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TAXONOMIC CHECKLIST OF NEPTICULIDAE OF MEXICO, WITH THE DESCRIPTION OF THREE NEW SPECIES FROM THE PACIFIC COAST (INSECTA, LEPIDOPTERA)

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Abstract. The study of the material collected along the Pacific Coast of Mexico in 2008 has resulted in the discovery of six new species of Nepticulidae. Three species are described and named *Stigmella racemifera* Šimkevičiūtė & Stonis, sp. n., *Acalyptris paradividua* Šimkevičiūtė & Stonis, sp. n. and *A. terrificus* Šimkevičiūtė & Stonis, sp. n., and the other three species belonging to *Stigmella* and *Acalyptris* are documented, but not named pending the availability of additional material. The taxonomic checklist of the Mexican fauna of Nepticulidae is provided for the first time. Illustrations of adults and male genitalia of all species reported in the checklist are given together with a distribution map.
Key words: Lepidoptera, Nepticulidae, *Acalyptris*, *Stigmella*, Mexico, checklist, new species, distribution, fauna

Introduction

One of the most fundamental challenges for mankind in the 21st century is to document the extent and distribution of global biodiversity, and to understand the ecological processes that generate and maintain it. Such information will be essential to inform and guide efforts to safeguard the natural ecosystems that provide Earth's life support systems in the face of escalating threats from habitat destruction and modification by human activity.

Nepticulidae are a family of minute monotrysian Microlepidoptera with a worldwide distribution and nearly 800 described species. Their morphology, biology, taxonomic composition and the history for the Neotropical Region have been reviewed by Puplesis and Robinson (2000). The results obtained from the fieldwork in Belize in 1998 by J. R. Stonis (formerly R. Puplesis) and S. R. Hill and analysis of unidentified material in the ZMUC and the USNM documented a total of seven genera and 58 species of Nepticulidae from Central and South America. Twenty eight of those species were new taxa from Belize (including four species left unnamed). Later, in Puplesis *et al*. 2002a, 16 new species from the upper Amazon basin and the Andes (Ecuador) were recorded, increasing the number of species known from the Neotropics by more than one-fifth. An updated taxonomic review and a checklist with a distribution map of Neotropical Nepticulidae were provided in Puplesis *et al.* 2002b and followed by a monograph by Puplesis and Diškus (2003).

In this paper, we report the results of recent fieldwork along the Pacific Coast of Mexico, in the areas unrepresented in the material reviewed by Puplesis and Robinson 2000; Puplesis *et al.* 2002b and Puplesis & Diškus 2003. From these new collections, we describe three new species: *Stigmella racemifera* Šimkevičiūtė & Stonis, sp. n., *Acalyptris paradividua* Šimkevičiūtė & Stonis, sp. n. and *A. terrificus* Šimkevičiūtė & Stonis, sp. n. The other three new species belonging to *Stigmella* and *Acalyptris* are documented, but not named pending the availability of additional material (male adults).

Currently, the checklist of the Mexican fauna of Nepticulidae includes eight species. Illustrations of adults and male genitalia of all species reported in the taxonomic checklist (including *Stigmella plumosetaeella* Newton & Wilkinson, 1982 and the newly recorded *Acalyptris lascuevella* Puplesis & Robinson, 2000) are presented for the first time together with a distribution map.

The present study is noteworthy because these tiny moths have been little studied and therefore many species remain to be discovered and described. Without the baseline data providing the names and the means of identification of species in a region, it is impossible to properly plan conservation efforts for endemic species, to control introduced species damaging endemic vegetation and to identify potential pests. Many species of Nepticulidae are also of economic importance.

Material and methods

Genitalia were prepared following the method described by Robinson (1976). After maceration of the abdomen

in 10% KOH and subsequent cleaning, male genital capsules were removed from the abdomen and mounted ventral side uppermost. In all cases, the genitalia were studied and photographed in glycerol before fixation. The aedeagus was removed and mounted alongside the genital armature. Female genitalia were removed entirely from the abdomen, cleaned and mounted ventral side uppermost. Genitalia and abdominal pelts of both sexes were stained with Chlorazol Black (Direct Black 38/Azo Black) and mounted in Euparal. Forewing length was measured along the costa from the wing base to the apex of the cilia. Wingspan was measured from the tip of the left wing to the tip of the right wing, when well-mounted specimens were available; however, in most other cases the forewing length was doubled and the thorax width added. The photographs of adults and genitalia were made by A. Šimkevičiūtė using a Leica DM2500 microscope and Leica DFC420 camera.

Descriptions of new species were based on material collected by Jonas R. Stonis (Vilnius, Lithuania) and Simon R. Hill (London, U.K.) during the fieldwork along the Pacific Coast of Mexico in 2008, at a collecting-site in Puerto Angel (Oaxaca Region, Pacific Coast, Mexico, secondary forest at 45–65 m a. s. l., 96°29'W, 15°39'N).

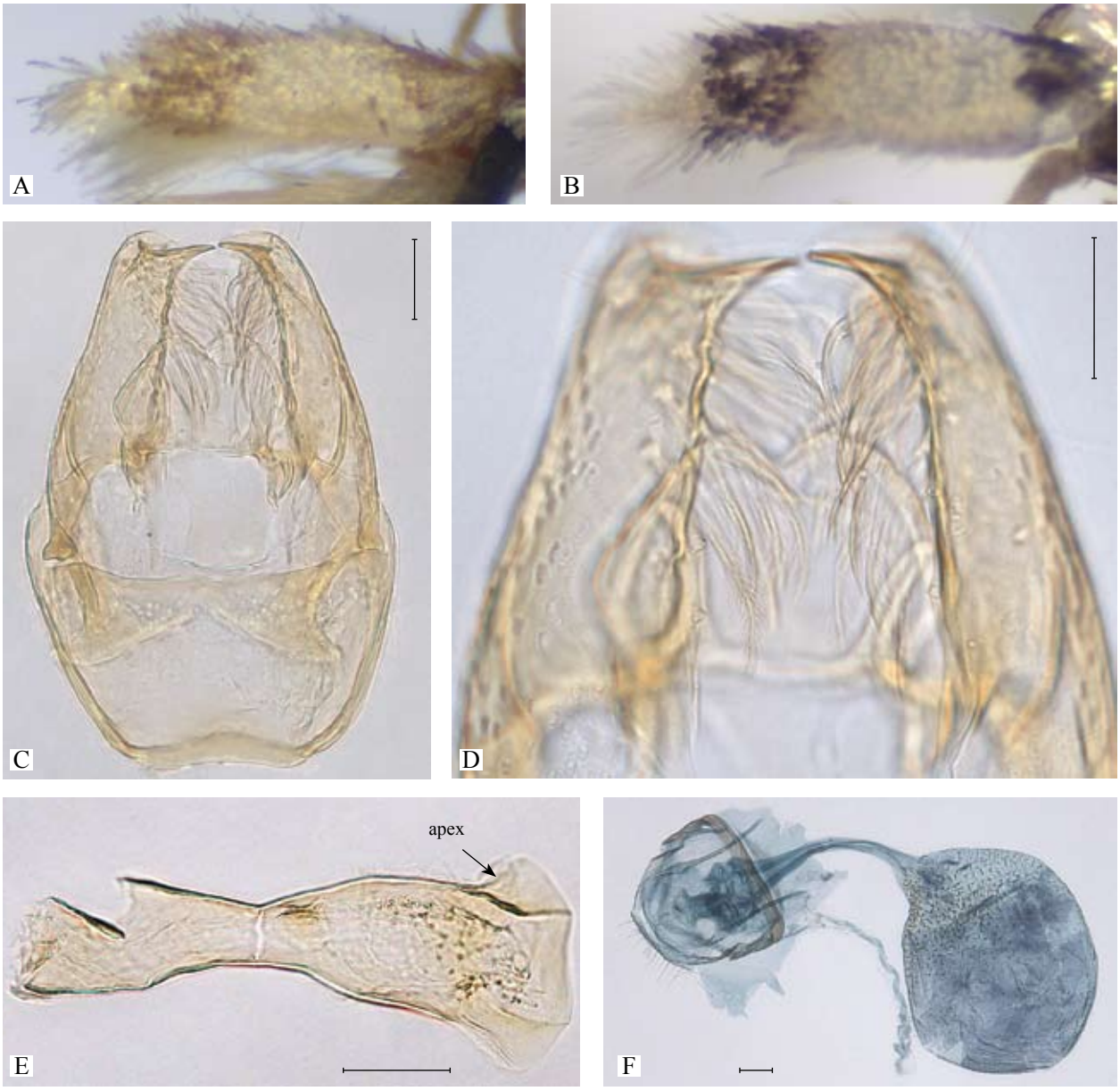

Figure 1. *Stigmella plumosetaeella* Newton & Wilkinson. A – male forewing; B – female forewing; C – genital capsule, slide no. Diškus004 USNM; D – valva with long chetae, slide no. Diškus005 USNM; E – aedeagus, slide no. Diškus004 USNM; F – female genitalia, slide no. Diškus006 USNM (scale 50 μm).

All specimens (except those of *Stigmella species AS018*) were collected at light using a standard method for light-collecting. The additional material studied was collected in Mexico (Tamaulipas) by Duckworth and Donald R. Davis (Washington DC, USA), and in Belize (Las Cuevas Research Station, Maya Mts) by J. R. Stonis (formerly R. Puplesis) and S. R. Hill.
The type series of the new species and other newly collected Mexican material are deposited in the collection of Biosistematics Division of VPU, all other studied material in the collections of the USNM, BMNH and VPU.

Abbreviations of institutions
BMNH – Natural History Museum, London, UK (formerly British Museum (Natural History))
USNM – National Museum of Natural History, Smithsonian Institution, Washington DC, USA (formerly United States National Museum)
VPU – Collections of Biosystematics Division, Department of Zoology, Vilnius Pedagogical University, Vilnius, Lithuania
ZMUC – Zoological Museum, University of Copenhagen, Copenhagen, Denmark.

Results

Checklist of the currently known Nepticulidae of Mexico
Based on the revision of the published records and analysis of recent material collected in Mexico in 2008, eight species of Nepticulidae are now recognized for the Mexican fauna. Three species belong to the genus *Stigmella* Schrank and five (i. e., about 63%) to the genus *Acalyptris* Meyrick.

Genus *Stigmella* Schrank, 1802
barbata group:
1. ***Stigmella plumosetaeella*** Newton & Wilkinson, 1982
Distribution. USA (Arizona), Mexico (Tamaulipas: Cd. Victoria).
*salici*s group:
2. ***Stigmella racemifera*** Šimkevičiūtė & Stonis, sp. n.
Distribution. Mexico (Pacific Coast: Oaxaca Region).
Species not attributed to a group:
3. ***Stigmella species AG018***
Distribution. Mexico (Pacific Coast: Oaxaca Region).
Genus *Acalyptris* Meyrick, 1921
latipennata group:
4. ***Acalyptris paradividua*** Šimkevičiūtė & Stonis, sp. n.
Distribution. Mexico (Pacific Coast: Oaxaca Region).
Species not attributed to a group:
5. ***Acalyptris lascuevella*** Puplesis & Robinson, 2000
Distribution. Belize (Maya Mts.), Mexico (Pacific Coast: Oaxaca Region; new distribution data).
6. ***Acalyptris terrificus*** Šimkevičiūtė & Stonis, sp. n.
Distribution. Mexico (Pacific Coast: Oaxaca Region).
7. ***Acalyptris species AG015***
Distribution. Mexico (Pacific Coast: Oaxaca Region).
8. ***Acalyptris species AG016***
Distribution. Mexico (Pacific Coast: Oaxaca Region).

Review of the currently known Nepticulidae of Mexico

Stigmella plumosetaeella **Newton & Wilkinson, 1982** (Figs 1, 9)
Male (Fig. 1A). Forewing length about 1.6–1.7 mm. Wingspan about 3.8–3.9 mm. The species has been recently redescribed by Puplesis & Robinson (2000: 36, 37, Figs. 31, 139–143, 216). In contrast to the description given by Puplesis and Robinson (2000), the fascia of the forewing ochre or yellowish brown in males (Fig. 1A), but fuscous brown in females (Fig. 1B).
Male genitalia (Fig. 1 C–E). Capsule 290–300 μm long. Valva 202 μm long, with long plumose scales in apical half (Fig. 1C, D). Aedeagus (243 μm long) with some tiny spine-like cornuti (Fig. 1E).
Female genitalia (Fig. 1 F). About 670 μm long. Caudal part of corpus bursae very slender, the remaining larger part subspherical.
Distribution. USA (Arizona), Mexico (Tamaulipas: Cd. Victoria) (Fig. 9).
Diagnosis. Externally and in the features of the male genitalia, this is a very distinctive species. The presence of plumose setae on the valva suggests a possible affinity with the Neotropical *S. barbata* Puplesis & Robinson or with some Nearctic representatives of the *S. saginella* group. However, the specialized shape of the valva, transtilla, uncus and the apically broadened aedeagus isolate *S. plumosetaeella* from these taxa (Puplesis & Robinson 2000).
Material examined. 12 ♂♂, 7 ♀♀, Mexico, env. Cd. Victoria, Tamaulipas, 6. viii. 1963 (*Duckworth & Davis*), genitalia slide nos. Diškus004♂, Diškus005♂, Diškus006♀ (USNM).

Stigmella racemifera **Šimkevičiūtė & Stonis, sp. n.** (Figs 2, 9)
Male (Fig. 2A). Forewing length about 1.5 mm. Wingspan about 3.2 mm. Head unknown (broken in the type material). Thorax, tegulae, forewing and cilia uniformly olive grey-brown, golden glossy, with some indistinctive purple and blue-green iridescence. Underside of fore-

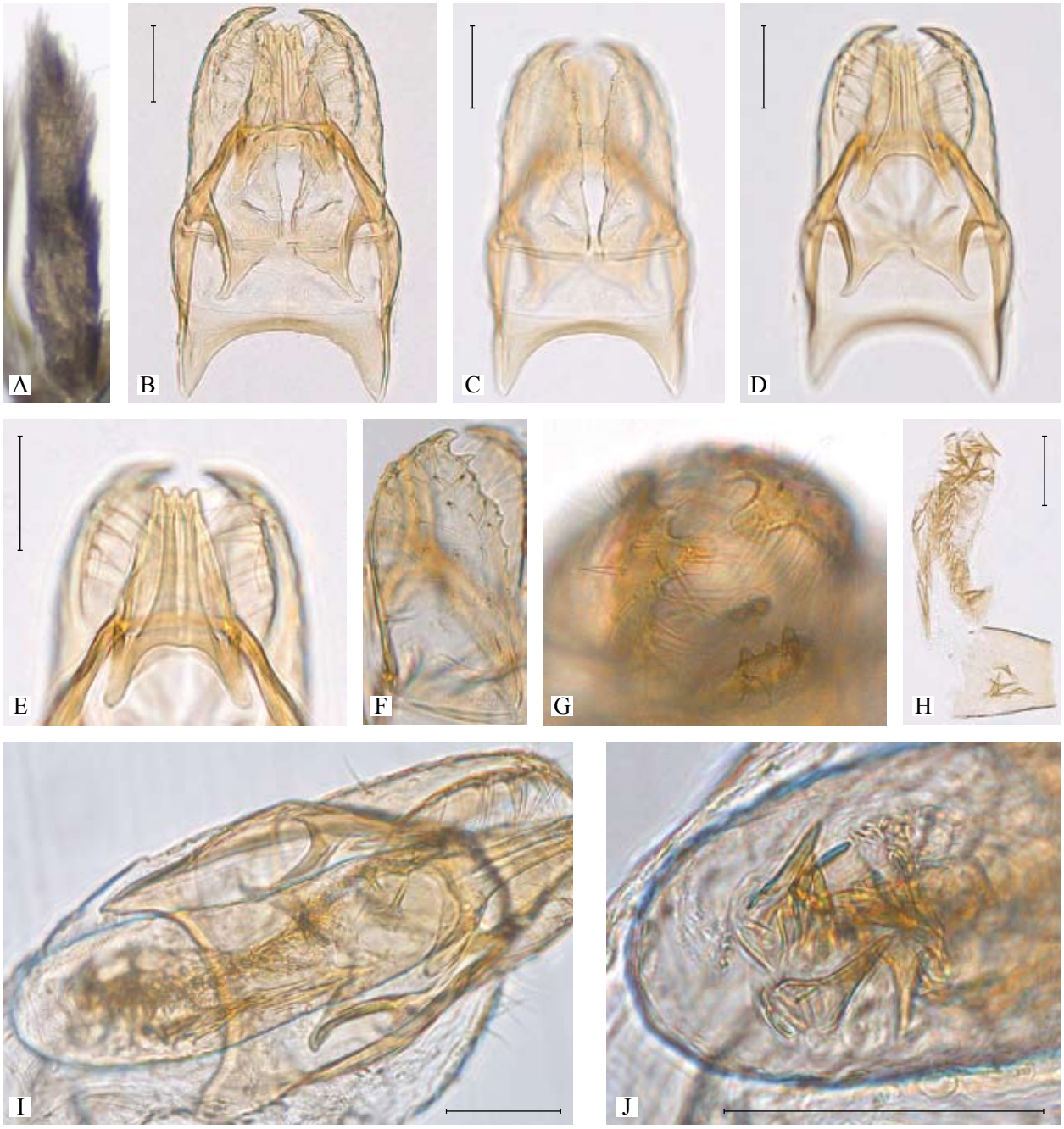

Figure 2. Holotype of *Stigmella racemifera* Šimkevičiūtė & Stonis, sp. n. A – male forewing; B–D – genital capsule, slide no. AG012 (VPU); E – uncus and gnathos, slide no. AG012 (VPU); F, G – valva, a view in glycerol; H – aedeagus, slide no. AG012 (VPU); I, J – details of male genitalia, in glycerol (scale 50 μm).

wing brown with blue-green iridescence. No androconia. Hindwing missing. Legs cream-brown.

Female. Unknown.

Male genitalia (Fig. 2B–J). Capsule 207 μm long. Uncus extended (50 μm long), with three (not four) caudal papillae (Fig. 2E). Gnathos with narrow central plate and two very long (51 μm), straight and parallel posterior processes (Fig. 2E); anterior extensions of gnathos slender and relatively long (10 μm). Valva 127 μm long, with two subapical processes (Fig. 2F, G). Transtilla with large sublateral processes (37 μm). Ventral plate of vinculum large, with pointed lateral lobes. Aedeagus long (200–240 μm) and broad (51–56 μm). Vesica with four clusters (two long bands and two small groups) of spine-like cornuti (Fig. 2H–J): left long band mostly comprises numerous tiny cornuti; right long band comprises many large cornuti; apical small group comprises about 5 large spine-like cornuti; basal small group comprises about 8–9 large spine-like cornuti

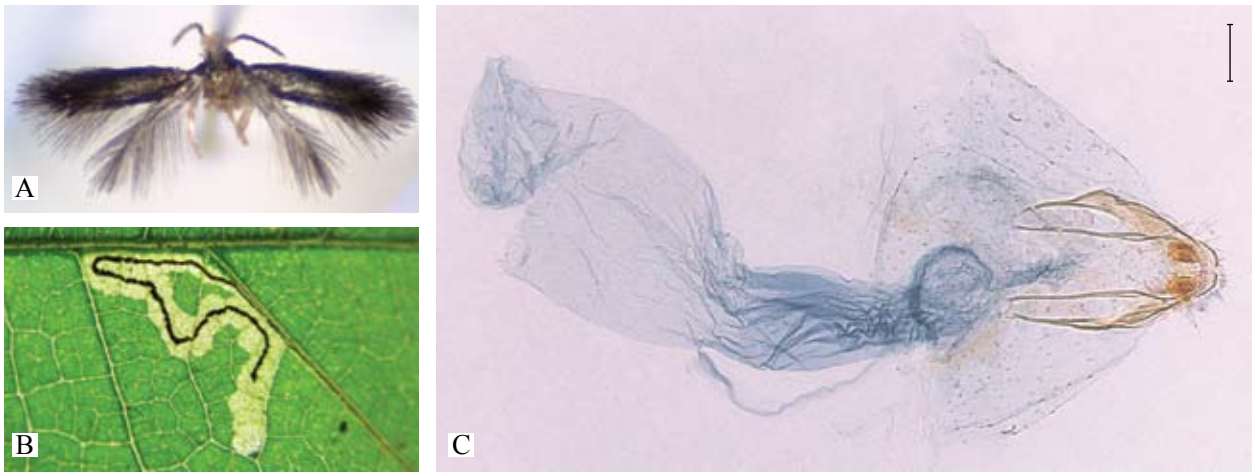

Figure 3. *Stigmella species AG018*. A – adult; B – leaf mine; C – female genitalia, slide no. AG018 (VPU) (scale 50 μm).

(this group is partially fused with the right band of large spine-like cornuti) (Fig. 2J). Juxta very weakly developed, fully membranous, almost triangular (Fig. 2).

Biology. Adults fly in November–December. They occur in secondary forest and can be attracted by light.

Diagnosis. *Stigmella racemifera* sp. n. belongs to the *S. salicis* group. Easily distinguishable from all currently known Neotropical representatives of this group by the configuration of specialized clusters of cornuti in the aedeagus.

Distribution. Mexico (Pacific Coast: Oaxaca Region, Puerto Angel) (Fig. 9).

Material examined. Holotype: ♂, Mexico, Oaxaca Region, Pacific Coast, Puerto Angel, secondary forest, 30. xi. 2008 (*J. R. Stonis & S. R. Hill*), genitalia slide no. AG012 (VPU).

Stigmella species AG018 (Figs 3, 9)

This new species is documented, but not named pending the availability of additional male material.

Female (Fig. 3A). Forewing length 1.4 mm. Wingspan 3.2 mm.

Female genitalia (Fig. 3C). Total length about 772 μm. Apophyses length about 170 μm.

Biology. Host-plant: *Planera aquatica* J. F. Gmelin (Ulmaceae). Larvae pale greenish, with very pale brown head. Mining larvae found in November, together with very numerous old and very old mines from probably September–October. These mines were very abundant in a forest along the coastal zone near Puerto Angel or Zipolite (Oaxaca Region). Mine is a gradually broadening sinuous gallery, with a slender line of frass (Fig. 3B). Mortality rate of the reared sample (no. 4959, VPU) about 92 %.

Distribution. Mexico (Pacific Coast: Oaxaca Region, Puerto Angel and Zipolite).

Material examined. 1♀, Mexico, Oaxaca Region, Pacific Coast, Puerto Angel, secondary forest, mining larvae on *Planera aquatica* 30. xi. 2008 (*J. R. Stonis & S. R. Hill*), genitalia slide no. AG018 (VPU). Also numerous leaf-mines (empty or with larvae) from Puerto Angel and Zipolite (fieldwork card no. 4959, VPU).

Acalyptris paradividua **Šimkevičiūtė & Stonis, sp. n.** (Figs 4A, C, E, F, H, J, 9)

Male (Fig. 4 A). Forewing length 2.4 mm. Wingspan 5.5 mm. Head: palpi cream to yellowish cream; frontal tuft ochreous orange; collar ochreous cream, indistinct; eye-caps yellowish cream; antenna pale ochreous yellow. Thorax, tegulae and forewing ochreous cream; forewing with single postmedian fascia (not subterminal as in the related *A. dividua* Puplesis & Robinson, see Fig. 4B), formed by densely distributed black scales (Fig. 4A). Cilia ochreous cream. Underside of forewing cream. No androconia on forewing. Hindwing and colour of abdomen unknown. Legs brown cream, but forelegs fuscous in frontal part.

Female. Unknown.

Male genitalia (Fig. 4C, E, F, H, J). Capsule 470 μm long. Pseuduncus (in contrast to the related *A. dividua*, see Fig. 4G) triangular, almost invisible from ventral view (Fig. 4E). Uncus with two long, slightly divergent caudal processes, each with a few setae. Tegumen simple, relatively large. Gnathos (in contrast to the related *A. dividua*, see Fig. 4G) with two large caudal processes (Fig. 4F). Valva about 242 μm long, with very slender apical process and inward-directed median lobe (Fig. 4C) (in the related *A. dividua* valva with pointed spine-like median process, not lobe; see Fig. 4D, G). Base of valva abruptly broadened (Fig. 4H), but less broad than in *A. dividua* (Fig. 4I). Transtilla with interrupted transverse bar and well-developed sublateral processes (82 μm) (Fig. 4C, H). Vinculum broad and very long (210 μm; in the related *A. dividua* vinculum is only 150 μm long).

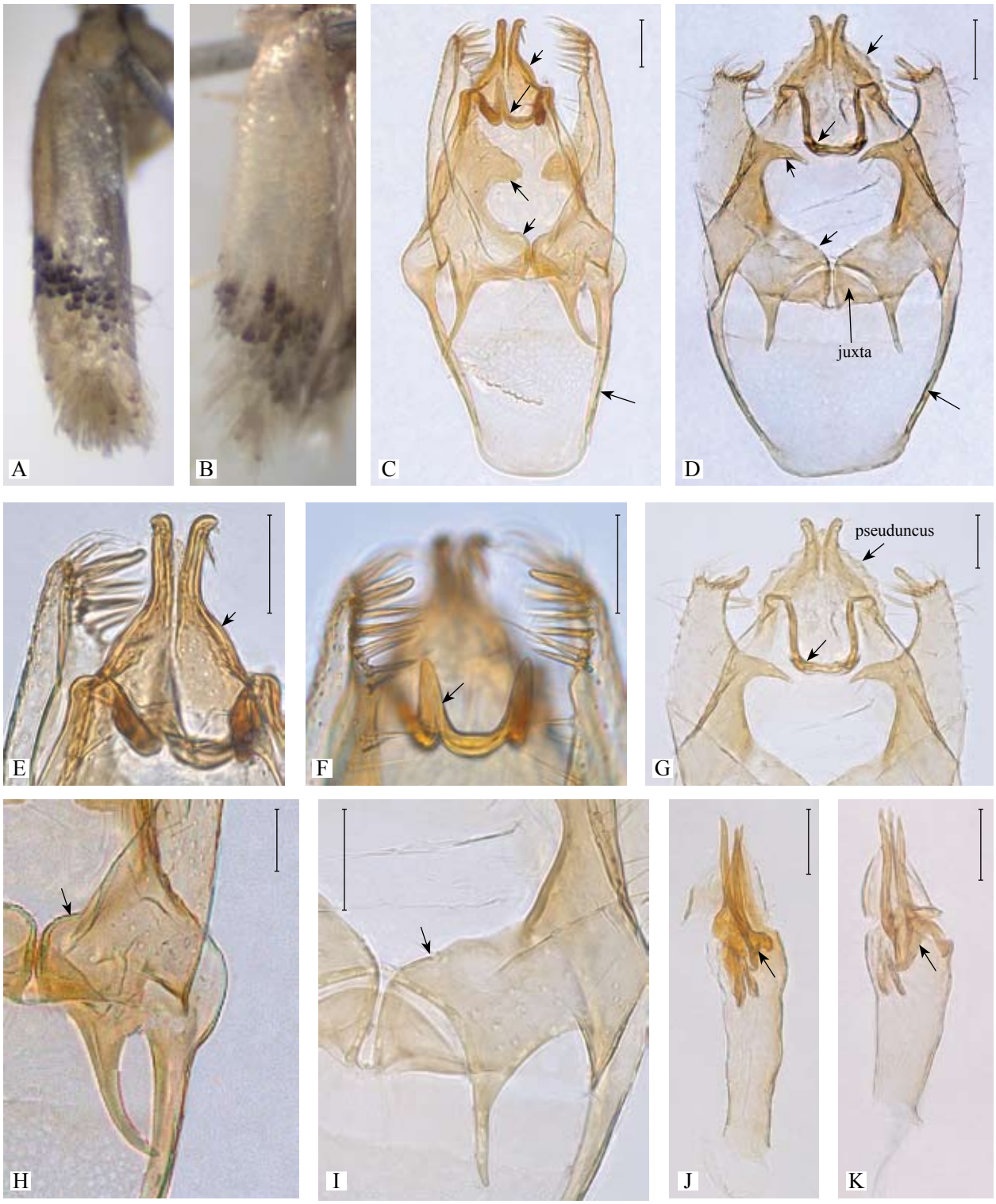

Figure 4. *Acalyptris paradividua* Šimkevičiūtė & Stonis, sp. n. and related *A*. *dividua* Puplesis & Robinson. A – male forewing of *A*. *paradividua*; B – male forewing of *A*. *dividua*; C – male genitalia, capsule of *A*. *paradividua*, holotype, slide no. AG013 (VPU); D – male genitalia, capsule of *A*. *dividua*, paratype, slide no. AD309 (VPU); E – pseuduncus and uncus of *A*. *paradividua*, holotype, in glycerol (VPU); F – gnathos and apical parts of valvae of *A*. *paradividua*, holotype, in glycerol (VPU); G – pseuduncus, uncus, gnathos and apical parts of valvae of *A*. *dividua*, paratype, slide no. AD309 (VPU); H – basal part of valva and sublateral process of *A*. *paradividua*, holotype, slide no. AG013 (VPU); I – basal part of valva and sublateral process of *A*. *dividua*, paratype, slide no. AD309 (VPU); J – aedeagus of *A*. *paradividua*, holotype, slide no. AG013 (VPU); K – aedeagus of *A*. *dividua*, paratype, slide no. AD309 (VPU) (scale 50 μm).

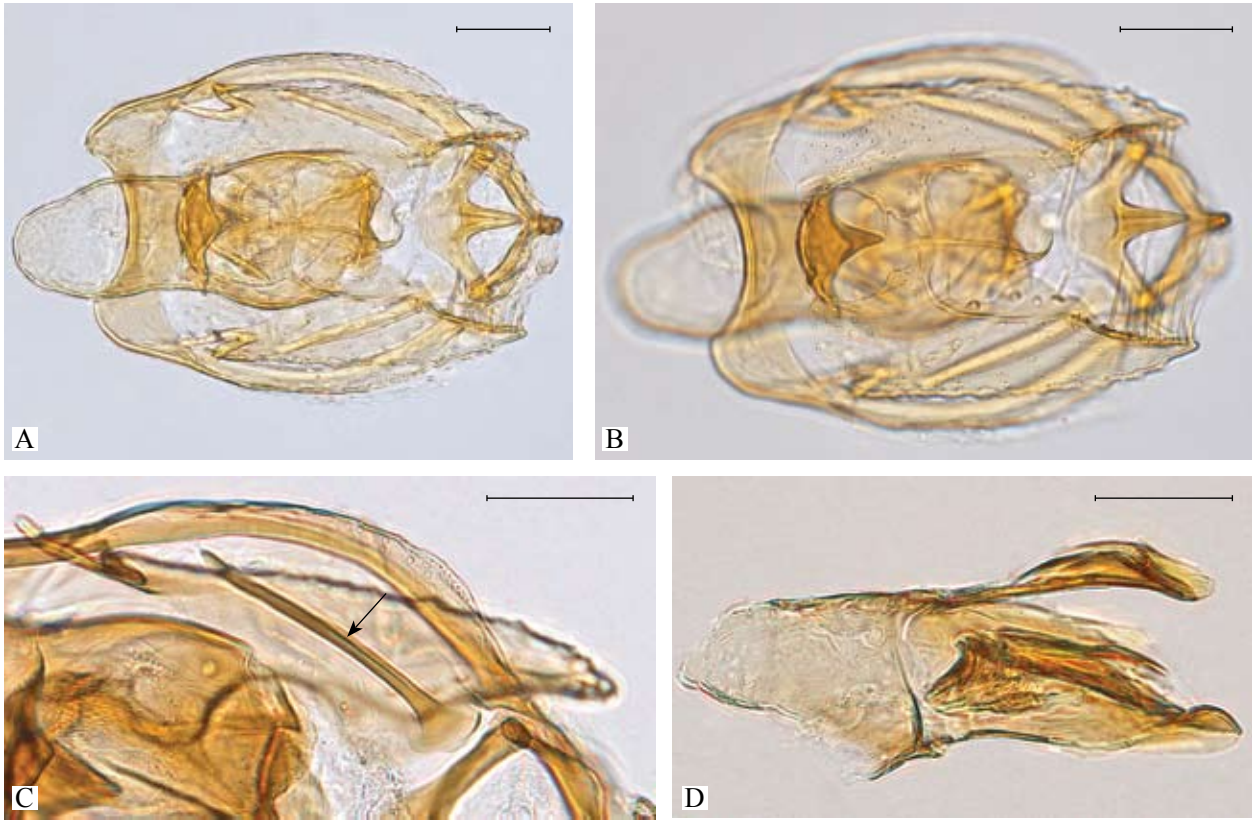

Figure 5. Male genitalia of *Acalyptris lascuevella* Puplesis & Robinson. A–B – capsule with aedeagus, slide no. AG011 (VPU); C – lateral apodeme, slide no. AG009 (VPU); D – lateral view of aedeagus, in glycerol before mounting the slide no. AG008 (VPU) (scale 50 μm).

Aedeagus about 322 μm long, similar to that of the related *A. dividua*, but basal extensions of cornuti short (for comparison see Figs 4J, K). Juxta indistinct, in contrast to *A. dividua* with triangular, but not semicircular, membranous lobe (for comparison see Fig. 4C, D).

Biology. Adults fly in November–December. Occur in secondary forest, can be attracted by light.

Diagnosis. *Acalyptris paradividua* sp. n. belongs to the *A. latipennata* group. It is most similar to *A. dividua* Puplesis & Robinson, but distinguishable by the post-median fascia of forewing (not subterminal as in the related *A. dividua*) and many characters of male genitalia: triangular shape of pseuduncus or juxta, inward-directed median lobe (not a pointed spine-like process) of valva, shape of basal part of valva, presence of long caudal processes of gnathos and a longer vinculum (210 μm long instead of 150 μm as in the related *A. dividua*).

Distribution. Mexico (Pacific Coast: Oaxaca Region, Puerto Angel) (Fig. 9).

Material examined. Holotype: ♂, Mexico, Oaxaca Region, Pacific Coast, Puerto Angel, secondary forest, 30. xi. 2008 (*J. R. Stonis & S. R. Hill*), genitalia slide no. AG013 (VPU).

***Acalyptris lascuevella* Puplesis & Robinson, 2000**
(Figs 5, 9)

The species has been recently described by Puplesis and Robinson (2000: 49, 50, Figs 50, 180, 181). Forewing length 1.4 mm. Wingspan 3.4 mm. Male genitalia capsule 223 μm long (Fig. 5A–C), aedeagus 189 μm long (Fig. 5D).

Female. Unknown.

Biology. Adults fly in November–December (Mexico) and April (Belize). They occur in secondary and tropical forests and can be attracted by light.

Distribution. Probably, the species is widely distributed in subtropical and tropical regions of Central America. Currently known from Belize (Maya Mts.) and Mexico (Pacific Coast: Oaxaca Region, Puerto Angel; new distribution data) (Fig. 9).

Material examined. 4♂♂, Mexico, Oaxaca Region, Pacific Coast, Puerto Angel, secondary forest, 30. xi. 2008 (*J. R. Stonis & S. R. Hill*), genitalia slide nos. AG008, AG009, AG010, AG011 (VPU); 1♂, holotype, Belize, Cayo District, Chiquibul Forest Reserve, Las Cuevas, 3–16.iv.1998 (*R. Puplesis & S. R. Hill*), genitalia slide no. 29119 (BMNH).

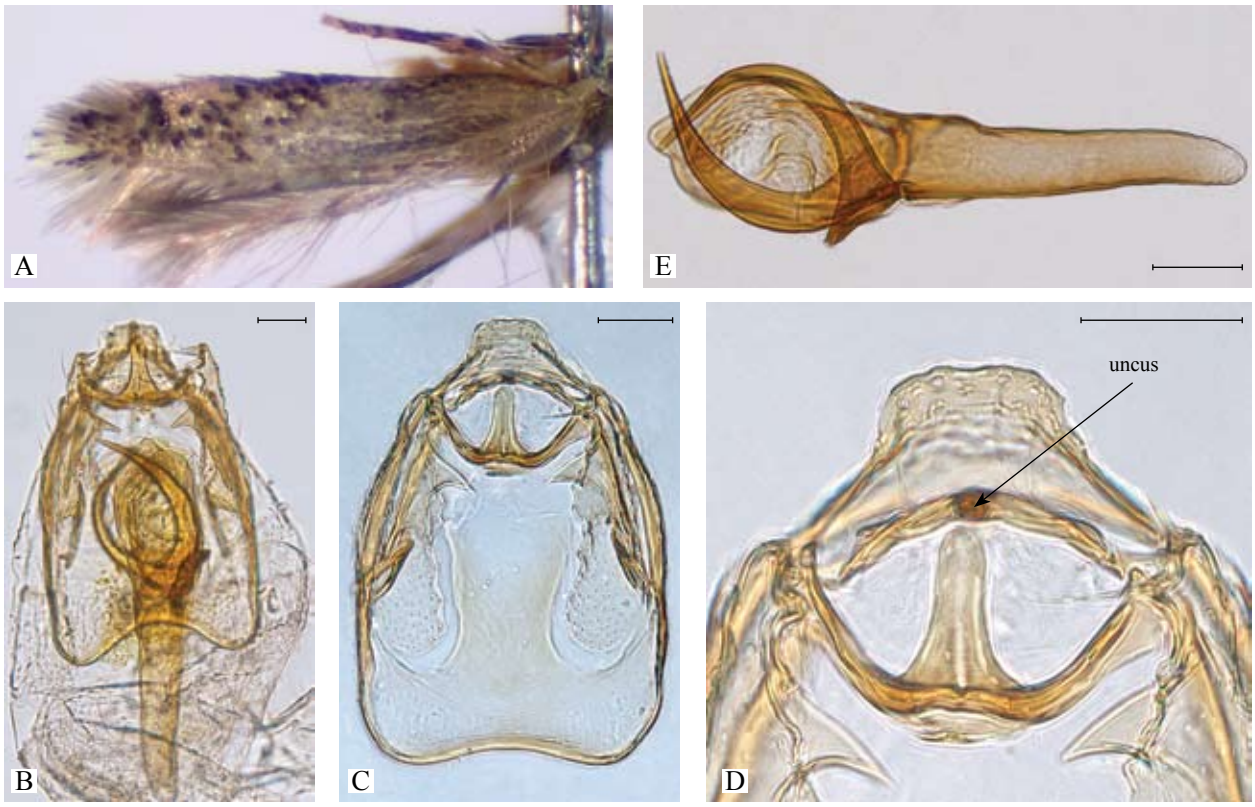

Figure 6. Holotype of *Acalyptris terrificus* Šimkevičiūtė & Stonis, sp. n. A – male forewing; B – male genitalia, holotype, in glycerol; C – capsule, holotype, slide no. AG007 (VPU); D – pseuduncus, uncus and gnathos, slide no. AG007; E – same, aedeagus, slide no. AG007 (scale 50 μm).

***Acalyptris terrificus* Šimkevičiūtė & Stonis, sp. n.** (Figs 6, 9)

Male (Fig. 6 A). Forewing length 1.8 mm. Wingspan 4.2 mm. Head: palpi cream; frontal tuft and collar unknown (rubbed); eye-caps cream; antenna pale ochreous cream. Thorax, and tegulae brownish grey-cream; forewing grey-cream, irrorated with fuscous scales. Cilia cream, with some fuscous scales overlapping onto cilia. Underside of forewing brownish. Hindwing brownish cream. No androconia on hindwing or forewing. Legs ochreous cream, but forelegs covered with fuscous scales in frontal part. Colour of abdomen unknown.

Female. Unknown.

Male genitalia (Fig. 6B–E). Capsule 260 μm long. Pseuduncus short and truncate, 35 μm long. Gnathos with long lateral arms and one large, 42 μm long caudal process (Fig. 6D). Valva 158 μm long, with narrowed apex and with very pointed inward-directed spine-like median lobe (Fig. 6C). Base of valva rounded. Transtilla absent. Vinculum broad, but very short, with short rounded lateral lobes. Aedeagus slender basally (28 μm), but broadened in the apical third (80 μm), about 314 μm long, with two asymmetrical and extremely large, curved spine-like cornuti (126 μm) (Fig. 6E). Juxta as a broad (55–73 μm) plate in-between valvae (Fig. 6C).

Biology. Adults fly in November–December. They occur in secondary forest and can be attracted by light.

Diagnosis. This species differs from other known representatives of *Acalyptris* by enormously large and asymmetrical cornuti and by the combination of a truncate pseuduncus and an acute inner lobe of the valva.

Distribution. Mexico (Pacific Coast: Oaxaca Region, Puerto Angel) (Fig. 9).

Material examined. Holotype: ♂, Mexico, Oaxaca Region, Pacific Coast, Puerto Angel, secondary forest, 30. xi. 2008 (*J. R. Stonis & S. R. Hill*), genitalia slide no. AG007 (VPU).

Acalyptris species AG015 (Figs 7, 9)

This new species is documented, but not named pending the availability of additional male material.

Female (Fig. 7A). Forewing length 1.6 mm. Wingspan 3.7 mm.

Female genitalia (Fig. 7B). Total length about 645 μm. Apophyses about 130 μm long. Corpus bursae oval with oval 282 μm long signum on each side.

Biology. Adults fly in November–December. Occur in secondary forest, can be attracted by light.

Distribution. Mexico (Pacific Coast: Oaxaca Region, Puerto Angel).

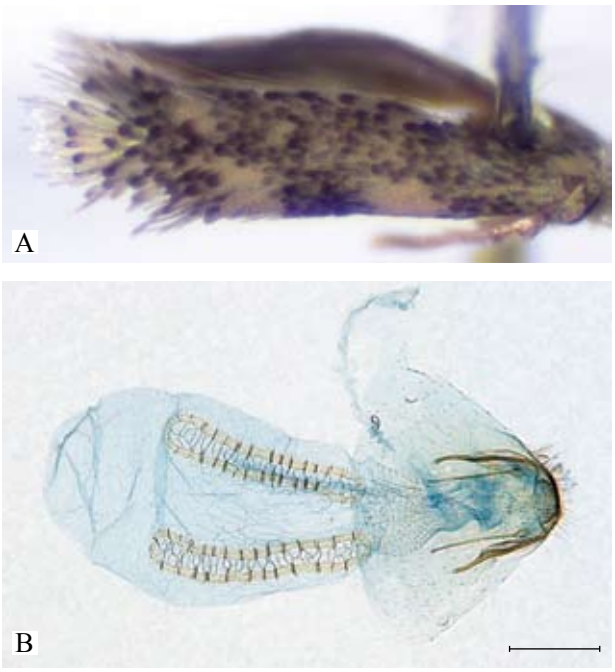

Figure 7. *Acalyptris species AG015*. A – female forewing; B – female genitalia, slide no. AG018 (VPU) (scale 50 μm).

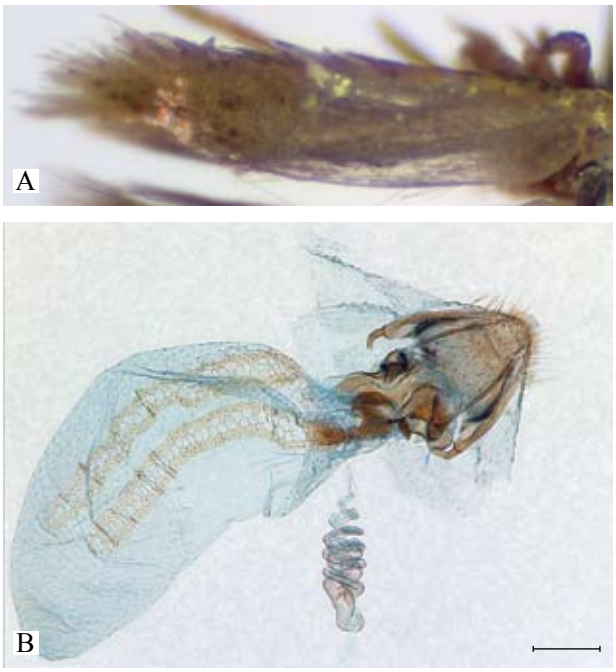

Figure 8. *Acalyptris species AG016*. A – female forewing; B – female genitalia, slide no. AG016 (VPU) (scale 100 μm).

Material examined. 1♀, Mexico, Oaxaca Region, Pacific Coast, Puerto Angel, secondary forest, 30. xi. 2008 (*J. R. Stonis & S. R. Hill*), genitalia slide no. AG015 (VPU).

Acalyptris species AG016 (Figs. 8, 9)
This new species is documented, but not named pending the availability of additional male material.
Female (Fig. 8A). Forewing length 2.0 mm. Wingspan 4.7 mm.
Female genitalia (Fig. 8B). Total length about 934 μm. Anterior apophyses 206 μm long, posterior apophyses 195 μm long. Corpus bursae oval with oval 520 μm long signum on each side.
Biology. Adults fly in November–December. Occur in secondary forest, can be attracted by light.
Distribution. Mexico (Pacific Coast: Oaxaca Region, Puerto Angel).
Material examined. 1♀, Mexico, Oaxaca Region, Pacific Coast, Puerto Angel, secondary forest, 30. xi. 2008 (*J. R. Stonis & S. R. Hill*), genitalia slide no. AG016 (VPU).

Figure 9. Distribution map of species treated in the checklist of Mexico (the dot – *Stigmella plumosetaeella* Newton & Wilkinson, the square – *Acalyptris lascuevella* Puplesis & Robinson; the star – *Stigmella racemifera* Šimkevičiūtė & Stonis, sp. n., *S. species AG018*, *Acalyptris paradividua* Šimkevičiūtė & Stonis, sp. n., *A. terrificus* Šimkevičiūtė & Stonis, sp. n., *A. species AG015* and *A. species* AG016).

Discussion

New data provided in this paper increase the number of species known for Neotropical Nepticulidae. A total of 80 species are recognized for the Neotropical Region (including six new species treated in the present paper) and eight species for the Mexican fauna (Fig. 10).
The size of adults, a concealed mining life-style of larvae (predominantly in leaves) and the difficulty of rearing imagines partially explain why these moths are still poorly studied in many regions. Prior to this study, only a single nepticulid species was known for the Mexican fauna. As

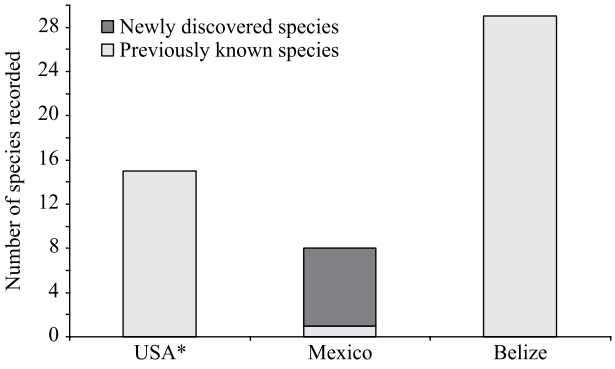

Figure 10. Number of the currently known nepticulid species in Mexico and neighbouring countries (* – only species with neotropical distribution ranges).

a result of this study, the increase in new faunistic data on Nepticulidae is 7.5% for the Neotropical Region and 87.5% for Mexico. New taxonomic data provided make up 7.5% for the current list of the Neotropical Region or 75% for the fauna of Nepticulidae of Mexico. Our previous study revealed the phenomenon of *Acalyptris* dominance in the Neotropical fauna: among the recognized species in Belize, 48% belong to the genus *Acalyptris* (Puplesis & Robinson 2000), in the western part of the Amazon basin, this genus comprises about 50% of the fauna (Puplesis & Diškus 2003). Our study of the material collected in Mexico in 2008 and the data provided in the checklist also demonstrate the dominance of *Acalyptris* (nearly 63% of the currently recorded fauna of Mexico).

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Meksikos mažųjų gaubtagalvių (Insecta, Lepidoptera, Nepticulidae) taksonominis sąvadas ir naujos mokslui rūšys, aptiktos Ramiojo vandenyno priekrantės zonoje

A. Šimkevičiūtė, J. R. Stonis, A. Diškus

Santrauka

Identifikavus kolekcinę medžiagą, kurią 2008 m. Meksikoje (Centrinė Amerika) surinko J. R. Stonis ir S. R. Hilas (Simon R. Hill), išaiškintos 6 naujos mokslui mažųjų gaubtagalvių (Nepticulidae) rūšys, iš kurių trys aprašomos šiame straipsnyje: *Stigmella racemifera* Šimkevičiūtė & Stonis, sp. n., *Acalyptris paradividua* Šimkevičiūtė & Stonis, sp. n. ir *A. terrificus* Šimkevičiūtė & Stonis, sp. n. Kitų trijų naujai išaiškintų rūšių pateikiamos tik iliustracijos, o rūšys neaprašomos. Vadovaujantis nusistovėjusia ir tarptautiniu mastu pripažinta taksonominių tyrimų praktika, šios rūšys (dėl medžiagos stygiaus) minimos tik pavartojant jų genitalinių preparatų numerius, t. y. neįvardinamos.
Pirmą kartą publikuojamas taksonominis Meksikos Nepticulidae faunos sąrašas ir skelbiami nauji duomenys apie *Acalyptris lascuevella* Puplesis & Robinson geografinį paplitimą. Šiame straipsnyje publikuojamų naujų duomenų indėlis yra labai didelis: faunistiniai duomenys apie Neotropinio regiono Nepticulidae fauną, lyginant su iki šiol žinomais duomenimis, pakito (padidėjo) 7,5 proc., duomenys apie Meksikos Nepticulidae fauną – 87,5 proc.

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