal lobes; basal part of valva broad; posterior edge of basal cavity a large, rounded lobe; sacculus angulate with oblique posterior edge; neck of valva short, slender; cucullus short with broad, densely spined ventral lobe; aedeagus moderately slender; one cornutus in vesica.

**Material examined**

Holotype male: "Brasil: Rio Grande do Sul, Mostardas 5 m, 13. I. 1989, V. O. BECKER Col; Col. BECKER 61214"; GS 505 WZ.

**Etymology**

The specific name refers to the peculiar shape of the valva, differing from those of the other congeners; Latin: diversa – different.

**Remarks**

In the VOBC there are at least two identically labelled specimens. They have not been dissected, so they are not included in this description.

***Hedya pocadia* sp. n.**

(Figs 3, 14)

**Diagnosis**

In the facies, *H. pocadia* is mostly similar to the Nearctic *H. cyanana* (MURTFELDT, 1880), but it differs from the latter in having a white dorsal forewing blotch and completely different male genitalia, which are characterized by slender, upcurved valvae.

**Description**

Wingspan 18 mm. Head brown, thorax tinged rust-brown medially. Forewing weakly expanding posteriorly; costa somewhat convex; termen almost straight, not oblique. Ground colour white in form of triangular postmedian blotch beyond mid-dorsum; remaining parts

suffused grey with brown transverse strigulae and refractive grey marks. Costal strigulae fine whitish grey, divisions brown. Markings reduced to subterminal greyish brown, indistinct fascia and traces of subapical markings. Cilia brownish. Hindwing brown; cilia paler.

Variation. Paratypes (wingspan 15 mm) paler than holotype with larger white blotch at forewing dorsum and greyish anterior half of wing. Spots and traces of markings more distinct.

Male genitalia (Fig. 3). Uncus slender, expanding terminally, mostly convex apically; socius elongate, broadest postmedially; subscaphium long; valva moderately broad with ill-defined neck and weak ventral incision; sacculus slightly convex, weakly angulate, with small thorn at angle followed by area of dense hairs reaching ventral lobe of cucullus from which extends area of setae; remaining part of cucullus elongate, setose; posterior edge of basal cavity of valva armoured with subbasal terminally setose lobe and broad, densely spined dorsomedian lobe; aedeagus slender, somewhat longer than uncus.

Female unknown.

#### **Material examined**

Holotype male: "Banhado, Quatro Barras, Parana, 6.VI. 1970, V. O. BECKER leg.; Col. BECKER No. 10836" GS 927 WZ. Paratypes 7 males from same locality as holotype, collected 5. VI. 1970 at 800 m by BECKER & LAROCA, VOBC 342296 and 8. VIII. 1970, VOBC 34333, none dissected.

#### **Etymology**

The specific name refers to the densely hairy ventral edge of the valva; Greek: pokas – wool.

### ***Hedya heptera* sp. n.**

(Figs 4, 15)

#### **Diagnosis**

Externally, *H. heptera* is similar to *H. cyanana* (MURTFELDT, 1880) and the preceding species. It differs from the latter in having a cream forewing median spot and concolorous terminal spots. The male genitalia of *heptera* are most like those of *H. cyanana* with similar lobes of the posterior edge of the basal cavity of valva, but *H. heptera* differs from *H. cyanana* chiefly in the row of dense spines along the proximal edge of the cucullus, similar to that in *Asaphistis* MEYRICK, 1909.

### Description

Wingspan 22 mm. Head brown-black; thorax brown with black markings. Forewing expanding posterad, broad terminally; costa slightly convex; apex broadly rounded; termen gently oblique and convex. Ground colour cream, slightly tinged brownish, preserved as a blotch at mid-dorsum and spots at median cell and along dorsal half of termen; indistinct concolorous marbling and small black marks in remaining wing area and grey refractive markings present. Costal strigulae grey, divisions black. Cream edged blotch with three black inner marks before tornus. Cilia blackish brown, creamer at tornus. Hindwing brownish paler basally; cilia brownish cream.

Male genitalia (Fig. 3). Uncus slender, slightly broadening terminally, concave apically; socius long, slender; angle of sacculus armoured with plate-shaped process; posterior edge of basal cavity of valva with slender submedian lobe followed by large, densely spined broad lobe; neck of valva indistinct; cucullus slender with row of ventral, short spines; ventral margin of valva almost entirely hairy; aedeagus and cornuti short.

Female unknown.

### Material examined

Holotype male: "Brazil: R[io de]J[aneiro], Itatiaia 2100 m, 25. I. 1993, V.O. BECKER Col; Col. BECKER 86484"; GS 926 WZ.

### Remarks

Two females from Parana, Brazil (Curitiba 920 m, 15.XII.1975, VOBC 5179, GS 723 WZ and Banhado, Quatro Barras 800 m, 9.V.1970, VOBC 15857, not dissected) are superficially similar to the type of *H. heptera* but differ from it in the grey colouration of the forewing and the absence of the creamish dorsal patch. It is uncertain whether they are conspecific with *H. heptera*.

### *Hedya alagoasia* sp. n.

(Figs 8, 16)

### Diagnosis

*Hedya alagoasia* is closely related to *H. cyanana* (MURTFELDT, 1880) and *H. heptera* but differs from them in having a slender forewing that does not expand terminad, and the absence of terminal pale spots. In *H. alagoasia* the posterior edge of the postostial sterigma is nearly straight and the antrum has a short sclerite.

**Description**

Wing span 11 mm. Head and thorax black-brown. Forewing uniformly broad throughout; termen slightly convex, not oblique. Ground colour grey, forming two fasciae fused along dorsum; costal strigulae indistinct. Markings blackish brown with greyer marks in form of convex basal blotch, broad median fascia ill-defined at dorsum and slender subterminal marking. Cilia brownish grey with blackish brown interruptions. Hindwing brown; cilia paler.

Male unknown.

Female genitalia (Fig. 8). Papilla analis broad; sterigma tubular with straight posterior edges and ventral plate extending proximally; antrum sclerite short, weak proximally; signum absent.

**Material examined**

Holotype female: "Brasil: Al[agoas], Ibataguara 400 m, 10-20. III. 1994, V.O. BECKER Col; Col. BECKER 91086"; GS 536 WZ.

**Etymology**

The name refers to the state of Alagoas in which the type locality of Ibataguara is situated.

***Hedya baezae* sp. n.**

(Figs 5, 17)

**Diagnosis**

*Hedya baezae* is similar to *H. cyanana* from the USA but differs from it chiefly in having a nearly uniformly broad, brown forewing and a large process on the uncus in the male genitalia.

**Description**

Wing span 18 mm. Head and thorax brownish, end of labial palpus dark brown. Forewing slightly expanding terminad, broadest postmedially; termen indistinctly convex, slightly angled postmedially. Ground colour brownish with browner spots and suffusions; costal strigulae fine, white-grey, divisions brown. Traces of markings brown. Cilia brown. Hindwing brown, cilia slightly paler.

Male genitalia (Fig. 5). Uncus very large, broad, armoured with large sharp ventroposterior process beyond middle; socius hairless; gnathos well developed; subscaphius oval; valva long, slender, with atrophied neck; sacculus weakly convex basally; large group of spines at posterior edge of basal cavity fused with spines of cucullus, latter long, curved dorsally; aedeagus simple, short.

Female unknown.

#### Material examined

Holotype male: "Ecuador: Napo, Baeza 2000 m, 29. XII. 1992, V.O. BECKER Col; Col. BECKER 104245"; GS 78 WZ.

#### Etymology

The specific name refers to the type locality, Baeza.

### *"Argyroploce" platyzona* MEYRICK, 1917

(Fig. 9)

#### Remarks

MEYRICK (1917) described *Argyroploce platyzona* from French Guiana (Rio Maroni), and CLARKE (1958) illustrated the male holotype. The male genitalia are similar to those of *Statherotis* MEYRICK, 1909 and the Ecuadoran *S. heteroglypha* RAZOWSKI & WOJTUSIAK, 2009. RAZOWSKI & BECKER (2016) transferred *S. heteroglypha* to *Ophiorrhabda* DIAKONOFF, 1966 which has similar female genitalia (e.g. a single, plesiomorphic signum present) but different male genitalia. Thus the systematic position of *Argyroploce platyzona* remains uncertain.

We examined one female from Pará, Brazil (Capitão Poco, 19-22. XI. 1984, VOBC 53870; GS 746 WZ) that is externally very similar to the type of *A. platyzona* and probably conspecific with it. Its genitalia (Fig. 9) are characterized by a semioval sterigma, a strong sclerite of the antrum and two strong signa.

### *Neopotamia streblopa* (MEYRICK, 1936)

(Figs 6, 10)

#### Material examined

Male and female from Puerto Rico (Maricao 770 m, 12. VIII. 1987, VOBC 67648; GS 1290 WZ, 1291 WZ).

#### Remarks

*N. streblopa* was described from Panama and Guatemala in *Argyroploce* HUBNER [1922]; CLARKE (1958) illustrated the female lectotype from Guatemala. POWELL et al. (1995) transferred it to *Neopotamia* DIAKONOFF, 1973, where it probably does not belong. The species

has been recorded from Guatemala, Costa Rica, Panama, Venezuela, Puerto Rico and the Dominican Republic. The male and female genitalia of the Puerto Rican specimens are presented in Figs 6 and 10.

***Neopotamia oblita* sp. n.**

(Figs 7, 18)

**Diagnosis**

In facies, *N. oblita* is extremely similar to *N. streblopa*, but *N. oblita* has a pale brown-grey hindwing and is smaller. The male genitalia of *oblita* differ from those of the latter in that the angle of the sacculus is strongly reduced, the cucullus is small and rounded, and the terminal part of the uncus is rounded.

**Description**

Wingspan 18 mm. Head and thorax pale brown. Forewing weakly expanding terminad; costa uniformly convex; apex rounded, termen slightly oblique, straight. Ground colour whitish, indistinctly mixed with brown, strigulated brownish; costal strigulae slightly paler than ground colour, divisions brownish. Basal marking ill-defined, brownish, with diffuse brown strigulae. Median fascia slender, convex, rust proximally, black posteriorly; oval, dark brown blotch in middle of posterior area and traces of brownish subterminal fascia. Cilia brownish cream with a few brown divisions. Hindwing pale brownish grey, cilia paler.

Male genitalia (Fig. 7). Uncus fairly broad, tapering medially, rounded terminally; valva mostly broad with weak neck and shallow ventral incision; sacculus slightly convex, with indistinct angle marked by small group of spines; larger group of longer spines accompanied by setae from angle towards basal opening of valva; trace of lobe at base of costa; cucullus rounded posteriorly; aedeagus moderately broad, tapering from beyond middle, pointed ventroterminally.

**Material examined**

Holotype male: "Brazil: M[inas]G[erais], Caraca 1300 m, 25. X. 1994, V.O. BECKER & K.S. SATTLER Col; Col. BECKER 93574"; GS 760 WZ. Paratype male, with identical data, not dissected.

**Etymology**

The name refers to the unrecognized status of the moth; Latin: *oblita* – forgotten.

***Neopotamia niveicollis* sp. n.**

(Figs 11, 19)

**Diagnosis**

In facies, *N. niveicollis* is easily distinguished by the white ground colour of the forewing. The female genitalia have the signa typical of the genus, similar to those of the Oriental *N. tornocarpa* DIAKONOFF, 1972.

**Description**

Wingspan 12 mm. Dorsum of head and basal half of labial palpus black, frons and posterior part of palpus snow white. Thorax white proximally, black distally. Forewing uniformly broad throughout; costa from beyond base nearly straight; termen convex postmedially. Ground colour in basal half of wing snow white, in posterior part white suffused greyish; costal strigulae white; divisions brown and rust. Markings: dorsobasal part of median fascia slender, costal part dark brown; large dorsal blotch concolorous proximally, mixed rust dorsomedially; tornal blotch grey followed by a smaller blotch at termen; apical part of wing rust. Cilia whitish in distal part brown. Hindwing brown, whiter in basal part; cilia whitish.

Male unknown.

Female genitalia (Fig. 11). Ovipositor short; sterigma elongate-oval sclerotized around ostium area and outer edges; ductus bursae slender, expanding basally where short cingulum and base of ductus seminalis present; signa two half-moon, pocket-shaped sclerites.

**Material examined**

Holotype female: "Ecuador: Past[aza], Mera 1300 m, XII. 1992, V.O. BECKER Col; Col. BECKER 100712"; GS 1292 WZ.

**Etymology**

The name refers to the colouration of the proximal part of the thorax.

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