

**Tortricidae from Vietnam in the collection of the Berlin Museum.  
7. Some additional data (Lepidoptera: Tortricidae)**

JÓZEF RAZOWSKI

Institute of Systematics and Evolution of Animals PAS, Sławkowska 17, 31-016 Kraków,  
Poland, e-mail: Razowski@isez.pan.krakow.pl

**ABSTRACT.** 17 species are listed of which 11 ones are described as new: *Terricula graphitana* sp.n., *Archips okuiho* sp. n., *Archips baolokia* sp.n., *Archips vivesi* sp. n., *Isodemis longicera* sp. n., *Isodemis brevicera* sp. n., *Neocalyptis acutapex* sp.n., *Atsusina curiosissima* sp. n., *Phaecasiophora euchlanis* sp. n., *Kennelia tropica* sp. n., *Vicamentia vietnamica* sp. n. Two new genera, *Atsusina* gen. n. and *Vicamentia* gen. n. are erected, female of *Gnorismoneura maichau* RAZOWSKI is newly described, and *Metendothenia albomaculata* KAWABE, 1989 is transferred to *Endothenia* STEPHENS, 1852.

Key words: Tortricidae, new taxa, Vietnam.

---

INTRODUCTION

Recently the Tortricidae of Vietnam were studied by RAZOWSKI (9 papers) and KUZNETZOV (11 papers). The papers published until 2000 are catalogized by KUZNETZOV (2000), these by RAZOWSKI are mentioned in his recent papers (RAZOWSKI (2009a, 2009b). List of localities is provided by RAZOWSKI (2009a).

**Material**

The material is housed in the Museum für Naturkunde der Humboldt Universität, Berlin.

### Acknowledgements

The author thanks Dr. WOLFRAM MEY, the Berlin Museum for providing the collection of the Tortricidae from Vietnam for study. Thanks are also extended to Mr. K. FIOŁEK and Mr. W. ZAJDA, Kraków who photographed the material and arranged the plates.

## SYSTEMATICS

### Tortricinae

#### *Gnorismoneura elegantica* RAZOWSKI, 2008

An additional male from the type locality, with same data.

#### *Gnorismoneura maichau* RAZOWSKI, 2008

Four specimens from the type locality (same data) one from Mt. Fa Si Pang, 2400 m (V - 1993, SINIAEV & SIMONOV) and two from Sa Pa, Fan Si Pang Mts (25 - 30-III-1995, MEY).

Description of female genitalia (Fig. 17, not known until now): Proximal edge of sterigma rounded; colliculum broad, membranous with small posterior sclerite and large proximal sclerite; ductus bursae slender; signum posterior, a large plate with medioposterior thorn.

#### *Terricula minor* RAZOWSKI, 2008

One female from Fan Si Pang Mts (one of the type localities, same date).

#### *Archips okuiho* sp. n.

(Fig. 22)

### Diagnosis

Diagnosis: This species is close to *A. termias* (MEYRICK, 1918) from Assam and *A. dispilanus* (WALKER, 1964) described from Buthan but is distinct chiefly by the terminal process of aedeagus; similar process is found in *A. micaceanus* (WALKER, 1863) from China but in *micaceanus* the uncus is broad, expanding terminally.

### Description

Wing span 17 mm. Head cinnamon brown, thorax browner; labial palpus ca 1,5 purple brown. Forewing costa concave beyond middle (with fold slender, reaching middle); apex weakly protruding; termen sinuate, slightly convex at middle. Ground colour cream brown slightly mixed pale ferruginous in costal half; strigulation indistinct, brownish; basal third of wing suffused brown, costal fold browner. Markings: median fascia slender, brown to middle, rust brown, broad postmedially, tinged grey in dorsal third; subapical blotch brownish, separate from posterior part of subapical fascia which is yellow. Cilia brown to M3, blackish at apex, yellowish cream in remaining part. Hindwing brownish, yellowish cream to M1; cilia brownish cream.

Male genitalia (Figs 1, 2): Uncus slender posteriorly; terminal plate of gnathos long; dorsum of posterior half of sacculus broader than the proximal part, with pointed free end; aedeagus slender with lateroterminal sharp prominence directed dorsad.

Female not known.

### Material

Holotype male: "Vietnam, Sa Pa Okui-ho, 1100 m, 31. III. 1995, leg. W. MEY"; GS 329 Wiet. Paratype male, same label.

### Etymology

This name refers to the type locality.

### *Archips baolokia* sp. n.

(Fig. 23)

### Diagnosis

This species is closest to *A. alleni* TUCK, 1990 from Thailand but *baolokia* with strong convexity of forewing termen, the brown hindwing, the uniformly broadening distal part of the uncus, and the presence of dorsosubterminal process of aedeagus.

### Description

Wing span ca 17 mm. Head and thorax ferruginous brown. Forewing not expanding terminad; costa distinctly convex basally with very slender fold reaching to before middle of curvature, then concave; apex short; termen deeply concave beneath apex, strongly convex near middle. Ground colour brownish ferruginous, paler in tornal fourth of wing with indistinct cream lines and brown suffusions and spots along costa. Markings almost completely atrophied, diffuse. Cilia paler than ground colour, especially at tornus. Hindwing pale brown; cilia paler.

Male genitalia (Figs 3, 4): Posterior half of uncus rather uniformly broad, proximal part slender; terminal plate of gnathos long; ventral edge of sacculus weakly convex; terminal process delicate; aedeagus beyond zone uniformly broad, armed with small dorsal process subterminally; cornuti long.

Female not known.

### Material

Holotype male: "S-Vietnam, Bao Lok, 1600 m, 20 - 26. IV. 1963, leg. SINIAEV & SIMONOV"; GS 327 Wiet.

### Etymology

The specific name refers to the type locality.

### *Archips vivesi* sp. n.

(Fig. 24)

### Diagnosis

Closest to *A. inanis* RAZOWSKI, 1976 from Afghanistan but this species with a narrow anteostial sterigma and short signum.

### Description

Wing span 18 mm. Head and thorax greyish brown; labial palpus ca 1,5 cream brown. Forewing costa strongly convex, then concave; apex moderately long; termen sinuate beyond apex, strongly convex near middle. Ground colour brownish cream, paler in costal area to 1/3, more brownish ferruginous otherwise; strigulation dense, brown. Markings atrophied; some brown spots along costa. Cilia brownish, grey-brown terminally. Hindwing brownish, hardly tinged cream at apex; cilia paler than wing.

Male not known.

Female genitalia (Fig. 18): Anteostial part of sterigma broad, short, with rounded proximal corners, postostial part large; antrum almost uniformly broad, with a weak posterior sclerite; ductus bursae moderately long; cestum reaching beyond mid-ductus; blade of signum long, slender.

### Material

Holotype female: "N-Vietnam, Sa Pa, Fan Si Pan (N expos.) 1600 m, 21.17N 103.44E, prim.[ary] forest, 28. X. - 3.XI. 1994, leg. SINIAEV"; GS 308 Wiet.

### Etymology

This species is named in honour of Dr. ANTONIO VIVES MORENO, my scientist fellow of Madrid.

### *Dynatocephala omophaea* (MEYRICK, 1926)

An additional specimen from South Vietnam taken in Kon Tum, Dac Glei at the altitude of 700 m.

### *Isodemis brevicera* sp. n.

(Fig. 26)

### Diagnosis

Similar to *longicera* but *brevicera* with the postbasal part of uncus slender and the terminal part broadening, the short sacculus with almost straight, short terminal process, and the longer cornuti. Also similar to *S. proxima* RAZOWSKI, 2000 from Taiwan and its allies but this last with a short, spine like process of sacculus.

### Description

Wing span 21 mm. Head and thorax creamish; labial palpus ca 1,5 tinged brownish. Forewing slender; costa curved in basal third; apex short; termen weakly sinuate beneath apex. Ground colour cream sparsely dotted and suffused brownish especially at base of wing and along dorsum. Markings brownish with dark brown parts: median fascia interrupted subcostally and medially, atrophied dorsally, connected with long subapical blotch; two small spots at end of dorsal branch of median cell; termen with short terminal lines between the veins; tip of apex rust. Cilia cream with some brown divisions. Hindwing pale brown-grey; cilia paler.

Male genitalia (Figs 7, 8): Uncus somewhat narrowing postbasally, broadening subterminally; posterior part of arm of gnathos broadening with distinct lateral prominence; terminal part short; henion broad, membranous ventrally; valva broad, rounded caudally with distinct pocket along middle of disc; sacculus rather short, straight ventrally, terminating in a moderate terminal process; transtilla rather small, without thorns; aedeagus moderate; cornuti 10 short, capitate spines.

Female not known.

### Material

Holotype male: "Vietnam. Sa Pa, Fan Si Pang Mts, 25. - 30. III. 1995, leg. W. MEY"; GS 342 Wiet.

### **Etymology**

The specific epithet refers to the termination of sacculus; Latin: brevis - short; cera (from Greek: keras) - a horn.

### ***Isodemis longicera* sp. n.**

(Fig. 25)

### **Diagnosis**

Very close to *brevicera* but this species with the posterior part of uncus tapering apicad, the terminal process of sacculus very long, slender, and the cornuti somewhat longer.

### **Description**

Wing span 22 mm. Head and thorax pale brownish cream; labial palpus ca 2. Forewing as in the preceding species. Ground colour cream; suffusions weak, cream brown and brown. Markings brownish with dark brown parts; costal part of median fascia not connecting subapical blotch; this last brownish grey; two terminal lines between M2 and M3 long. Cilia cream without divisions. Hindwing pale brownish grey; cilia paler.

Male genitalia (Figs 5, 6): Uncus uniformly broad to beyond middle, then tapering apicad; ventral edge of terminal part of gnathos concave, lateral corners elongate; valva broad; sacculus long with very long, slender terminal process; cornuti 12 rather long spines.

Female not known.

### **Material**

Holotype male: "N-Vietnam, Fan Si Pan, 1600 m, 22.17N 103.44E, primary forest 1.-7.XI. 1995, leg. SINIAEV & AFONIN"; GS 337 Wiet.

### **Etymology**

The name refers to the terminal process of sacculus; Latin: longus - long, cera/ Greek: keras - a horn.

### **Gatesclarkeini**

### ***Atsusina* gen. n.**

Type-species: *Atsusina curiosissima* RAZOWSKI, sp. n.

### Diagnosis

Related to *Gatesclarkeana* DIAKONOFF, 1966 and *Hiroshiinouea* KAWABE, 1978 (compare RAZOWSKI 1989b) but this genus with the long, weakly sclerotized uncus, the atrophied gnathos and socii, the setose lobes fused with sacculus, and the left sacculus armed with terminal spines.

### Description

Venation. In forewing chorda complete; M-stem ill-defined; base of CuA2 opposite 1/3 distance R1-R2; M2 well distanced from M3; M3 approaching CuA1 in basal third. In hindwing Rs-M1 stalked to 1/3; M2 well separated from M3-CuA1; two last veins connate.

Male genitalia: Pedunculi of tegumen slender, rather weak; terminal part of tegumen forming a weakly sclerotized uncus; gnathos membranous; tuba analis weakly sclerotized, membranous proximally, broad distally; valvae asymmetric: right valva short with almost oval setose lobe (all setae similar, blunt) and slender terminal part; basal cavity and basal process atrophied; sacculus produced ventropostbasally. Left valva large with setose lobe broad proximally; basal cavity slender, subdorsal; sacculus broad beyond base, extending, well sclerotized ventroposteriorly where a group of 6 curved spines occurs. Aedeagus short, delicate; olethreutoid weak; cornuti absent.

Abdomen with one pair of pits. No specialized abdominal scent organs.

Female not known.

### Distribution

Vietnam; biology: only the collecting date (cf. *A. curiosissima*).

### Etymology

The genus is named in honour of the late Dr. Atsusi KAWABE who specialized in this group of Olethreutinae.

### *Atsusina curiosissima* sp. n.

(Fig. 28)

### Diagnosis

This is the only species of the new genus (cf. its characters); externally it somewhat resembles *Endothenia albomaculana* (KAWABE, 1989), **comb.n.** from Thailand.

### Description

Wing span 12 mm. Head and thorax greyish brown. Forewing broad, not expanding terminad; costa curved basally, then weakly so; apex broadly rounded; termen not oblique,

straight. Ground colour pale brownish, mixed pink chiefly along costa; costal strigulae indistinct, cream at costa; divisions brown; suffusions brownish, some dots and postmedian veins brown. Markings consisting of diffuse brown median fascia and paler subterminal fascia. Cilia (remnants) brown, paler at tornus. Hindwing brownish; cilia creamish with brown basal line.

Male genitalia (Figs 11, 12) as described for the genus.

#### **Material**

Holotype male: "N-Vietnam: Fan Si Pan, 1600 m, 22.17N 103.44E primary forest, 1 - 7. XI. 1995, leg. SINIAEV & AFONIN"; GS 331 Wiet.

#### **Etymology**

The specific epithet refers to curious male genitalia; Latin: curiosissima - most curious.

### **Olethreutini**

#### ***Eudemis gyrotis* (MEYRICK, 1909)**

#### **Material**

One male from Fan Si Pan, N Vietnam, 1600 m, 1 - 7-VIII, primary forest, leg. SINIAEV & AFONIN.

#### **Remarks**

Externally this specimen does not differ from the type from Assam and the specimens from Japan but the tuft of hair from postbasal edge of sacculus illustrated by DIAKONOFF (1973) is absent.

#### ***Sorolopha herbifera* (MEYRICK, 1909)**

#### **Material**

Additional specimens from Fan Si Pang Mts (cf RAZOWSKI 2009b).



***Phaecasiophora euchlanis* sp. n.**

(Fig. 29, 30)

**Diagnosis**

Male genitalia similar to those in *P. diluta* DIAKONOFF, 1973 from Java and Assam, India but this species with the undivided socius and desely spined major part of the neck of valva; female with two small signa similar to *P. attica* (MEYRICK, 1907), also from Assam, but with completely membranous anteostial part of sterigma and broad postostial sclerite.

**Description**

Wing span 26 mm. Head and thorax brownish cream. Costa of forewing curved to beyond middle; termen not oblique, straight. Ground colour cream with slight yellowish brown admixture; suffusions and small dots brownish; costal strigulae fine, indistinct, creamish; divisions small, brown. Markings pale brown represented by slender subapical blotch and costal remnant of median fascia; basal suffusion weak; brownish marks between median veins. Cilia paler than suffusions, creamish medially. Hindwing pale cream brown; cilia paler.

Variation. Paratypes somewhat darker than the holotype, with brownish suffusions of forewing. Markings brown consisting of costal part of postbasal fascia and remaining costal elements more or less fused with one another. Dorsal third or half of wing strongly suffused and sprinkled brownish. Hindwing in female brownish.

Male genitalia (Fig. 13): Tegumen short; socii small, triangular, densely hairy; sacculus convex followed by a very weak ventral incision setose in posterior half; cucullus long, slender with indistinct ventral lobe; aedeagus short, broad.

Female genitalia (Fig. 19): Papilla analis convex laterally; apophyses short; sterigma moderately large, subsquare with rounded angles, concave proximally; anteostial part membranous; almost entire ductus bursae with inner sclerite; corpus bursae very large; two small signa present.

**Material**

Holotype male: "N-Vietnam. Fan Si Pan near Chapa, 16-1800 m, 22.20N 103.40E, V. 1995, secondary forest, native collectors"; GS 304 Wiet. Paratypes 2 males and 1 female from same locality, 1600 m, 1 - 7. XI. 1995, leg. SIMONOV & AFONIN, female GS 305 Wiet.

**Etymology**

The specific epithet refers to the colouration of forewing; Greek: *euchlana* - a thin overcoat.

*Neostatherotis pallidornus* RAZOWSKI, 2008**Material**

One male from the type locality, with same data.

*Dudua aprobola* (MEYRICK, 1886)**Material**

Four specimens from Sa Pan (Mt Fan Si Pan, N Vietnam 2400 m, 28-X-1994, SINIAEV).

**Remarks**

Known from Vietnam (KUZNETZOV 2000), S China, Thailand, India and Indonesia, Australia, and Micronesia; described from Tonga.

**Enarmoniini***Kennelia tropica* sp. n.

(Figs 31, 32)

**Diagnosis**

This species is closely related with East Palaearctic *K. xylinana* (KENNEL, 1900) and *K. corthynias* (MEYRICK, 1909) from Sri Lanka but is easily distinguished by the pale colouration, the long neck of valva and the slender, long aedeagus. Female of the new species differs from that of the former in the presence of a small, rounded sterigma and very long posterior sclerite of ductus bursae.

**Description**

Wing span 18 mm. Head and thorax whitish. Forewing typical of the genus. Ground colour whitish hardly mixed brownish grey, sparsely sprinkled brownish; costal strigulae white, indistinct; divisions dark brown. Markings atropied. Cilia whitish. Hindwing brownish white; cilia whitish.

Variation: Wing span of paratype 16 mm. Traces of markings and suffusions pale brownish. Hindwing pale brownish with much paler cilia.

Male genitalia (Fig. 14): Uncus fairly long with small apical bifurcation; socius subtriangular, rounded apically; valva slender with long neck, ventral angle of cucullus indistinct, ventrocaudal part somewhat protruding, spiny; aedeagus slender, long.

Female genitalia (Fig. 20): Sterigma small, rounded; basal and postbasal 3/4 of ductus bursae sclerotized.

### Material

Holotype male: "N-Vietnam, Fan Si Pan, 1600 m, 22.17N 103.44E, 1600 m, primary forest, 1 - 7. XI. 1995 leg. SINIAEV & AFONIN"; GS 323 Wiet. Paratypes: a male from Mai-Chau, N Vietnam, 40 km SE Moc-chau, 1400 m, 7 - 15. IV. 1995, primary forest, leg. SINIAEV; not dissected; female identically labelled the the holotype, GS 346 Wiet.

### Etymology

The name refers to the tropical area of the Oriental Region.

### *Vicamentia* gen. n.

Type-species: *Vicamentia vietnamica* RAZOWSKI, sp. n.

### Diagnosis

Related to *Anathamna* MEYRICK, 1911 and *Helicophanes* MEYRICK, 1888 but with the forewing pattern, uncus and socii resembling *Enarmonia* HÜBNER [1825], the valva is rather similar to that in *Enarmonodes* DANILEVSKY & KUZNETZOV, 1968. The cucullus resembles that in many Eucosmini and Grapholitini.

### Description

In forewing all veins separate, R5 to termen; M3 approaching CuA1 at median cell; median stem absent; chorda preserved in chiefly proximal part, originating at 2/3 distance between R1-R2; CuA2 rather opposite base of R2. In hindwing Rs stalked with M1 to 1/3; bases of M3-CuA1 close to one another.

Male genitalia: Tegumen slender, high; uncus elongate, weakly sclerotized, hairy; socius broad, hairy; valva long, slender with large basal cavity and short, moderate neck; sacculus simple, somewhat convex, with long hairs in dorsomedian area; cucullus elongate with weakly expressed proximal angle and some small marginal spines; aedeagus simple, moderately long tube; cornuti not found.

Female not known.

### Etymology

The name is an anagram of the name of the type-species.

***Vicamentia vietnamica* sp. n.**

(Fig. 33)

**Diagnosis**

The only species of the new genus (cf its description). The facies of this species is similar to that of *Celypha argyrata* RAZOWSKI, 2009 but without silver marks and generally more pink rust. In the male genitalia it rather reminds *Kennelia tropica*.

**Description**

Wing span 12 mm. Head and thorax creamish with brown marks, mainly on proximal part of thorax, labial palpus. Forewing broad, weakly expanding terminad; costa slightly convex; termen straight, moderately oblique. Ground colour cream densely strigulate and reticulate brownish; costal strigulae whitish; divisions large, brown. Markings rudimentary, brown, consisting of diffuse basal blotch, costal part of median fascia and oblique line from subcostal part of this last to before end of vein M1. Cilia (worn) creamish with brown parts. Hindwing palew brownish, creamer basally; cilia concolorous with middle of wing.

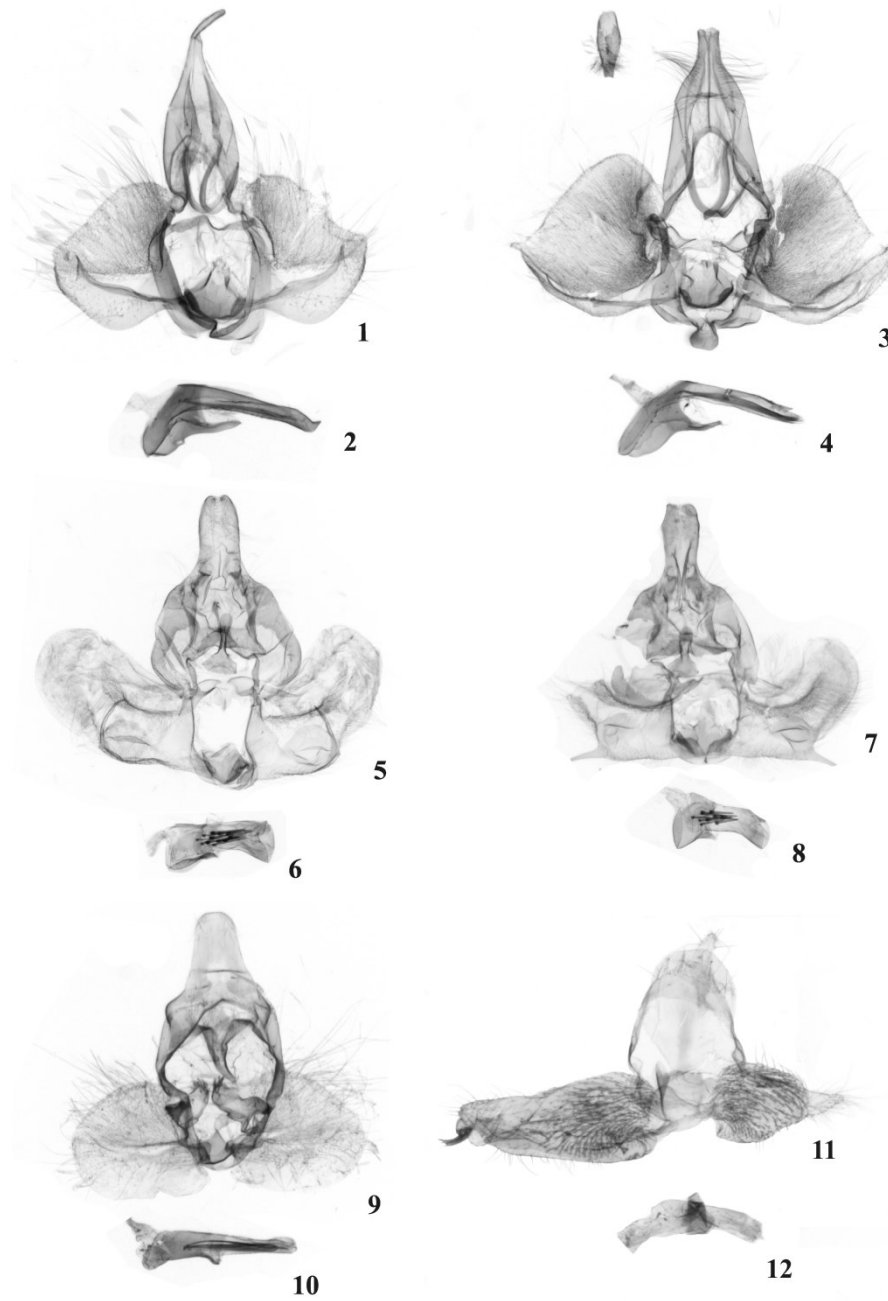
Male genitalia (Fig. 15) as described for the genus.

**Material**

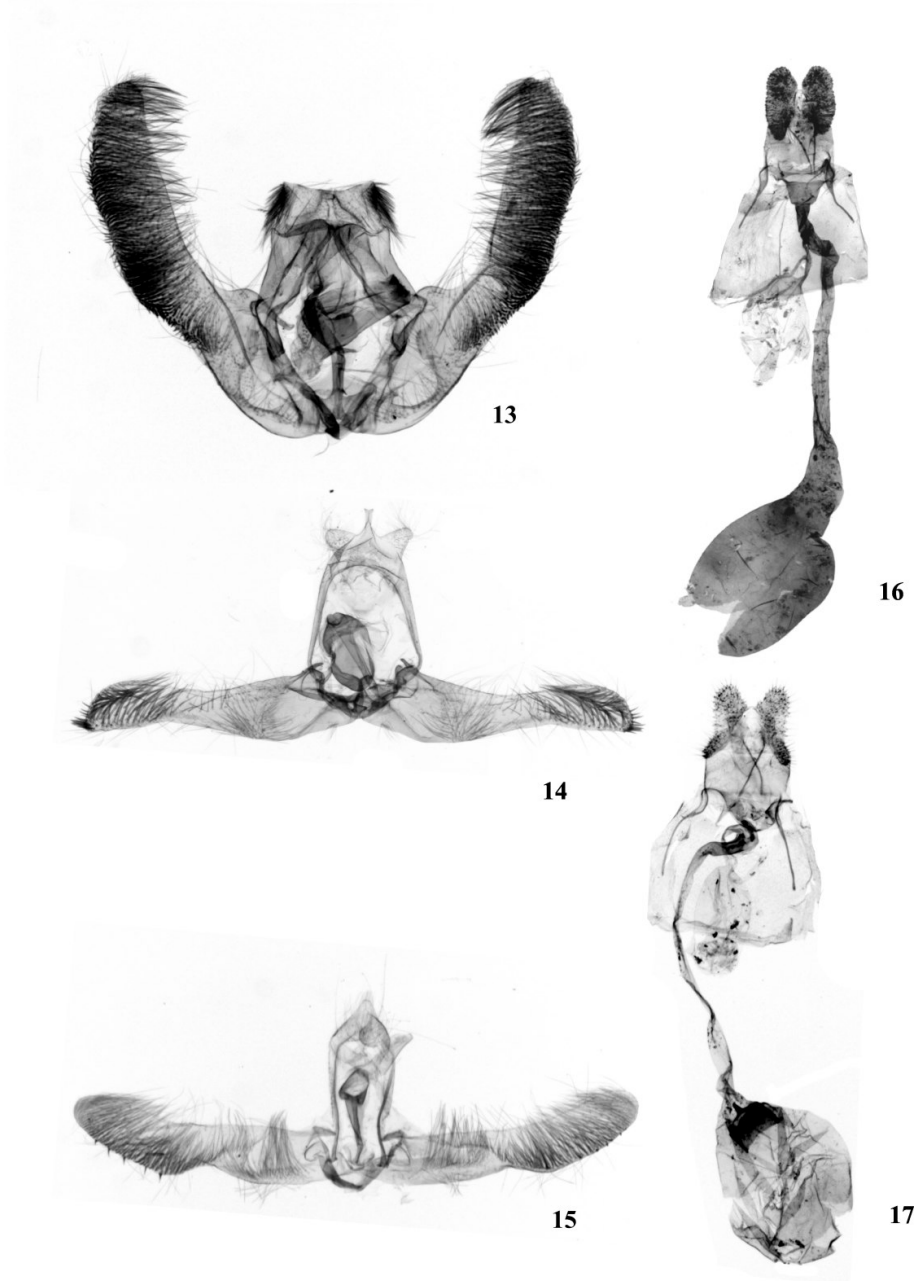
Holotype male: "N-Vietnam, Mai-Chau, 20.50'N 104.50'E, 40 km SE Moc-chau, 1400 m, 7-11. V. 1995, primary forest, leg. SINIAEV & nat. col."; GS 325 Wiet. Paratype and identically labelled male.

***Assulela kuznetsovi* DIAKONOFF, 1983**

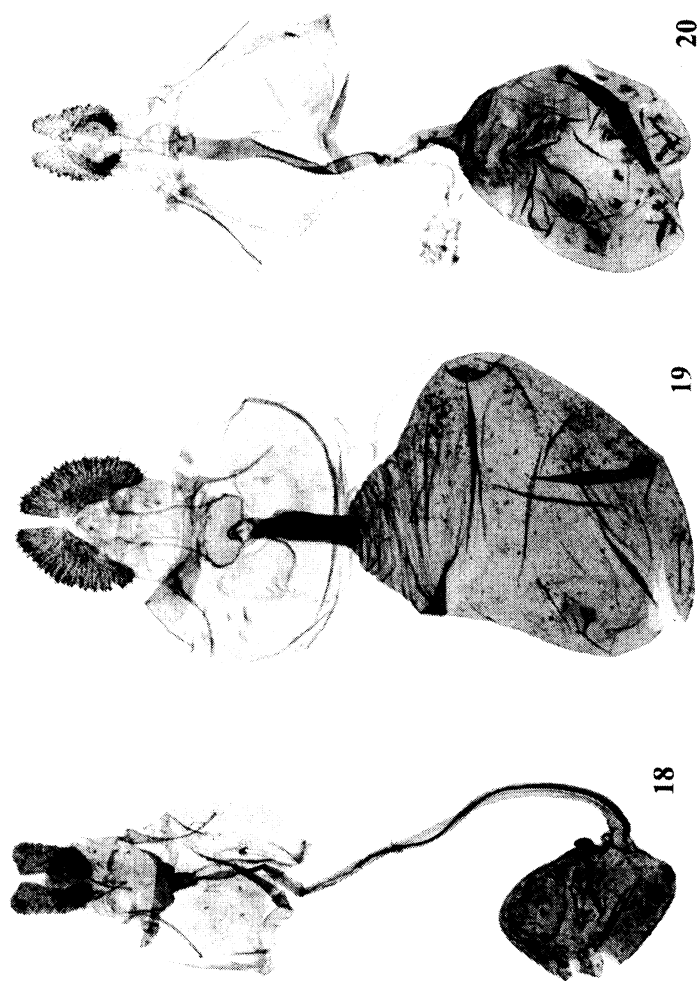
One specimens from Tam Dao (900 m, 23-III-1995, W. MEY); known from Sa Pa, N Vietnam (RAZOWSKI 2009b).



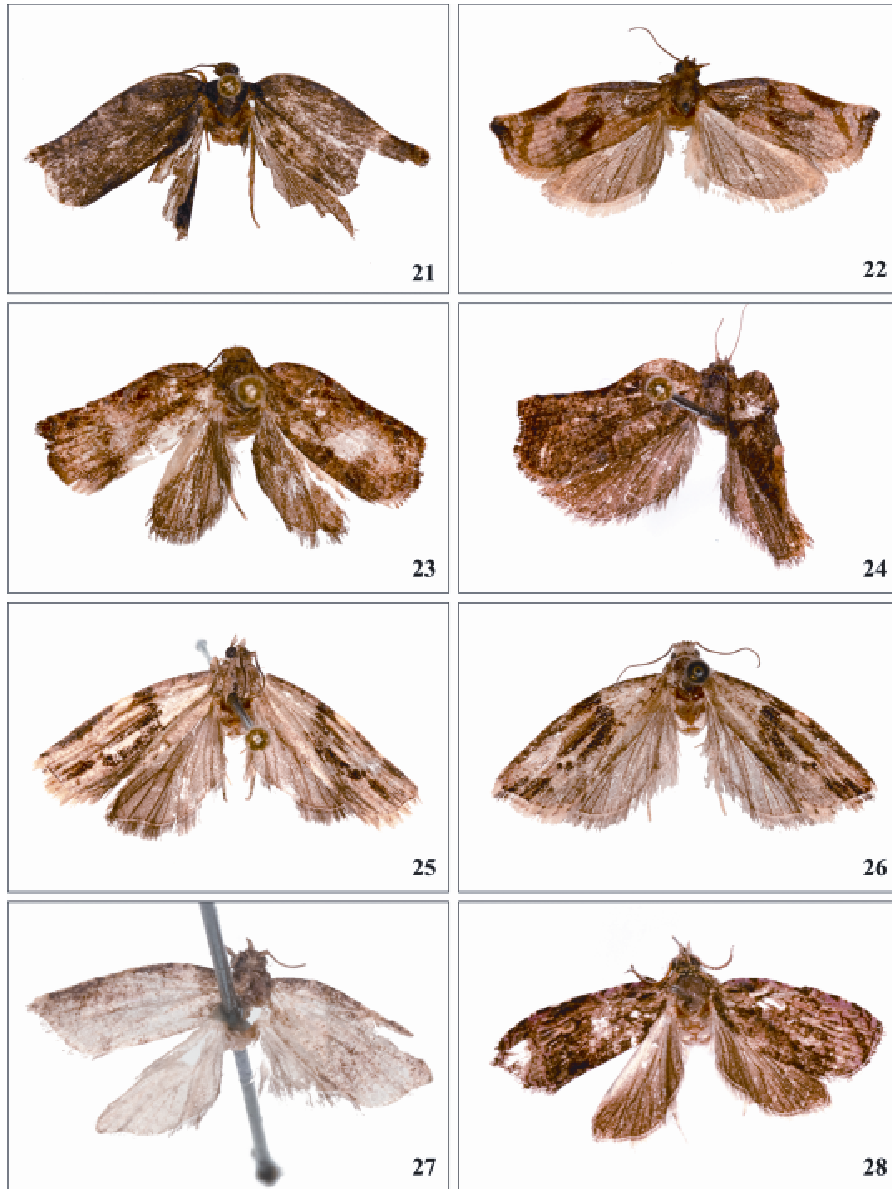
**Figs 1-12.** Male genitalia: 1, 2 - *Archips okuiho* sp. n., holotype; 3, 4; *Archips baolokia* sp. n., holotype; 5, 6 - *Isodemis longicera* sp. n., holotype; 7, 8 - *Isodemis brevicera* sp. n., holotype; 9, 10 - *Neocalyptis acutapex* sp. n., holotype; 11, 12 - *Atsusina curiosissima* sp. n., holotype.



**Figs 13-17.** Male and female genitalia: *Phaecasiophora euchlanis* sp. n., holotype; 14 - *Kennelia tropica* sp. n., holotype; 15 - *Vicamentia vietnamica* sp. n., holotype; 16 - *Terricula graphitana* sp. n., holotype; 17 - *Gnorismoneura maichau* RAZOWSKI, 2008, Vietnam, type locality.

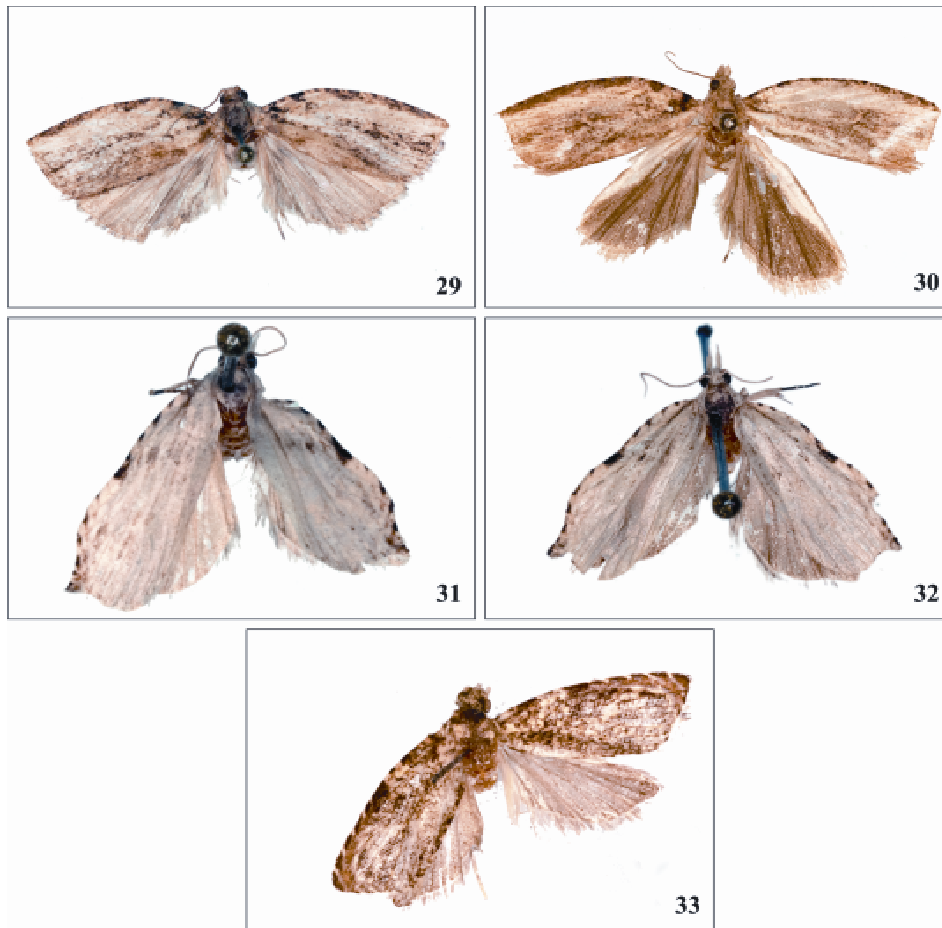


Figs 18-20. Female genitalia: 18 - *Archips vivesi* sp. n., holotype; 19 - *Phaecasiophora euchlanis* sp. n., paratype; 20 - *Kennelia tropica* sp. n., paratype



**Figs 21-28.** Adults: 21 - *Terricula graphitana* sp. n., holotype; 22 - *Archips okuiho* sp. n., holotype; 23 - *Archips baolokia* sp. n., holotype; 24 - *Archips vivesi* sp. n., holotype; 25 - *Isodemis longicera* sp. n., holotype; 26 - *Isodemis brevicera* sp. n., holotype; 27 - *Neocalyptis acutapex* sp. n., holotype; 28 - *Atsusina curiosissima* sp. n., holotype.





**Figs 29-33.** Adults: 29 - *Phaecasiophora euchlanis* sp.n., holotype; 30 - *Phaecasiophora euchlanis* sp. n., paratype; 31 - *Kennelia tropica* sp. n., holotype; 32 - *Kennelia tropica* sp. n., paratype; 33 - *Vicamentia vietnamica* sp. n., holotype.

#### REFERENCES

- DIAKONOFF A. 1973. The South Asiatic Olethreutini (Lepidoptera, Tortricidae). Zool. Monogr. Rijksmus. nat. Hist.,**1**: 1 - 700 + 22 pp.
- KUZNETZOV V. I. 2000. Annotated list of Tortricidae recorded from Vietnam (Lepidoptera). Zoosyst. Rossica,**8**: 337-348.
- RAZOWSKI J. 1979. Tortricinae (Lepidoptera: Tortricidae) from Vietnam. Bull. Polish Acad. Sci (Biol. Sci.),**37**(10-12): 299 - 305.

- 
- RAZOWSKI J. 1989b. The genera of Tortricidae (Lepidoptera). Part II: Palaearctic Olethreutinae. Acta zool. cracov.,**32**: 107-328.
- RAZOWSKI J. 2009a. Tortricidae from Vietnam in the collection of the Berlin Museum. 5. Archipini and Sparganothini (Lepidoptera: Tortricidae). SHILAP Revta lepid.,**37**(145): [in press]
- RAZOWSKI J., 2009b. Tortricidae from Vietnam in the collection of the Berlin Museum. 6. Olethreutinae (Lepidoptera: Tortricidae). SHILAP Revta lepid.,**37**(145): [in press]

Received: December 08, 2008

Accepted: February 27, 2009