



Entomofauna

ZEITSCHRIFT FÜR ENTOMOLOGIE

Supplement 11, Heft 3: 25-104

ISSN 0250-4413

Ansfelden, 15. Juni 2000

The Lasiocampidae of Vietnam

Vadim V. ZOLOTUHN & Thomas J. WITT

Abstract

98 species of the *Lasiocampidae* are known from Vietnam. In the article, 2 new genera are established, 15 species and 7 subspecies from Vietnam and 1 more species from Bhutan are described as new:

Gorgonella ZOLOTUHN, **gen. nov.** with type-species: *Gorgonella bhutata* ZOLOTUHN, **sp.n.**

Notogramma **gen. nov.** with type-species *Pachypasa mutabile* CANDÈZE, 1927.

Euthrix fox **sp.n.**

Euthrix alessa **sp.n.**

Euthrix luciferus **sp.n.**

Cosmeptera monstrosa **sp.n.**

Gorgonella mendica ZOLOTUHN, **sp.n.**

Gorgonella bhutata ZOLOTUHN **sp.n.**

Dendrolimus liliput **sp.n.**

Pachypasoides candezei **sp.n.**

Kunugia sinjaevi **sp.n.**

Kunugia mediacolorata **sp.n.**

Pyrosis matronata **sp.n.**

Pyrosis dierli **sp.n.**

Pyrosis hyalata **sp.n.**

Metanastrina capucina **sp.n.**

Syrastrena regia **sp.n.**

Arguda tayana **sp.n.**

Odontocraspis collieri **sp.n.**

Amurilla subpurpurea obscurior **ssp. n.**

Dendrolimus kikuchii kishidai **ssp.n.**

Pachypasoides roessleri dessiae **ssp.n.**

Paralebeda femorata titanica **ssp.n.**

Dendrolimus punctata glados **ssp.n.**

Kunugia vulpina victori **ssp.n.**

Syrastrena lanaoensis continentalis **ssp.n.**

Arguda insulindiana inexpectata **ssp.n.**

The following new combinations are established:

Notogramma mutabile (CANDÈZE, 1927), **comb. nov.** = *Pachypasa mutabile* CANDÈZE, 1927

Kunugia lemeepauli (LEMÉE & TAMS, 1950), **comb. nov.** = *Cyclophragma Lemee-Pauli* LEMÉE & TAMS, 1950

Kunugia vulpina (MOORE, 1879), **comb. nov.** = *Lebeda vulpina* MOORE, 1879

Kunugia vulpina omeiensis (TSAI & LIU, 1964), **comb. et stat. nov.** = *Cyclophragma omeiensis* TSAI & LIU, 1964

Streblote igniflua (MOORE, [1883]), **comb. nov.** = *Taragama igniflua* MOORE, [1883]

The lectotype of *Radhica flavovittata* MOORE, 1879 is designated. *Arguda viettei* DE LAJONQUIÈRE, 1977, *Bharetta owadai* KISHIDA, 1986, *Trabala shiva* ROEPKE, 1951 and *Trabala brahma* ROEPKE, 1951 are firstly recorded from the continent. The species *Euthrix decisa* (WALKER, 1855), *Streblote dorsalis* (WALKER, 1866) and *Syrastrena minor* (MOORE, 1879) are deleted from the list of the Vietnamese *Lasiocampidae* as erroneously pointed out before.

Zusammenfassung

98 *Lasiocampidae*-Arten werden für Vietnam nachgewiesen. 2 neue Gattungen werden errichtet, 15 Arten und 7 Unterarten aus Vietnam und 1 Art aus Bhutan werden neu beschrieben (siehe Liste der neuen Taxa im Abstract). Der Lectotypus der *Radhica flavovittata* MOORE, 1879 wird designiert. *Arguda viettei* DE LAJONQUIÈRE, 1977, *Bharetta owadai* KISHIDA, 1986, *Trabala shiva* ROEPKE, 1951 and *Trabala brahma* ROEPKE, 1951 werden erstmalig für den Kontinent nachgewiesen. 5 neue Kombinationen (**comb. nov.**) und 1 neuer Status (**stat. nov.**) werden vorgenommen (siehe Liste im Abstract). Die Arten *Euthrix decisa* (WALKER, 1855), *Streblote dorsalis* (WALKER, 1866) and *Syrastrena minor* (MOORE, 1879) sind aus der Liste der vietnamesischen *Lasiocampidae* aufgrund früherer Fehldetermination zu streichen.

Check-list of the Vietnamese *Lasiocampidae*

Malacosominae TUTT, 1902	30
Malacosomini TUTT, 1902	30
<i>Malacosoma</i> HÜBNER, [1820] 1816	30
<i>Malacosoma dentata</i> MELL, 1938	30
Lasiocampinae HARRIS, 1841	30
Lasiocampini HARRIS, 1841	30
<i>Amurilla</i> AURIVILLIUS, 1902	30
<i>Amurilla subpurpurea</i> ssp. <i>obscurior</i> ssp.n.	30
<i>Cerberolebeda</i> ZOLOTUHIN, 1995	31
<i>Cerberolebeda styx</i> ZOLOTUHIN, 1995	31
Pinarinae KIRBY, 1892	31
Selenepherini TUTT, 1902	31
<i>Euthrix</i> MEIGEN, 1830	31
<i>Euthrix laeta</i> ssp. <i>austrina</i> (DE LAJONQUIÈRE, 1978)	31
<i>Euthrix fox</i> sp.n.	34
<i>Euthrix sondensis</i> (DE LAJONQUIÈRE, 1978)	36
<i>Euthrix inobtrusa</i> (WALKER, 1862)	36
<i>Euthrix alessa</i> sp.n.	37
<i>Euthrix luciferus</i> sp.n.	38
<i>Euthrix tangi</i> (DE LAJONQUIÈRE, 1978)	39
<i>Euthrix isocyma</i> ssp. <i>orientalis</i> (DE LAJONQUIÈRE, 1978)	40
<i>Euthrix imitatrix</i> ssp. <i>tonkiensis</i> (DE LAJONQUIÈRE, 1978)	41
<i>Euthrix improvisa</i> (DE LAJONQUIÈRE, 1978)	41
<i>Cosmeptera</i> DE LAJONQUIÈRE, 1979	42
<i>Cosmeptera monstrosa</i> sp.n.	42
<i>Eteinopla</i> DE LAJONQUIÈRE, 1979	43
<i>Eteinopla signata</i> (MOORE, 1879)	43
<i>Eteinopla narcissus</i> ZOLOTUHIN, 1995	43

<i>Gorgonella</i> ZOLOTUHIN, gen. nov.	46
<i>Gorgonella mendica</i> ZOLOTUHIN, sp.n.	47
<i>Micropacha</i> ROEPKE, 1953	48
<i>Micropacha gejra</i> ZOLOTUHIN (in press)	48
<i>Micropacha zojka</i> ZOLOTUHIN (in press)	48
Trabaliini TUTT, 1902	48
<i>Trabala</i> WALKER, 1856	48
<i>Trabala vishnou</i> (LEFÈBVRE, 1827)	48
<i>Trabala pallida</i> (WALKER, 1855)	48
<i>Trabala viridana</i> JOICEY & TALBOT, 1917	49
<i>Trabala brahma</i> ROEPKE, 1951	49
<i>Trabala shiva</i> ROEPKE, 1951	49
<i>Crinocraspeda</i> HAMPSON, [1893] 1892	49
<i>Crinocraspeda torrida</i> (MOORE, 1879)	49
Pinarini KIRBY, 1892	50
<i>Dendrolimus</i> GERMAR, 1812	50
<i>Dendrolimus grisea</i> (MOORE, 1879)	51
<i>Dendrolimus punctata</i> ssp. <i>glados</i> ssp.n.	51
<i>Dendrolimus angulata</i> GAEDE, 1932	51
<i>Dendrolimus kikuchii</i> ssp. <i>kishidai</i> ssp.n.	51
<i>Dendrolimus liliput</i> sp.n.	54
<i>Pachypasoides</i> MATSUMURA, 1927	55
<i>Pachypasoides roesleri</i> ssp. <i>dessiae</i> ssp.n.	55
<i>Pachypasoides candezei</i> sp.n.	56
<i>Notogramma</i> gen. nov.	57
<i>Notogramma mutabile</i> (CANDÈZE, 1927) comb. nov.	57
<i>Kunugia</i> NAGANO, 1917	58
<i>Kunugia placida</i> (MOORE, 1879)	58
<i>Kunugia austroplacida</i> HOLLOWAY, 1987	59
<i>Kunugia ampla</i> (WALKER, 1855)	59
<i>Kunugia latipennis</i> (WALKER, 1855)	59
<i>Kunugia fulgens</i> (MOORE, 1879)	59
<i>Kunugia brunnea</i> (WILEMAN, 1915)	61
<i>Kunugia lineata</i> (MOORE, 1897)	62
<i>Kunugia basinigra</i> (ROEPKE, 1953)	62
<i>Kunugia undans</i> ssp. <i>prope shensiensis</i> DE LAJONQUIÈRE, 1973	62
<i>Kunugia sinjaevi</i> sp.n.	62
<i>Kunugia lemeepauli</i> (LEMÉE & TAMS, 1950)	64
<i>Kunugia vulpina</i> ssp. <i>victori</i> ssp.n.	65
<i>Kunugia burmensis</i> (GAEDE, 1932)	65
<i>Kunugia mediacolorata</i> sp.n.	67
<i>Kunugia divaricata</i> (MOORE, 1884)	68
<i>Lebeda</i> WALKER, 1855	70
<i>Lebeda nobilis</i> WALKER, 1855	70
<i>Lebeda trifascia</i> (WALKER, 1855)	71
<i>Paralebeda</i> AURIVILLIUS, 1894	71
<i>Paralebeda femorata</i> ssp. <i>titanica</i> ssp.n.	71
<i>Paralebeda plagifera</i> (WALKER, 1855)	72

<i>Streblote</i> HÜBNER, [1820] 1816	72
<i>Streblote stupidum</i> (STAUDINGER, 1887)	72
<i>Streblote igniflua</i> (MOORE, [1883]) comb. nov.	72
<i>Pyrosis</i> OBERTHÜR, 1880	74
<i>Pyrosis rotundipennis</i> (DE JOANNIS, 1929)	74
<i>Pyrosis fulviplaga</i> (DE JOANNIS, 1929)	76
<i>Pyrosis matronata</i> sp.n.	78
<i>Pyrosis dierli</i> sp.n.	79
<i>Pyrosis hyalata</i> sp.n.	80
<i>Pyrosis</i> sp.	81
<i>Suana</i> WALKER, 1855	81
<i>Suana concolor</i> (WALKER, 1855)	81
<i>Metanastris</i> HÜBNER, [1820] 1816	82
<i>Metanastris hyrtaca</i> (CRAMER, 1779)	82
<i>Metanastris gemella</i> DE LAJONQUIÈRE, 1979	82
<i>Metanastris capucina</i> sp.n.	82
Gastropachini NEUMOEGEN & DYAR, 1893	85
<i>Gastropacha</i> OCHSENHEIMER, 1810	85
<i>Gastropacha quercifolia</i> ssp. <i>propae lucens</i> MELL, 1939	85
<i>Gastropacha populifolia</i> ssp.	87
<i>Gastropacha xenapates</i> TAMS, 1935	87
<i>Gastropacha leopoldi</i> TAMS, 1935	88
<i>Gastropacha philippinensis</i> TAMS, 1935	88
<i>Gastropacha pardale</i> (WALKER, 1855)	88
<i>Gastropacha</i> sp.	89
<i>Paradoxopla</i> DE LAJONQUIÈRE, 1976	89
<i>Paradoxopla sinuata</i> (MOORE, 1879)	89
Odonestini TUTT, 1902	89
<i>Syrastrena</i> MOORE, 1884	89
<i>Syrastrena</i> sp.	89
<i>Syrastrena lanaoensis</i> ssp. <i>continentalis</i> ssp.n.	90
<i>Syrastrena lajonquierei</i> HOLLOWAY, 1982	90
<i>Syrastrena regia</i> sp.n.	91
<i>Radhica</i> MOORE, 1879	93
<i>Radhica flavovittata</i> MOORE, 1879	93
<i>Radhica elisabethae</i> DE LAJONQUIÈRE, 1977	94
<i>Arguda</i> MOORE, 1879	94
<i>Arguda vinata</i> MOORE, 1865	94
<i>Arguda viettei</i> DE LAJONQUIÈRE, 1977	95
<i>Arguda insulindiana</i> ssp. <i>inexpectata</i> ssp.n.	95
<i>Arguda tayana</i> sp.n.	96
<i>Arguda</i> sp. 1	97
<i>Arguda</i> sp. 2	97
<i>Hallicarnia</i> KIRBY, 1892	97
<i>Hallicarnia albipectus</i> (WALKER, 1855)	97
<i>Odontocraspis</i> SWINHOE, 1894	97
<i>Odontocraspis hasora</i> SWINHOE, 1894	97
<i>Odontocraspis collieri</i> sp.n.	97

<i>Odonestis</i> GERMAR, 1812	98
<i>Odonestis erectilinea</i> (SWINHOE, 1904)	98
<i>Odonestis bheroba</i> MOORE, 1858-1859	98
<i>Odonestis vita</i> MOORE, 1859	99
<i>Odonestis pruni</i> ssp.	99
<i>Bharetta</i> MOORE, [1866] 1865	99
<i>Bharetta cinnamomea</i> MOORE, [1866] 1865	99
<i>Bharetta owadai</i> KISHIDA, 1986	100
Systematic position uncertain	100
<i>Chonopla</i> DE LAJONQUIÈRE, 1979	100
<i>Chonopla modulata</i> (SWINHOE, 1890)	100
<i>Alompra</i> MOORE, 1872	100
<i>Alompra roepkei</i> TAMS, 1953	100
<i>Kosala</i> MOORE, 1879	102
<i>Kosala rufa</i> HAMPSON, 1892	102
<i>Kosala flavosignata</i> (MOORE, 1879)	102
<i>Kosala reducta</i> sp.n.	102
<i>Argonestis</i> ZOLOTUHIN, 1995	104
<i>Argonestis flammans</i> (HAMPSON, 1892)	104

The first species of the *Lasiocampidae* described from Vietnam was *Megasoma stupidum* STAUDINGER, 1887 (currently placed in *Streblote* HÜBNER – one specimen from Saigon, female paralectotype, kept now in the collection of ZMHUB).

Up to present, only three works were devoted specially to Vietnamese Heterocera, namely the articles of L. CANDÈZE (1927), J. DE JOANNIS (1929) and A. LEMÉE & W. TAMS (1950). 9 species of the *Lasiocampidae* were mentioned from different localities by L. CANDÈZE. 15 species were listed by J. DE JOANNIS, mainly from Tonkin. A. LEMÉE & W. TAMS marked 9 species from Vietnam. After that only several articles adduced for the country some species of the *Lasiocampidae* (DE LAJONQUIÈRE, 1975, 1977; ZOLOTUHIN, 1995).

The main part of the material for this article was obtained by V. SINJAEV and V. SIMONOV as well as by Dr. R. BRECHLIN and Dr. A. SCHINTLMEISTER and now is deposited in Museum WITT, München. Other museums are stipulated and the following abbreviations are used for them in the text:

BMNH	The Natural History Museum, London;
MNHN	Museum National d'Histoire Naturelle, Paris;
MWM	Museum Witt, München;
NHMK	Staatliches Museum für Naturkunde Karlsruhe;
SMTD	Staatliches Museum für Tierkunde Dresden;
ZFMK	Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn;
ZMHUB	Zoologisches Museum der Humboldt-Universität zu Berlin;
ZSSM	Zoologische Staatssammlung, München.

In the listing of the labels' data it is held to original spelling. The species erroneously pointed out from Vietnam in former publications are underlined in the text.

At present, 98 species of the *Lasiocampidae* are known from Vietnam. 2 new genera are established, 15 species and 7 subspecies from Vietnam and 1 more species from Bhutan are described as new.

LASIOCAMPIDAE

Malacosominae TUTT, 1902

Malacosomini TUTT, 1902

Malacosoma HÜBNER, [1820] 1816

Malacosoma dentata MELL, 1938 (Plate 1 fig. 1)

Malacosoma neustria dentata MELL, 1938, Dt. ent. Z. Iris 52: 137.

Locus typicus: China, Fukien.

Material:

2♂♂ Tonkin, Montes Mauson, April-Mai, 2-300', H. FRUHSTORFER (BMNH).

Comments: inspite of smaller size and lighter coloration it is impossible to give a definite statement on the taxonomic status of the Vietnamese population as only these two males are known. In male genitalia no real differences from the nominate subspecies are found. First record of *Malacosoma* from Vietnam.

Lasiocampinae HARRIS, 1841

Lasiocampini HARRIS, 1841

Amurilla AURIVILLIUS, 1902

Amurilla subpurpurea (BUTLER, 1881)

Poecilocampa subpurpurea BUTLER, 1881, Trans. Ent. Soc. London: 18.

Locus typicus: Japan, Tokyo.

Distribution: specific – from Baikal Lake, Russian Far East, Sakhalin and Japan over Korea and China to northern India, Nepal and northern Vietnam.

Amurilla subpurpurea obscurior ssp.n. (Plate 1 fig. 2, 3)

Distribution: northern Vietnam.

Literature: ZOLOTUHIN 1995: 160 (*Amurilla subpurpurea* ssp.).

Material:

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 2000 m, 22°15'N, 103°45'E, 5.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

Paratypes:

2♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa) 1525 m, 22°17'N, 103°44'E, 10.VII.1994, leg. BRECHLIN & SCHINTLMEISTER (GenPr. Het. 3962).

2♂♂ 2♀♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

5♂♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°45'E, VI.1994, leg. V. SINJAEV & einh. Sammler.

2♂♂, Hinterindien, Tonking [Tonkin, Cha pa, IX.1930, leg. LEMAI], ex coll. F. DANIEL.

2♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

Comments: from all other subspecies of *subpurpurea* differs easily by more dark coloration of the wings and body that makes this subspecies very similar to *Amurilla rubra* HAMPSON, 1896 (Locus typicus: northern India). From the last species differs well by the peculiarities of the male

genitalia, first of all by the presence of a large number of needle-shaped cornuti on the vesica and by the shape of VIII abdominal sternit (see ZOLOTUHIN, 1995). Expanse ♂ 57-59 mm, forewing length 31-32 mm; expanse ♀ 70 mm, forewing length 37 mm.

***Cerberolebeda* ZOLOTUHIN, 1995**

***Cerberolebeda styx* ZOLOTUHIN, 1995 (Plate 1 fig. 4)**

Cerberolebeda styx ZOLOTUHIN, Tinea 14 (3): 164, figs 11, 22.

Locus typicus: N. Vietnam.

Distribution: northern Vietnam, northern Thailand and north-eastern Burma.

Material:

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ September 1994, leg. MONG [Holotypus].

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 10.6.-6.7.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°20'N, 103°40'E, Sek. Wald / 15.-25.3.1995, leg. SINJAEV & einh. Sammler.

12♂♂ 2♀♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, April 1995, leg. SINJAEV & einh. Sammler.

6♂♂, N. Vietnam, Mai-Chau, Urwald, 40 km SE von Moc-Chau, 20°50'N, 104°50'E, 7.-15. April 1995, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600 m, 22°20'N, 103°40'E, Sek. Wald/ 30.3.1995, leg. SCHINTLMEISTER & SINJAEV.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600 m, 22°20'N, 103°40'E, Sek. Wald/ 20.-30.4.1995, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105° 20'E, 23.-31.3.1995, leg. SCHINTLMEISTER.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ September 1994, leg. MONG.

Comments: Resting position as figured (Plate 1 fig. 5).

Pinarinae KIRBY, 1892 Selenepherini TUTT, 1902 *Euthrix* MEIGEN, 1830

***Euthrix laeta* (WALKER, 1855)**

Amydona laeta WALKER, List. Spec. Lepid. Colln Brit. Mus. 6: 1416.

Locus typicus: India (Assam and Sylhet).

Distribution: from Russian Far East, Korea and Japan over China, Nepal, Thailand and Vietnam to India, Sri Lanka, Peninsular Malaysia, Sumatra, Borneo and Java.

***Euthrix laeta australina* (DE LAJONQUIÈRE, 1978)**

Philudoria laeta australina DE LAJONQUIÈRE, 1978, Annl's Soc. ent. France 14 (3): 396, pl. 1 N, fig. 11, 32.

Locus typicus: Sumatra.

Distribution: Vietnam, Malaysia, Sumatra, Borneo.

Material:

- 2♂♂ 1♀, N-Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.
3♂♂, N. Vietnam, Tuan-giao, 5-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.
1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 1.-5.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. 3817).
2♂♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 23°14'N, 105°20'E, 1200 m, 1.-15.XI.1993, leg. SINJAEV.
1♂, Vietnam, Tuyen Quang, Na Nang Nature Reserve, 300 m, 105°05'E, 22°03'N, 22.II.-5.III.1997, leg. G. CSORBA.
1♂, N. Vietnam, Tuan-giao, 21°35'N, 103°25'E, 1200 m, 21.-31.III.1995, leg. A. SCHINTLMEISTER.
1♂, the same data, leg. V. SINJAEV.
1♂, N. Vietnam, Yen-Bai-An-chy, 21°42'N, 104°18'E, primary forest, V.1996.
Comments: The species was noted by CANDÈZE 1927: 123 from Annam and by DE JOANNIS 1929: 568 from Poste de Dong dang.

Plate 1

- 1 *Malacosoma dentata* MELL, 1938 ♂
Tonkin, Montes Mauson, April-Mai, 2-300', H. FRUHSTORFER (BMNH).
- 2 *Amurilla subpurpurea obscurior* ssp. n. Holotype ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 2000 m, 22°15'N, 103°45'E, 5.VII.1994, leg. BRECHLIN & SCHINTLMEISTER (MWM).
- 3 *Amurilla subpurpurea obscurior* ssp. n. Paratype ♀
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER (MWM).
- 4 *Cerberolebeda styx* ZOLOTUHIN, 1995 Holotype ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG. (MWM).
- 5 *Cerberolebeda styx* ZOLOTUHIN, 1995
Male in resting position (Foto V. SINJAEV).
- 6 *Euthrix fox* sp. n. Holotype ♂
Nord-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8-29.V.1993, leg. SINJAEV & SIMONOV (Gen.Pr. Het. 3885) (MWM).
- 7 *Euthrix fox* sp. n. Paratype ♀
N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler
- 8 *Euthrix alessa* sp. n. Holotype ♂
Nord-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8-29.V.1993, leg. SINJAEV & SIMONOV.



***Euthrix fox* sp.n. (Plate 1 fig. 6, 7)**

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8-29.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. 3885♂).

Paratypes: 2♂♂ 2♀♀, same locality.

9♂♂ 4♀♀, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler (GenPr. Het. 3979 ♀).

8♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Kulturland, December 1994, leg. SINJAEV & einh. Sammler.

5♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.

1♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°20'N, 103°40'E, Kulturland, 15.-25.III.1994, leg. SINJAEV & einh. Sammler.

4♂♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

2♂♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

27♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, prim. Urwald, 25.-30.III.1995, leg. SINJAEV & SCHINTLMEISTER.

2♂♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.

7♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

6♂♂, the same data, 20.-30.X.1995, leg. V. SINJAEV & E. AFONIN.

1♂ N. Vietnam, Yen-Bai – An-chy, 21°42'N, 104°18'E, primary forest, V.1996.

2♂♂ 1♀, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

27♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 10.VI.-6.VII.1994, leg. SINJAEV & einh. Sammler.

15♂♂ 2♀♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, April 1995, leg. SINJAEV & einh. Sammler.

2♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), primary forest, 1.-7.XI.1995, leg. V. SINJAEV & E. AFONIN.

1♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.

15♂♂ 2♀♀, N-Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2240 m, 22°15'N, 103°45'E, prim. Nebelwald, 2.-4.III.1995, leg. Dr. BRECHLIN.

8♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, 20.-30.IV.1995, leg. SINJAEV & einh. Sammler.

4♀♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, secondary forest, May 1995, leg. local collectors.

2♂♂, Thailand, Changwat Nan, 30 km E of Pua, 1700 m, 24.XI.1998, leg. TIBOR CSÖVÁRI & László Mikus.

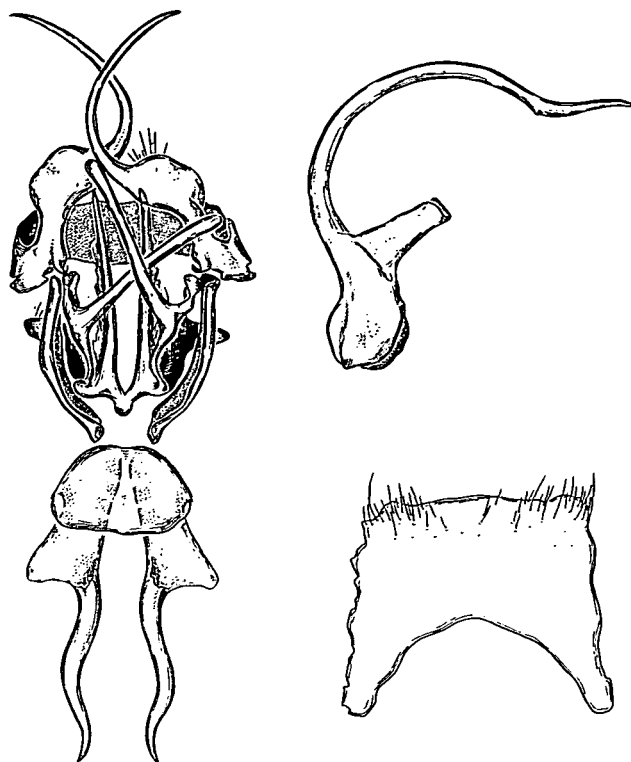


Fig. 1. Male genitalia of *Euthrix fox* sp. n., Paratype.

7♂♂, same locality, 1.III.1998, leg. MÁRTON HREBLAY & CSABA SZABÓKY.

2♂♂, same locality, 20.+27.II.1998, leg. MÁRTON HREBLAY & CSABA SZABÓKY.

6♂♂ 1♀, Thailand, Changwat, Chiang Mai, Mt. Doi Phahompok, 19 km NW of Fang, 1900 m, 26./27.III.1998, leg. TIBOR CSÖVÁRI & PÁL STÉGER.

2♂♂, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 16 km NW of Fang, 2000 m, 8.XII.1998, leg. Y. SHERPA & T. SOÓS.

2♂♂, same, 15.II.1998, leg. MÁRTON HREBLAY & CSABA SZABÓKY.

3♂♂, same, 2.+4.IV.1998, leg. TIBOR CSÖVÁRI & PÁL STÉGER.

Comments: In both sexes body and wings rose-violet, hindwings lighter. Forewings with yellowish brown subcostal and radial zone and large rounded silver white discal spot with admixture of sole brown scales. Three transversal lines are presented: strong rose postmedial crossing the wing diagonal, almost parallel to costal margin from the top to cubital zone there makes a break and falls in anal margin almost perpendicular. Antemedial line weak, situated in basal part of the wing and absent in some specimens. External line teathed greyish, sometimes outlined by silver scales and also absent in some specimens. A contrast blackish elongated strike along medial branch in central zone of the wing are also typical. There is no sexual dimorphism in coloration and pattern. Forelegs with elongated epyphysis. Expanse ♂ 43-50 mm, forewing length 21-25 mm. Expanse ♀ 57-62 mm, forewing length 28-32 mm.

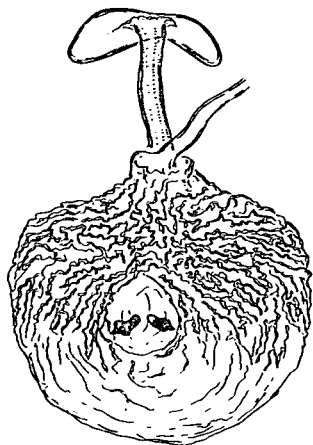


Fig. 2. Female genitalia of *Euthrix fox* sp. n., Paratype.

Male genitalia (Text-fig. 1): tegumen broad with long, curved, stiletto-shaped lateral processes; vinculum narrow band-shaped; valvae bilobated, the upper lobe long, weakly thickened cranial, the lower one long, thin and strong, stiletto-shaped; distal processes of vinculum cup-shaped with two long, curved, pitchfork-shaped appendices. Aedoeagus long, thin, sharpened caudal, with ventral opening of vesica. Shape of the sternite VIII as figured.

Female genitalia (Text-fig. 2): typical for the genus construction. Both vaginal plates presented, antrum and ductus weakly sclerotized; bursa copulatrix bad-shaped, membranous with wrinkled surface and pair of distinct signa, not merged together.

In external characters very similar to *Euthrix laeta* WALKER but easily to be distinguished by an analysis of its genitalia. The genitalia structures of the new species are very different from those of all hitherto known *Euthrix* due to a presence of the strong teguminal appendages. These appendages make the new species to be similar to *Lenodora* Moore from those it can be distinguished easily by pattern and shape of the wings.

Euthrix sondensis (DE LAJONQUIÈRE, 1978)

Philudoria inobtrusa sondensis DE LAJONQUIÈRE, 1978, Anns Soc. ent. France 14 (3): 398 pl. II B, fig. 13.

Locus typicus: Java, Perwabatic.

Distribution: Vietnam, Peninsula Malaysia, Sumatra, Java.

Material:

5♂♂, S. Vietnam, Bao Loc, Rung Cat Tien, 1500 m, 11°32'N, 107°48'E, 10-20.XII.1992, leg. SINJAEV & SIMONOV (GenPr. Het. 3833 + 3834).

1♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8-29.V.1993, leg. SINJAEV & SIMONOV.

Taxonomic notes: HOLLOWAY & BENDER 1990 discussed the status of this species and arose it from subspecies of *Euthrix inobtrusa* because of the sympatric habitats of both on Sumatra. Furthermore both species well differ one from each another even in external characters such as in the shape of sternite VIII in males (Text-fig. 3).

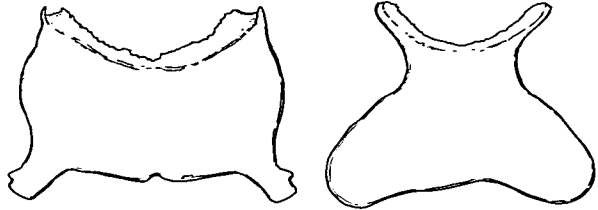
Euthrix inobtrusa (WALKER, 1862)

Lasiocampa inobtrusa WALKER, 1862, Trans. ent. Soc. London 1: 85.

Locus typicus: „Hindostan“.

Distribution: Northern India, Nepal, central and south China, Bhutan, Thailand, Vietnam, Peninsular Malaysia, Sumatra.

Fig. 3. Sternite VIII. of the abdomen: *Euthrix sondensis* (DE LAJONQUIÈRE, 1978) (left) and *Euthrix inobtrusa* (WALKER, 1862).



Material:

1♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8-29.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. 3836).

1♂, Vietnam, Hanoi, I-III.1975 (NHMK).

2♂♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

3♂♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

***Euthrix alessa* sp.n. (Plate 1 fig. 8)**

Holotype ♂: Nord-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.

Paratypes: 22♂♂, same locality (GenPr. Het. 3888 ♂).

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 10.VI.-6.VII.1994, leg. SINJAEV & einh. Sammler.

4♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

Comments: body and wings sandy coloured, hindwings slightly lighter. Forewings with blackish teethed externa and two brownish medial lines. Postmedia almost diagonal, slightly curved near the wing's apex, antemedial vague, lunulated. Discal spot small but obvious, blackish, rounded. External margins of both wings bluish. Foretibia with elongate epyphysis. Expanse ♂ 41-43 mm, forewing length 22-23 mm.

Male genitalia (Text-fig. 4): tegumen narrow without lateral processes; vinculum broad; valvae bilobated, the upper lobe broad, flattened distinctly, the lower one conical basally and stiletto-shaped distally; distal processes of vinculum presented as a plate with medio-distal cut and two thin and long inner stiletto-shaped processes. Aedoeagus relatively short with lateral (left) opening of vesica. A shape of the VIII. abdominal sternite is characterized as illustrated.

Female still unknown.

In external characters similar only to south-chinese *Euthrix hani* (DE LAJONQUIÈRE, 1978) and *Euthrix tsini* (DE LAJONQUIÈRE, 1978), but lighter with slightly curved postmedial lines.

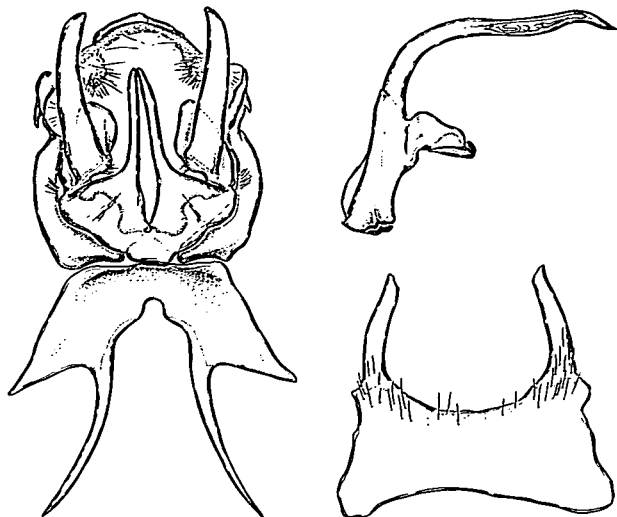


Fig. 4. Male genitalia of *Euthrix alessa* sp. n., Paratype.

Well differing by peculiarities of the male genitalia: both pointed species never have so characteristic distal processes of vinculum and that shape of the VIII. abdominal sternite.

***Euthrix luciferus* sp.n.** (Plate 2 figs 9, 10)

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 10.VI.-6.VII.1994, leg. SINJAEV & einh. Sammler.

Paratypes: 7♂♂, same locality.

1♀, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 2000 m, 22°15'N, 103°45'E, 5.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

2♂♂, same locality, 1600-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER (GenPr. Het. 3893).

10 ♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, December 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1525 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 28.X.-3.II.1994, leg. SINJAEV & einh. Sammler.

6♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

4♂♂, N. Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2240 m, 22°15'N, 103°45'E, prim. Nebelwald, 2.-4.III.1995, leg. Dr BRECHLIN.

1♀, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

11♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 10.VI.-6.VII.1994, leg. SINJAEV & einh. Sammler.

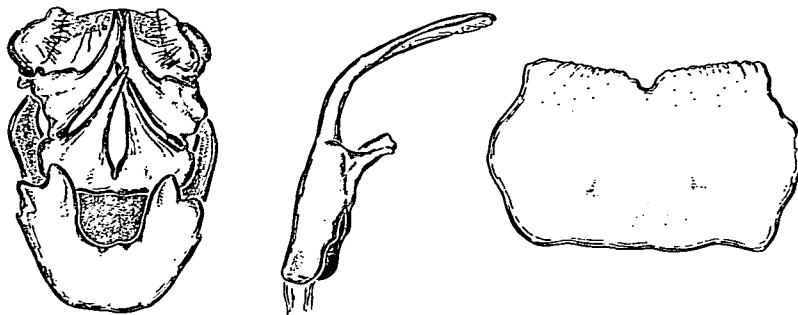


Fig. 5. Male genitalia of *Euthrix lucipherus* sp. n., Paratype.

Comments: small species with deep blackish brown coloration; forewings with straight dark brown postmedial line and curved lunulated antemedial; external line developed well, blackish and toothed. Discal spot small, comma-shaped, white. Hindwings darker. Foretibia with short, elongated epyphysis. Expanse ♂ 33-36 mm, forewing length 17-19 mm.

Females: expanse 45 mm, forewing length 25 mm. Similar to those of *Euthrix tangi* DE LAJONQUIÈRE, 1978 but postmedia of the forewing straighter and connecting with an anal edge of the wing in their middle (in $\frac{1}{3}$ from a basis in *tangi*).

Male genitalia (Text-fig. 5): tegumen band-shaped; vinculum cup-shaped with small rounded processes; valvae bilobed, both lobes short, conical, the upper one undistinctly curved. Aedoeagus with tubular base and long thin distal part. Sternite VIII as a plate with small medio-distal cut, without processes or appendices.

Female genitalia: both vaginal plates developed; ostium sclerotized; antrum and ductus very short, membranous; bursa bag-shaped, with small coalescens signum.

Well differing from all *Euthrix*-species by dark coloration. In male genitalia similar to *Euthrix tsini* (DE LAJONQUIÈRE 1978) and *Euthrix tangi* (DE LAJONQUIÈRE 1978) but in the new species all sclerotized structures considerably shorter. In female genitalia the new species differs from *tangi* by another shape of vaginal plates and by a very small signum.

Euthrix tangi (DE LAJONQUIÈRE, 1978) (Plate 2 figs 11, 12)

Philudoria tangi DE LAJONQUIÈRE, 1978, Anns Soc. entomol. France 14 (3): 404-405, figs 19, 35, pls II H, III G.

Locus typicus: China, Kwantung.

Distribution: South-east China and northern Vietnam.

Material:

3♂♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 950 m, 21°34'N, 105°20'E, 17.XI.1994, leg. SINJAEV.

1♀, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

***Euthrix isocyma* (HAMPSON, 1892)**

Odonestis isocyma HAMPSON, 1892, Fauna Br. India incl. Ceylon and Burma, Moths 1: 427.

Locus typicus: Assam, Naga Hills.

***Euthrix isocyma orientalis* (DE LAJONQUIÈRE, 1978)**

Philudoria isocyma orientalis DE LAJONQUIÈRE, 1978, Annl. Soc. ent. France 14 (3): 403, pl. II G, fig. 17.

Locus typicus: China, Kuatung, Linping.

Distribution: northern India, southern China, Burma, Vietnam.

Material:

2♂♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

5♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

1♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.

9♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

2♂♂, N. Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SIMONOV (GenPr. Het. ♂ 3823).

1♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 1600-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105° 20'E, 1.-15.XI.1992, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Hoa Bihn, 400 m, 70 km NW Hanoi, 28.V.-6.VI.1990, leg. E. PALIK.

7♂♂, N-Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

1♂, S. Vietnam, Bao Loc, Rung Cat Tien, 11°32'N, 107°48'E, 1500 m, 10.-20.XII.1992. leg. SINJAEV & SIMONOV (GenPr. Het. ♂ 3904).

2♂♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

3♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, Prim. Nebelwald, 25.-30.III.1995, leg. SINJAEV & SCHINTLMEISTER.

***Euthrix imitatrix* (DE LAJONQUIÈRE, 1978)**

Philudoria imitatrix DE LAJONQUIÈRE, 1978, Annl. Soc. ent. France 14 (3): 389-390, pl. I H, fig. 5.

Locus typicus: China, Kwangtung, Linping.

Distribution: southern China, northern Thailand, northern Vietnam.

***Euthrix imitatrix tonkiensis* (DE LAJONQUIÈRE, 1978)**

Philudoria imitatrix tonkiensis DE LAJONQUIÈRE, 1978, Annl. Soc. ent. France 14 (3): 390, pl. 1 J, fig. 6.

Locus typicus: Haut Tonkin, prov. de Laokay, Muong Khuong.

Distribution: Northern Thailand, northern Vietnam.

Material:

6♂♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 1.-5.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. ♂ 3824, 3819, 3821).

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 950 m 17.X.1994 leg. SINJAEV.

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 14.-15.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

1♂, N. Vietnam, Tam Dao, 70 km SE Hanoi, XI.1991, leg. MURZIN.

28♂♂, Nord-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. ♂ 3820).

1♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

24♂♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

4♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.

5♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

1♂, Vietnam sept., Cuc-Phuong, 18.X.1976, leg. J. Haager (NHMK).

Comments: probably this is the species listed from Hanoi by DE JOANNIS (1929: 568) as *Cosmotriche decisa* with remarks: "Caterpillar on *Bambus*".

***Euthrix improvisa* (DE LAJONQUIÈRE, 1978)**

Philudoria improvisa DE LAJONQUIÈRE, 1978, Annl. Soc. ent. France 14 (3): 390-391, pl. 1 G, fig. 7.

Locus typicus: Cochinchina, Tuyen Quang.

Distribution: northern Thailand, northern Vietnam.

Material:

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 1.-5.V.1993, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 950 m, 17.X.1994, leg. SINJAEV.

5♂♂, N. Vietnam, Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

6♂♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8-29.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. ♂ 3818).

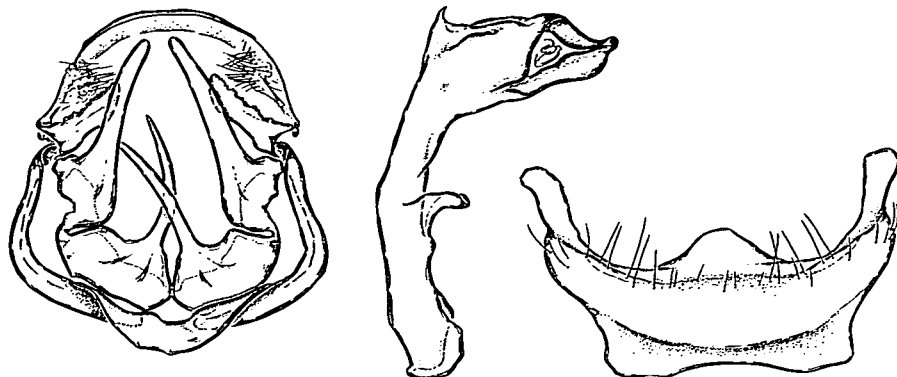


Fig. 6. Male genitalia of *Cosmeptera monstrosa* sp. n., Paratype.

***Euthrix decisa* (WALKER, 1855)**

Lasiocampa decisa WALKER, List Spec. lepid. Insects Colln Br. Mus. 6: 1441. N 23.

Locus typicus: India, Sylhet.

Literature: DE JOANNIS, 1929: 568.

Comments: was noted by DE JOANNIS for Hanoi, but wrongly because this species is limited in its distribution to India and Nepal. Probably *improvisa* DE LAJONQUIÈRE, 1978 or *imitatrix* DE LAJONQUIÈRE, 1978 were implied. Deleted from the list of Vietnamese Lasiocampids.

***Cosmeptera* DE LAJONQUIÈRE, 1979**

***Cosmeptera monstrosa* sp.n. (Plate 2 fig. 13)**

Material:

Holotype ♂: Nord-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV

Paratypes: 7♂♂, same locality (GenPr. Het. ♂ 3887).

2♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 10.VI.-6.VII.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, VI.1994, leg. SINJAEV & einh. Sammler.

1♂, same locality, 20.-30.X.1994.

3♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa) 1600 m, 22°17'N, 103°44'E, 20.-30.IV.1995, leg. SINJAEV & einh. Sammler.

Comments: Body and wings yellowish rose brown; forewings with dark grey teathed medial fasciae and grey externa, both medias closed together basally. Discal vein marked by white, dark outlined, cramp-shaped spot; besides that there is a small but distinct white point in base of R₂ and R₃. Foretibia with small ellipsoid epyphysis. Expanse ♂ 34-37 mm, forewing length 17-18, 5 mm.

Male genitalia (Text-fig. 6): tegumen and vinculum narrow, band-shaped; lateral processes of tegumen obvious, scoop-shaped, dentated. Valvae bilobated, both lobes relatively short, with conical foundations, the upper one rounded on a top, the lower one contrary sharpened. Distal processes of vinculum reduced. Aedeagus of the species is very characteristic: strong, hammer-shaped, with much facets and latero-caudal opening of vesica. Sternite VIII is narrow, lyra-shaped, with obvious medio-caudal appendage.

Female still unknown.

Biology is unknown. Probably develops in two generations with flight periods from mid April to early July and in November.

From all other *Cosmoptera* this species differs by larger size, monotonous coloration of the wings and especially by the strongly modified aedoeagus.

Eteinopla DE LAJONQUIÈRE, 1979

Eteinopla signata (MOORE, 1879) (Plate 2 fig. 14)

Odonestis signata MOORE, in HEWITSON & MOORE, Descr. new Indian lepid. Insects Colln late Mr W. S. Atkinson (1): 76.

Locus typicus: India, Darjeeling.

Distribution: northern India, Nepal, southern China, Thailand, Vietnam and Peninsula Malaysia.

Material:

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 1.-5.V.1993, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 23.-31.III.1995, 21°34'N, 105°20'E, leg. A. SCHINTLMEISTER.

2♂♂, S. Vietnam, Bao Loc, Rung Cat Tien, 1500 m, 11°32'N, 107°48'E, 10.-20.XII.1992, leg. SINJAEV & SIMONOV.

2♀♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.

4♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.

3♂♂, N. Vietnam, Mal-chau, 14.-18.XI.1994, 25 km SE Moc-chau, 1400 m, 20°50'N, 104°40'E, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, Prim. Nebelwald, 25.-30.III.1995, leg. SINJAEV & SCHINTLMEISTER.

Comments: was noted by LEMÉE & TAMS 1950: 35 from Backan.

Eteinopla narcissus ZOLOTUHIN, 1995 (Plate 2 fig. 15, 16)

Eteinopla narcissus ZOLOTUHIN, Tinea 14 (3): 160, figs 9, 19.

Locus typicus: northern Thailand.



Distribution: northern Thailand, northern Vietnam and north-eastern Burma.

Material:

- 24♂♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV (Paratypes).
- 1♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, 30.VI.-12.VII.1994, leg. SINJAEV & einh. Sammler.
- 3♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler (Paratypes).
- 3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.
- 2♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.
- 21♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, Kulturland, November 1994, leg. SINJAEV & einh. Sammler (GenPr. Het. ♂ 3903) (Paratypes).
- 2♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG (Paratypes).
- 2♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, Prim. Nebelwald, 25.-30.III.1995, leg. SINJAEV & SCHINTLMEISTER.

The type series from Vietnam is included in this list.

Plate 2

- 9 *Euthrix lucipherus* sp. n. Holotype ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 10.VI.-6.VII.1994, leg. SINJAEV & einh. Sammler.
- 10 *Euthrix lucipherus* sp. n. Paratype ♀
N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI. 1994, leg. SINJAEV & einh. Sammler.
- 11 *Euthrix tangi* (DE LAJONQUIÈRE, 1978) ♂
Nord-Vietnam, Tam Dao, 60 km NW Hanoi, 950 m, 21°34'N, 105°20'E, 17.XI.1994, leg. SINJAEV.
- 12 *Euthrix tangi* (DE LAJONQUIÈRE, 1978) ♀
N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.
- 13 *Cosmeptera monstrosa* sp. n. Paratype ♂
Nord-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV
- 14 *Eteinopla signata* (MOORE, 1879) ♂
Sued-Vietnam, Bao Loc, Rung Cat Tien, 1500 m, 11°32'N, 107°48'E, 10.-20.XII.1992, leg. SINJAEV & SIMONOV.
- 15 *Eteinopla narcissus* ZOLOTUHIN, 1995 ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, 30.VI.-12.VII.1994, leg. SINJAEV & einh. Sammler
- 16 *Eteinopla narcissus* ZOLOTUHIN, 1995 ♀
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, 30.VI.-12.VII.1994, leg. SINJAEV & einh. Sammler

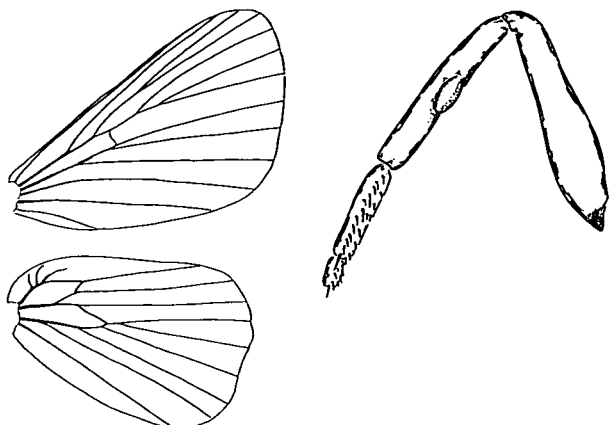


Fig. 7. Wing venation and foreleg of *Gorgonella* ZOLOTUHIN gen. n. *bhutata* ZOLOTUHIN sp. n.

Gorgonella ZOLOTUHIN, gen. nov.

Type-species: *Gorgonella bhutata* ZOLOTUHIN, sp. n., here designated.

Diagnosis: small lasiocampids with reddish-brown elongated wings. Forewings (Text-fig. 7) with smoothly curved medial lines, hindwings without pattern. In forewings r_1 free, common branches both r_2+r_3 as well as $r_4+(r_5+m_1)$; base of m_2 close to that of m_3 ; two anal veins present. In the hindwing sc makes an anastomosis with r and they both form a large humeral Sc-R cell, unconsiderably smaller than M-Cu cellula; bases of m_2 and m_3 branched, two anal veins present. Foretibia with small ellipsoid epiphysis. Male genitalia with stylitized valvae, band-shaped tegumen and vinculum. Distal processes of vinculum flatted and teathed caudally. Aedoeagus styletto-shaped, but not so long as in *Euthrix*, without teeth or thorns dorsally.

Females, preimaginal phases and biology are unknown.

Two closely related species are included.

Gorgonella bhutata ZOLOTUHIN, sp.n. (Plate 3 fig. 17)

Holotype ♂: „Bhutan“, „ex coll. R. Oberthür“ (ZFMK).

Paratype: 1♂ „Bhutan“, „Gen. Präp. GLYC N 051“ (ZFMK).

Description: Forewings reddish-brown with brown, weakly observed, curved basally postmedial and teathed external fasciae. Discal vein with white scales, outlined by grey strikes. Hindwings monotonous, unsignificantly darker than the forewings. Expanse 27 mm, forewing length 12-12,5 mm.

Male genitalia (Text-fig. 8): surface of valves smooth, their tops cut off and weakly teathed. Distal processes of vinculum with obvious cut on lateral edge, teeth-wrinkled on caudal edge and with numerous small thorns on the inner side. Aedoeagus with trapezium-shaped plate basally and clear narrowing in central part.

Distribution: known only from the type locality.

Diagnosis: differing from the similar *Gorgonella mendica* ZOLOTUHIN, sp.n., by the form of the medial line on the forewings, by presence of white scales on discal vein, less bright background of the wings, smooth surfaces of valvae, their unsharpened tops, by form of distal processes of

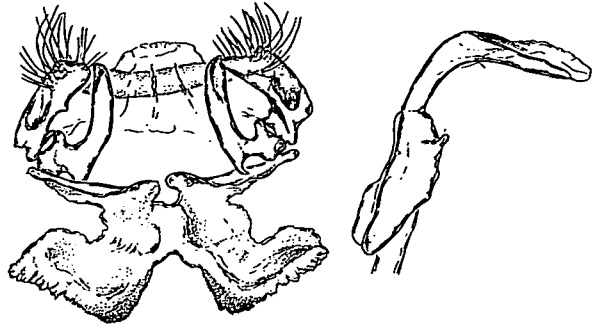


Fig. 8. Male genitalia of *Gorgonella bhutata* ZOLOTUHIN sp. n., Holotype.

vinculum and by the peculiarities of the thorns' disposition on their surfaces, by the form of basal plate of aedeagus and by presence of clear narrowing in it.

***Gorgonella mendica* ZOLOTUHIN, sp.n. (Plate 3 fig. 18)**

Holotype ♂: „Tonkin“, „ex coll. R. Oberthür“, „Gen. Präp. GLYC. N 052“ (ZFMK).

Description: forewings bright red-brown, weakly lighter tornal. Medial fasciae dark brown, smoothly curved; external fascia dark grey, teathed. Discal vein marked by small dark-grey point. Hindwings without pattern, the same coloration as the forewings. Expanse 29 mm, forewing length 12 mm.

Male genitalia (Text-fig. 9): surface of valvae covered by small thorns, tops of valvae sharpened. Distal processes of vinculum nearly triangular, teathed caudal, with some small thorns on the inner side. Aedeagus with rounded basal plate, without narrowing in the central part.

Distribution: known only from the type-locality.

Diagnosis: see under *Gorgonella bhutata* sp. n.

Comments: In external characters *Gorgonella* gen. nov. is close to *Cosmeptera* DE LAJONQUIÈRE, 1979, but differing well from it by the male genitalia. The genus *Gorgonella* gen. nov. is placed here in the *Selenepherini* TUTT, 1902 of the subfamily *Pinarinae* KIRBY, 1892 and is considered to be closely related to *Cosmeptera* DE LAJONQUIÈRE, 1979.

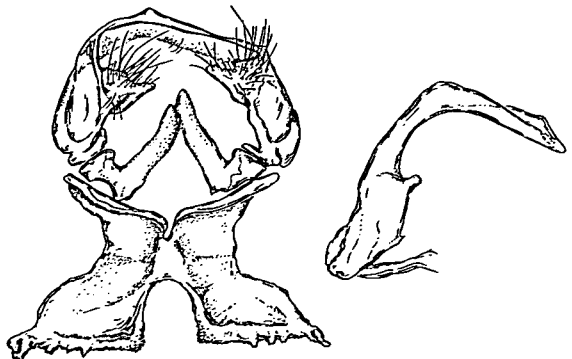


Fig. 9. Male genitalia of *Gorgonella mendica* ZOLOTUHIN sp. n., Holotype.

***Micropacha* ROEPKE, 1953**

***Micropacha gepra* ZOLOTUHIN (in press)**

Material:

2♂♂, N. Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI-3.XII.1992, 400 m, leg. SINJAEV & SCHINTLMEISTER (GenPr. Het. 3877).

2♂♂, N. Vietnam, Cuc Phuong, 120 km SW Hanoi, 400 m, 20°15'N, 105°20'E, 1/2.IV.1995, leg. SINJAEV & SCHINTLMEISTER.

3♂♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2220 m, 22° 15'N, 103°46'E, 3.III.1995, leg. Dr. R. BRECHLIN.

6♂♂, Vietnam, prov. Tuyen Quang, Na Nang Nature Reserve, 300 m, 105°5'E, 22°3'N, 22.II-5.III.1997, leg. G. CSORBA.

***Micropacha zojka* ZOLOTUHIN (in press)**

Material:

2♂♂, S. Vietnam, Bao Loc, Rung Cat Tien, 11°32'N, 107°48'E, 1500 m, 10.-20.XII.1992, leg. SINJAEV & SIMONOV (GenPr. Het. 3872).

5♂♂, N. Vietnam, Mal-chau, 14.-18.XI.1994, 25 km SE Moc-chau, 1400 m, 20°50'N, 104° 40'E, leg. SINJAEV & SIMONOV (GenPr. Het. 3918).

Trabaliini TUTT, 1902

***Trabala* WALKER, 1856**

***Trabala vishnou* (LEFÈBVRE, 1827)**

Gastropacha vishnou LEFÈBVRE, 1827, Zool. J. (3): 207.

Locus typicus: northern India.

Distribution: north-eastern Pakistan, India, Ceylon, China, Taiwan, Nepal, Thailand, Vietnam and Malaysia.

Literature: CANDÈZE 1927: 123; DE JOANNIS 1929: 567; LEMÉE & TAMS 1950: 53.

Material:

1♀, Vietnam, Hanoi, III. 1979, M. HLAVA leg. (ZSSM).

1♀, Vietnam, Hanoi, III. 1979, M. HLAVA leg., coll. KRUSEK (MWM).

1♀, Hanoi, leg. VAULOGER (MNHN).

19♂♂ 2♀♀, N. Vietnam, Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler (MWM).

Comments: was noted by CANDÈZE from Annam and Cochinchina, by DE JOANNIS from Hanoi, Cho ganh, Cho cay, region de Hoa binh and Yen bai and by LEMÉE & TAMS from Hagiang.

***Trabala pallida* (WALKER, 1855)**

Amydona pallida WALKER, List Spec. lepid. Insects Colln Br. Mus., 1855 6: 1417.

Locus typicus: Java.

Distribution: southern China, Thailand, Vietnam, Malaysia, Sumatra and Borneo.

Material:

2♂♂ 1♀, Hinterindien, Tonking, leg. DE COOMAN.

3♂♂, Vietnam, Tam Dao, 900 m, 22.-24.V.1990, leg. E. PALIK & H. J. KOPEC.

1♂, N. Vietnam, Tam Dao, 1000 m, 90 km N Hanoi, 12.-25.V.1990, leg. E. PALIK.

1♂, Vietnam, Hanoi, IV.1979, M. HLAVA leg. (ZSSM).

10♂♂, N. Vietnam, Cuc Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SCHINTLMEISTER (MWM).

1♂♀, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV (MWM).

7♀♀, Vietnam, Hanoi, III. 1979, M. HLAVA leg. (ZSSM).

***Trabala viridana* JOICEY & TALBOT, 1917** (Plate 3 fig. 19)

Trabala viridana JOICEY & TALBOT, Ann. & Mag. Nat. Hist. (8) 20: 8, pl. 3 fig. 11.

Locus typicus: Dutch New Guinea, Wandamman Mts.

Distribution: Sundaland, Malaysia, Thailand, Vietnam.

Material:

1♂, N. Vietnam, Cuc Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SCHINTLMEISTER (MWM).

1♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV (MWM).

***Trabala brahma* ROEPKE, 1951**

Trabala brahma ROEPKE, 1951, Meded. Landbhoogsch. Wageningen 50: 119, pl. 1, fig. 8; pl. 7, fig. 5; pl. 10, fig. 3; pl. 11, fig. 5; pl. 12, fig. 5; pl. 13, fig. 9.

Locus typicus: W.-Java, Mt. Gedeh.

Distribution: Sundaland, Malaysia, Thailand, Vietnam.

Material:

1♀, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN (MWM).

Comments: is firstly noted from the continent.

***Trabala shiva* ROEPKE, 1951**

Trabala shiva ROEPKE, 1951, Meded. Landbhoogsch. Wageningen 50: 120-121, pl. 3, fig. 8; pl. 10, fig. 8; pl. 11, fig. 8; pl. 12, fig. 7.

Locus typicus: W.-Java, Goalpara.

Distribution: Java, Sumatra, Borneo, Vietnam.

Material:

3♂♂, N. Vietnam, Cuc Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SIMONOV. (MWM).

Comments: is firstly noted from the continent.

***Crinocraspeda* HAMPSON, [1893] 1892**

***Crinocraspeda torrida* (MOORE, 1879)** (Plate 3 figs 20, 21)

Gastropacha torrida MOORE, 1879, in HEWITSON & MOORE, Descr. new Indian lepid. Insects Colln late Mr. W. S. Atkinson (1): 76, pl. 3, fig. 19.

Locus typicus: India, Darjeeling.

Literature: DE JOANNIS 1929: 567; ROEPKE 1953: 4.

Distribution: northern and central India, southern China, northern Thailand, northern Vietnam.

Material:

3♂♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

6♂♂ 14♀♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.

2♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

18♂♂ 3♀♀, N. Vietnam, Mt. Fan-si-pan, W-seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

3♂♂ 2♀♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.

1♀, Hinterindien, Tonking, Cha-pa, IX.1930, LEMAI.

7♂♂ 5♀♀, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler (alle MWM).

Comments: was noted by DE JOANNIS from Cha-pa.

Pinarini KIRBY, 1892

***Dendrolimus* GERMAR, 1812**

***Dendrolimus grisea* (MOORE, 1879)**

Chatra grisea MOORE, 1879, in HEWITSON & MOORE, Descr. new Indian lepid. Insects Colln late Mr W. S. Atkinson (1): 80.

Locus typicus: northern India, Khasia Hills.

Distribution: northern India, southern and south-eastern China, northern Thailand and northern Vietnam.

Literature: ZOLOTUHIN 1995.

Material:

1♂ 3♀♀, N. Vietnam, Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler (MWM).

***Dendrolimus punctata* (WALKER, 1855)**

Oreona punctata WALKER, List Lepid. Ins. Colln Br. Mus. 6: 1418.

Locus typicus: China, Hong-Kong.

Literature: CANDÈZE 1927: 123; DE JOANNIS 1929: 568-569.

Distribution: specific – from Japan and central and eastern China to southern China and northern Vietnam.

Comments: was noted by CANDÈZE from Annam and by DE JOANNIS from Hoang su phi.

***Dendrolimus punctata glados* ssp. n. (Plate 3 fig. 22)**

Holotype ♂: N-Vietnam, Tam Dao, 60 km NW Hanoi, 23°14'N, 105°20'E, 1200 m, 1.-15.XI.1993, leg. SINJAEV & SIMONOV.

Paratypes: 1♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

1♀, N. Vietnam, Cuc Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SCHINTLMEISTER.

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 23°14'N, 105°20'E, 1200 m, 1.-15.XI.1993, leg. SINJAEV & SIMONOV.

1♀, N. Vietnam, Tam Dao, 60 km NW Hanoi, 23°14'N, 105°20'E, 1200 m, April 1995.

1♂, N. Vietnam, National Park Cuc Phuong, ca. 150 km SO Hanoi, Dez. 1991 - Jan. 1992, leg. T. Nadler (SMTD).

Diagnosis: Male: wing expanse 42-47 mm, forewing length 20-23 mm. Female: wing expanse 60-61 mm, forewing length 32 mm. The male differs from those of other subspecies of *punctata* by lacking of teeth on the distal processes of vinculum, those are replaced by indistinct wrinkles. Its lower appendages of valvae shorter than in other subspecies. Was noted as *Dendrolimus punctata* WALKER by DE JOANNIS (1929: 568) from Hoang su phi.

***Dendrolimus angulata* GAEDE, 1932 (Plate 3 fig. 23)**

Dendrolimus angulata GAEDE, 1932 in A. SEITZ, Großschmett. Erde, vol. 2, Suppl.: 123, pl. 10, e.

Locus typicus: [China, Yunnan, Tsekou] Tseku.

Distribution: southern China (Yunnan) and northern Vietnam.

Material:

2♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, primär. Urwald, 7.-10.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°15'N, 103°45'E, primär. Nebelurwald, 9.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

5♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, VI.1994, leg. SINJAEV & einh. Sammler.

1♀, N. Vietnam, Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler.

Comments: From two different forms of this species only one is represented in Vietnam as figured.

***Dendrolimus kikuchii* MATSUMURA, 1927**

Dendrolimus kikuchii MATSUMURA, 1927, Coll. Agr. Hokkaido 19 (1): 18, pl. 2, fig. 16.

Locus typicus: Taiwan.

Distribution: Taiwan, south and eastern China and northern Vietnam.

***Dendrolimus kikuchii kishidai*, ssp. n.**

Holotype ♂: Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

Paratypes: 4♂♂ 1♀, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.
1♂, S.Vietnam, Kon Tum Province, Dac Glei, 15°07'N, 107°42'E, H = 700 m, 8.VIII.1996, leg. SINJAEV & AFONIN.

Description: Male: small, wing expanse 49-57 mm, forewing length 23-27 mm. Wings relatively short and narrow, rounded on external margin with sharpened apex. Coloration of forewing dark brown or monotonous reddish brown without pattern.

Female: larger, wing expanse 82mm, forewing length 39mm. Wings broader than in males and of yellowish brown not reddish brown colour. Wing pattern vague without light spotted marking.

Male genitalia (Text-fig. 10): as illustrated; see also Comments.

Female genitalia: not studied.

Distribution: so far known only from the type-locality.

Comments: clearly differing from other subspecies of *Dendrolimus kikuchii* by small size. In male genitalia both valvar lobes shorter than in nominate subspecies from Taiwan or continental ssp. *ochraceus* TSAI & LIU, 1962; ratio long lobe: short lobe is almost 3:1 but 2:1 in other subspecies; distal processes of vinculum shorter and not so strong flattened caudally, their teeth shorter. Aedeagus of ssp. *kishidai* ssp. n. also shorter with shorter apex; cornuti are almost of the same size and in smaller number (17 instead 28, 36 and 39 as in *ochraceus* TSAI & LIU).

Plate 3

- 17 *Gorgonella bhutata* ZOLOTUHIN, sp. n. Paratype ♂
„Bhutan“.
- 18 *Gorgonella mendica* ZOLOTUHIN, sp. n. Holotype ♂
„Tonkin“, „ex coll. R. Oberthur“.
- 19 *Trabala viridana* JOICEY & TALBOT, 1917 ♀
N-Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI. 1994, leg. SINJAEV & SIMONOV.
- 20 *Crinocraspeda torrida* (MOORE, 1879) ♂
N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.
- 21 *Crinocraspeda torrida* (MOORE, 1879) ♀
N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.
- 22 *Dendrolimus punctata glados* ssp. n. Paratype ♂
N-Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV
- 23 *Dendrolimus angulata* GAEDE, 1932 ♂
N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°15'N, 103°45'E, primär. Nebelurwald, 9.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.
- 24 *Dendrolimus liliput* sp. n. Holotype ♂
Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.
- 25 *Dendrolimus liliput* sp. n. Paratype, ♀
Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.



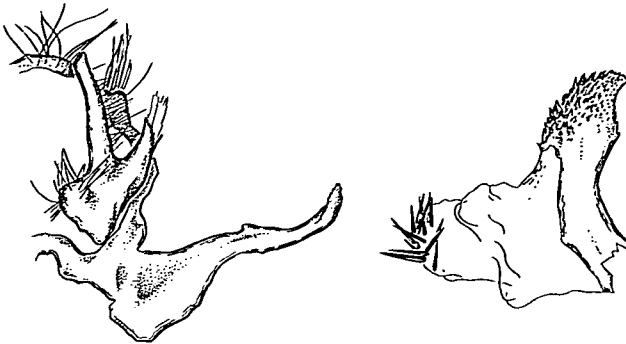


Fig. 10. Male genitalia of *Dendrolimus kikuchii kishidai* ssp. n., Paratype

Similar to *Dendrolimus kikuchii hainanensis* TSAI & HOU, 1980 from Hainan Island, but the aedeagus of the new subspecies shorter and distal processes of vinculum longer.

Biology is not known. Seems to be rare and very local.

***Dendrolimus liliput* sp. n.** (Plate 3 figs 24, 25)

Holotype ♂: Vietnam sept., Plateau Tay Nguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

Paratypes: 2♂ 1♀, Vietnam sept., Plateau Tay Nguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

Description: the smallest species of *Dendrolimus* GERMAR, 1812, externally very similar to *Dendrolimus punctata* (WALKER, 1855) but almost 2 times smaller. Expanse 31 mm, forewing length 15 mm.

Forewings elongated, their outer margin rounded. Background of the forewings is light brown, medial zone is grey, limited from both sides by dentate white fasciae. Outer zone is light grey and outlined proximally by dark grey spots. These spots for m typical for all *Dendrolimus* external fascia, in this species it is smooth but wide and obvious. Discal spot small, vague and not remarkable yet in slightly worn specimens. Hindwings monotonous yellow grey. Scales weakly cover both wings and the wings seem to be semitransparent. Thorax reddish brown, abdomen yellow grey.

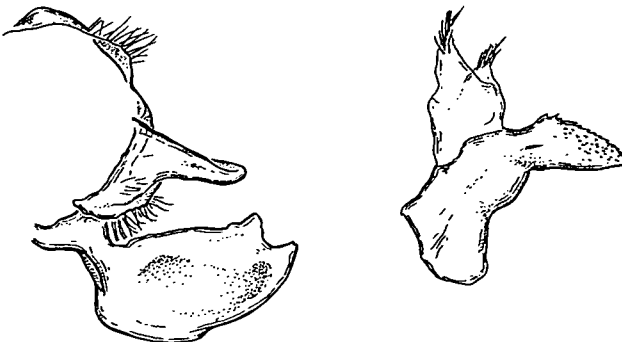


Fig. 11. Male genitalia of *Dendrolimus liliput* sp. n., Paratype.

The colouration of the single female is similar to that on the males but the wing-pattern is more vague.

Male genitalia (Text-fig. 11): small and compact. Upper lobe of valva conical, slightly flattened apical. Distal processes of vinculum are characteristic – broad and smooth, without teeth on ventral edge, only few of them are typical for caudal edge. Aedoeagus beak-shaped, with apical part covered by small teeth. Vesica bilobated with two terminal lineal groups of long, needle-shaped cornuti.

Distribution: known only from the type locality so far.

Comments: remarkable species, cannot be confused with others neither in external characters nor in structure of genitalia.

Pachypasoides MATSUMURA, 1927

Pachypasoides roesleri (DE LAJONQUIÈRE, 1973)

Hoennimnema roesleri DE LAJONQUIÈRE, 1973, Annl. Soc. entomol. France 9 (3): 567-569, pl. II N, figs 45, 50.

Locus typicus: China, Chekiang: West Tien-mu-shan.

Pachypasoides roesleri dessiae ssp. n. (Plate 4 fig. 26)

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ April 1995, leg. SINJAEV & einh. Sammler (GenPr. Het. 4047 ♂).

Paratypes: 1♂, same locality.

1♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 1600-1800 m, 22°20'N, 103°40'E, secondary forest, May 1995, leg. local collectors.

1♂, N. Vietnam, Mt. Fan-si-pan (Nord), Cha-pa, 1000 m, 22°17'N, 103°44'E, Primär-Wald, 28.X-3.XI.1994, leg. SINJAEV & einh. Sammler.

In external characters similar to the nominate subspecies but larger and has more elongated forewings with more distinct pattern. Dark blackish-grey outer bordering of the external fasciae obvious, stronger than in the nominative subspecies. Expanse 69-82 mm, forewing length 36-39 mm.

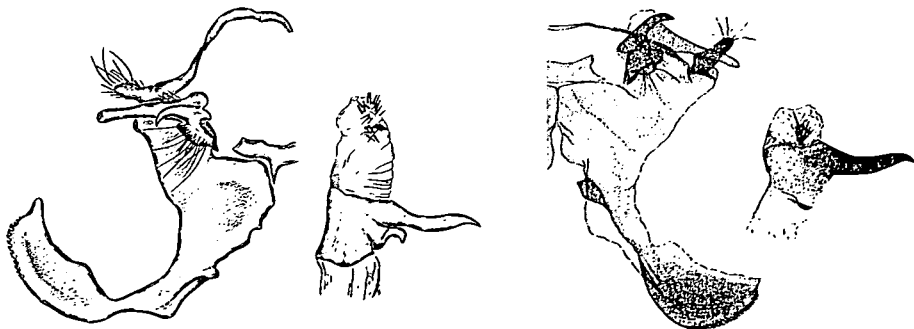


Fig. 12. Male genitalia of *Pachypasoides roesleri dessiae* ssp. n., Paratype (left) in comparison with *Pachypasoides roesleri roesleri* (DE LAJONQUIÈRE, 1973) (right – from the original description).

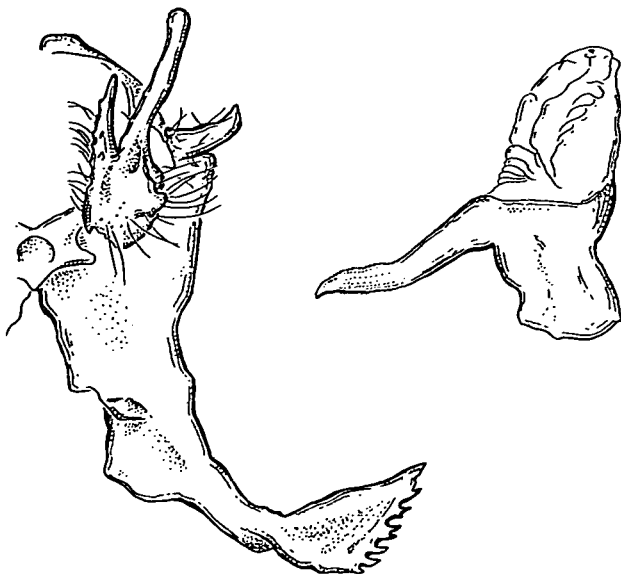


Fig. 13. Male genitalia of *Pachypasoides candezei* sp. n., Paratype.

Male genitalia (Text-fig. 12): stronger than in nominate subspecies, the distal processes of vinculum larger and longer.

Distribution: it is known only from the type locality so far.

Comments: all Paratypes are strongly worn.

***Pachypasoides candezei* sp. n.** (Plate 4 fig. 27)

Holotype ♂: Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

Paratypes: 5♂♂, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

1♂, Vietnam mer., Kon Tum Province, Dac Glei, 15°07'N, 107°42'E, 700 m, 8.VIII.1996, leg. V. SINJAEV & E. AFONIN.

Description: the smallest species of *Pachypasoides* MATSUMURA, 1927, with narrow and long forewings. Expanse 45-50 mm, forewing length 23.5-24 mm. Forewings reddish brown with typical for *Pachypasoides* black zic-zac pattern. Medial zone is covered by numerous white and silver-white scales, especially typical for basal and anal zone of the wings. External fasciae obvious, blackish, consisting of triangular spots, merging together in a complete band. Discal spot small white, point-like. Hindwings light reddish-brown without pattern. Thorax dark reddish-brown with whitish tegulae; abdomen light reddish-brown.

Male genitalia (Text-fig. 13): as illustrated, characterized by completely divided valva, conical sclerotized socii and strong distal processes of vinculum. The upper lobe of valva relatively long, mace-shaped, with rounded top, the inner lobe conical with distinct curved thorns on its surface and the lower lobe small, pyramidal. Base of valva and the inner lobe are covered by long setae. Distal processes of vinculum elongated, flattened caudal in triangular plate, that is strongly

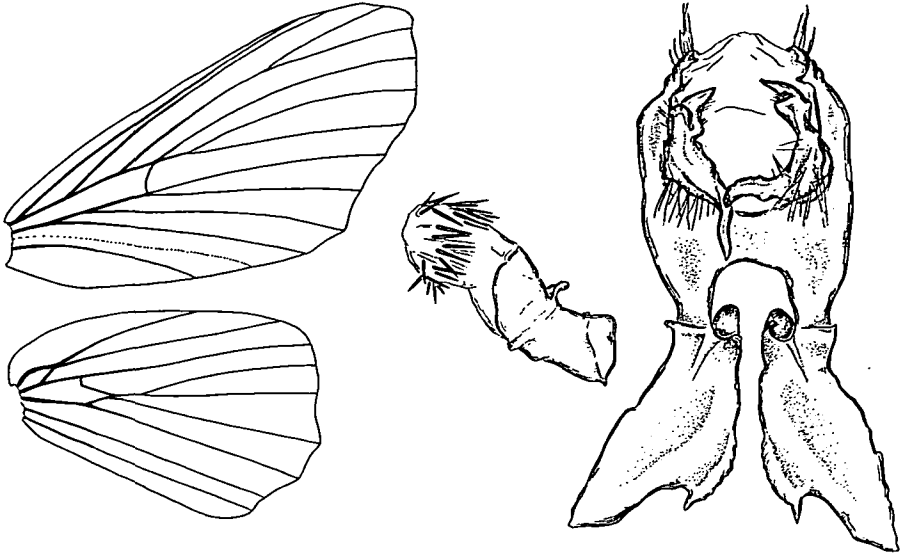


Fig. 14. Wing venation and male genitalia of *Notogroma* gen. n. *mutabile* (CANDÈZE, 1927)

teethed with large irregular teeth on ventral edge. Aedeagus with short tubular base and long S-curved beak-shaped apex, covered by numerous very small teeth. Vesica without cornuti. Female and preimaginal stages are still unknown.

Distribution: is known only from its type-locality.

Comments: differs from other *Pachypasoides* by considerably smaller size and narrower, long forewing. Male genitalia are also diagnostic.

Notogroma gen. nov.

Type-species: *Pachypasa mutabile* CANDÈZE, 1927, here designated.

Diagnosis: Lasiocampids of a middle size (expanse 48-62 mm) with bipectinate antennae and elongated wings with complicated wavy pattern.

Venation (Text-fig. 14): in forewing r_1 and r_4 free; common branches both r_2 and r_3 & r_5 and m_1 ; base of r_4 close to that of r_5+m_1 ; one a (a_2 ?) present and a_1 developed only as a fold. In the hind-wing sc makes an anastomosis with r and they both form a small $Sc-R$ cellula, about four times smaller than $M-Cu$ cellula; m_2 and m_3 on a short branch, two a present. Foretibia with large sigara-shaped epyphysis in both sexes. Male and female genitalia as described below. Preimaginal instars and biology are still unknown. Only one species is included, the type one.

Notogroma mutabile (CANDÈZE, 1927), comb. nov. (Plate 4 figs 28, 29)

Pachypasa mutabile CANDÈZE, 1927, Enc. entomol., Lepidoptera 2: 123-124.

Locus typicus: „Indochine (sans autre indication de provenance)“.

Material:

9♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa) 1600 m, 22°17'N, 103°44'E, 25.-30.III.1995, leg. SCHINTLMEISTER & SINJAEV.

1♂, N. Vietnam, Sapa, 1500 m, 10.-15.V.1994, leg. F. Lehmann.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, 20.-30.X.1995, leg. V. SINJAEV & E. AFONIN.

Male. Head and patagia dark-grey. Thorax and tegulae grey with a large number of white and silver-grey hairs. Abdomen dark reddish-brown. Forewings elongate with weakly concave external margin, whitish-grey with iridescent shining. Two double medial dentated dark-grey lines present parallel to external margin, all they are marked by obvious strikes on veins. Serrate externa distinct. Hindwings monotonous brown without pattern. Expanse 48-50 mm, forewing length 22.5-23 mm.

Female. Considerably larger, expanse 62 mm, forewing length 28 mm, and darker; forewings lacking a majority of white scales but large brown dorsal spots are typical. Wing pattern more vague and not contrast. Antennae bipectinate but with more short appendages.

Male genitalia (Text-fig. 14): uncus and gnathos reduced. Tegumen narrow, weakly observed; socii sclerotized small. Valvae strongly sclerotized trilobated; the lower lobe long styletto-shaped slightly curved; the medial lobe very short rounded and the upper lobe short conical. Vinculum band-shaped, distal processes of vinculum very broad of the characteristic forms and covered on the inner edge by short teeth and powerful medio-apical thorn. Aedeagus tubular without developed top; vesica with a row of long needle-shaped cornuti, those are oriented cranial.

Female genitalia: both vaginal plates strongly modified; ostium sclerotized; antrum and ductus very short and broad membranous; bursa bag-shaped membranous without signa.

In external characters the species of *Notogramma* gen. nov. resemble some *Notodontidae*-species and can be confused with them at first sight. Wings' pattern similar to those of *Pachypasoides* MATSUMURA, 1927, but *Notogramma* gen. nov. differs well from the latter by the male genitalia. They outlined obviously this genus between the related genera.

The genus *Notogramma* gen. nov. is placed here in the *Pinarini* KIRBY, 1892 of the subfamily *Pinarinae* KIRBY, 1892 and close together with *Dendrolimus* GERMAR, 1812 and *Pachypasoides* MATSUMURA, 1927.

Kunugia NAGANO, 1917

Kunugia placida (MOORE, 1879)

Lebeda placida MOORE, 1879, Descr. new Indian lepid. insects Colln late Mr. Atkinson: 80.

Locus typicus: Northern India, Darjeeling.

Distribution: India, southern China, Thailand, Vietnam, Peninsular Malaysia.

Literature: DE JOANNIS 1929: 566 (as *Metanstria lidderdalei* (sic!) BUTLER).

Material:

8♂♂, N. Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI-3.XII.1992, 400 m, leg. SINJAEV & SCHINTLMEISTER.

1♂, Tonkin, Hanoi (MNHN).

3♂♂, Saigon (MNHN).

Comments: was noted by DE JOANNIS for Sui gahn with remark „Caterpillars in IX, hatching in X”.

***Kunugia austroplacida* HOLLOWAY, 1987**

Kunugia austroplacida HOLLOWAY, 1987, Moths of Borneo 3: 34, pl. 4, Fig. 31.

Locus typicus: Sarawak.

Distribution: Borneo, peninsular Malaysia to Vietnam and Thailand, Sumatra, Java.

Material:

1♂ Bao Loc, 18 km from Ho Chi Minh, South Vietnam, 4.XI.1991, T. ENDO leg. (coll. H. Inoue in BMNH).

***Kunugia ampla* (WALKER, 1855)**

Odenestis (sic!) *ampla* WALKER, List Lepid. Heterocera Colln Br. Mus. 6: 1412.

Locus typicus: [India] Silhet.

Distribution: India, southern China, Thailand, Vietnam, Peninsular Malaysia.

Literature: DE JOANNIS 1929: 566.

Comments: was noted by DE JOANNIS for Hoang su phi and Laokay. No material at our disposal.

***Kunugia latipennis* (WALKER, 1855)**

Lebeda latipennis WALKER, 1855, List spec. Lepid. Insects Colln Brit. Mus. 6: 1457.

Locus typicus: India.

Literature: LEMÉE & TAMS, 1950: 68.

Distribution: India, southern China, Thailand, Burma, Sumatra, Borneo.

Material:

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 21°34'N, 105°20'E, 1200 m, 1.-5.V.1993, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

Comments: was noted by LEMÉE & TAMS from Saigon.

***Kunugia fulgens* (MOORE, 1879)**

Lebeda fulgens MOORE, in HEWITSON & MOORE. Descr. new Indian lepid. Insects colln late Mr Atkinson: 81.

Locus typicus: Darjiling.

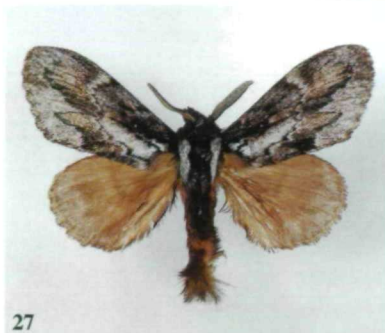
Distribution: northern India, Nepal, southern China, Thailand, Vietnam.

Material:

7♂♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.



26



27



29



28



30



31

- 1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.
2♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.
6♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler.
1♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

***Kunugia brunnea* (WILEMAN, 1915)**

Metanaestia brunnea WILEMANN, The Entomologist 48: 15.

Locus typicus: [Taiwan] Formosa.

Distribution: Taiwan, southern and central China, Nepal, northern Thailand, northern Vietnam.

Material:

- 2♂♂, N. Vietnam, 16-1800 m, Mt. Fan-si-pan (West), Cha-pa, 22°20'N, 103°40'E, Sekwald/cult., IV.1995, leg. SINJAEV & einh. Sammler.
4♂♂, N. Vietnam, 1600 m, Mt. Fan-si-pan (Nord), Cha-pa, 22°17'N, 103°44'E, Primärurwald, 20.-30.IV.1995, leg. SINJAEV & einh. Sammler.
1♂, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.
1♂, N. Vietnam, 16-1800 m, Mt. Fan-si-pan (West), Cha-pa, 22°20'N, 103°40'E, Sekwald/cult., 15.-25.V.1995, leg. SINJAEV & einh. Sammler.
1♂, N. Vietnam, 1600 m, Mt. Fan-si-pan (Nord), Cha-pa, 22°17'N, 103°44'E, Primärurwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

Plate 4

- 26 *Pachypasoides roesleri dessiae* ssp. n., Holotype ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, April 1995, leg. SINJAEV & einh. Sammler.
27 *Pachypasoides candezei* sp. n., Holotype ♂
Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.
28 *Notogroma mutabile* CANDÈZE, 1927 ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler
29 *Notogroma mutabile* CANDÈZE, 1927 ♀
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler
30 *Kunugia undans* (WALKER, 1855), ssp. *prope shensiensis* DE LAJONQUIÈRE ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.
31 *Kunugia lemeepauli* (LEMÉE & TAMS & TAMS, 1950) ♂
N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

***Kunugia basinigra* (ROEPKE, 1953)**

Cyclophragma basinigra ROEPKE, 1953, Tijdschr. Ent. 96: 95, pl. 4, fig. 1.

Locus typicus: West Java, Perbawatee.

Distribution: Java, Borneo, Sumatra, the Philippines, Peninsular Malaysia, Vietnam and Northern Thailand.

Material:

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

***Kunugia undans* (WALKER, 1855)**

Lebeda undans WALKER, List Specim. lepid. Insects Colln Br. Mus. 6: 1458-1459.

Locus typicus: India, Assam, Sylhet.

Distribution: from Russian Far East, Korea and Japan through China to India, Nepal, N. Vietnam.

***Kunugia undans* (WALKER, 1855) ssp. *prope shensiensis* DE LAJONQUIÈRE, 1973 (Plate 4 fig. 30)**

Cyclophragma undans shensiensis DE LAJONQUIÈRE, 1973, Ann. Soc. ent. Fr. (N. S.) 9 (3): 589.

Material:

4♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

***Kunugia sinjaevi* sp. n. (Plate 5 fig. 32, 33)**

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler (GenPr. Het. 3963).

Paratypes: 2♂♂ same locality.

1♂ 1♀, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Tam Dao, 60 NW Hanoi, 21°34'N, 105°20'E, 1200 m, 1.-5.V.1993, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Prov. Lao Cai, Sa Pa, 1300 m, 15-20.XI.1993, leg. BARKOVICS & CSORBA.

Large lasiocampids, expanse ♂ 83-85 mm, forewing length ♂ 40-42 mm, ♀ 52 mm. Head and thorax brownish grey, sometimes patagia with admixture of yellowish hairs, sometimes left and right patagia differently coloured. Abdomen yellow-brown. Forewings dark brownish-grey with obvious dark dentate lines and bands and yellow fields of a different saturation between them. Discal spot obviously white yellow; externa presented as blackish spots. Hindwings dark yellow brown with two indistinct dark transversal bands. Lower surface of the wings with contrast yellow and brown wide bands.

Male genitalia (Text-figs 15, 16): similar to those of *Kunugia undans* but stronger, valvae more powerful and long; distal processes of vinculum with distinct teeth. Aedoeagus with elongated top; vesica with smoothly sclerotized zone and unnumerous needle-shaped cornuti.



32



33

Plate 5

32 *Kunugia sinjaevi* sp. n. Holotype ♂

N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

33 *Kunugia sinjaevi* sp. n. Paratype ♀

N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler

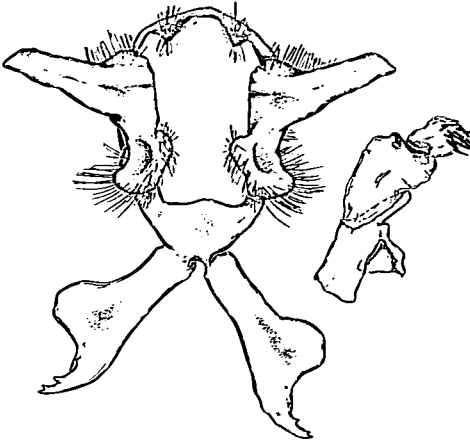


Fig. 15. Male genitalia of *Kunugia sinjaevi* sp. n., Paratype.

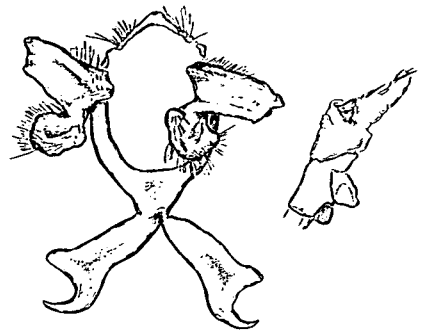


Fig. 16. Male genitalia of *Kunugia undans* ssp. *prope shensiensis* (DE LAJONQUIÈRE, 1973)

Female genitalia were not studied.

Biology and preimaginal instars are still unknown.

Comments: The new species occurs sympatric with the Vietnamese population of *Kunugia undans*.

***Kunugia lemeepauli* (LEMÉE & TAMS, 1950) (Plate 4 fig. 31)**

Metanastrina Lemée-Pauli LEMÉE & TAMS, Contr. Et. Lepid. Ht Tonkin, Saigon: 35, fig. 6.
= *Cyclophragma yongdensis* TSAI & HOU, 1983, *Acta Zootaxon. Sin.* 8 (3): 293.

Locus typicus: Haut Tonkin, Backan.

Distribution: northern Vietnam and southern China.

Material:

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Tam Dao, 60 NW Hanoi, 21°34'N, 105°20'E, 1200 m, 1.-5.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. 3852).

7♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

***Kunugia vulpina* (MOORE, 1879), comb. nov.**

Lebeda vulpina MOORE, 1879, in HEWITSON & MOORE, Descr. new Indian lepid. Insects Colln late Mr. Atkinson 1: 81.

Locus typicus: India, Darjeeling.

Distribution: northern India (ssp. *vulpina* MOORE, 1879), southern China (ssp. *omeiensis* (TSAI & LIU, 1964), **comb. et stat. nov.**) and northern Vietnam (ssp. *victori* ssp. n.).

Comments: this little-known taxon had been incorrectly synonymized with *Kunugia latipennis* (WALKER, 1855) soon after the description and therefore has been overlooked by most authors. A re-examination of the male Holotype from the collection of ZMHUB has shown the independence of *vulpina* from *latipennis* from one hand and from another, the conspecificity of *vulpina* and *omeiensis*. Therefore the new combination, *Kunugia vulpina omeiensis* (TSAI & LIU, 1964), **comb. et stat. nov.**, is established.

***Kunugia vulpina victori* ssp. n.** (Plate 6 figs 34, 35)

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2200 m, 22°15'N, 103°45'E, Primärnebelwald, 9. Juli 1994, leg. BRECHLIN & SCHINTLMEISTER.

Paratypes: 1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER (GenPr. Het. 3851).

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, Juni 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, April 1995, leg. V. SINJAEV.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, Juni 1995, leg. SINJAEV.

Comments: in external characters very similar to the nominate subspecies but the latter one has no cornuti on the vesica and has differing form of the teeth on the distal processes of vinculum. The new subspecies differs well from the ssp. *omeiensis* by more dark and contrast wings coloration. Its male genitalia are characterized by smaller number of thorns on the distal processes of vinculum and by considerably more short cornuti on the vesica. Expanse 64-70 mm, forewings length 32-34 mm.

***Kunugia burmensis* (GAEDE, 1932)** (Plate 6 fig. 36)

Dendrolimus burmensis GAEDE, 1932 in A. Seitz, Großschmett. Erde, vol. II, suppl.: 123.

Locus typicus: Burma (Karen Hills).

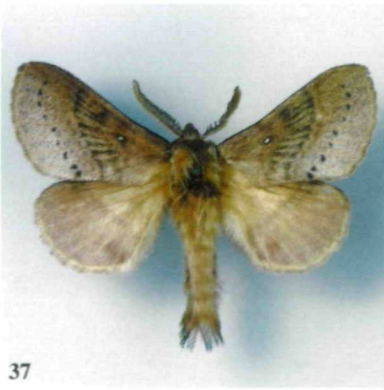
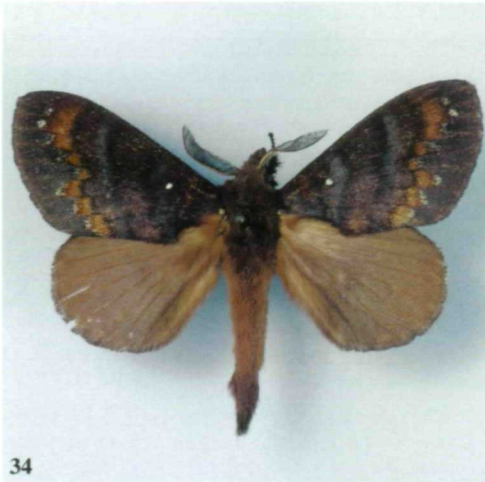
Distribution: Burma, south-western China and northern Vietnam.

Material:

3♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2200 m, 22°15'N, 103°45'E, 9.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

6♂♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8-29.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. 3849).

2♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.



- 1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.
1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.
6♂♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, Juni 1994, leg. SINJAEV & einh. Sammler.

***Kunugia mediacolorata* sp.n.** (Plate 6 figs 37, 38)

Holotype ♂: N-Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2250 m, 22°15'N, 103°45'E, prim. Nebelwald, 28.-29.III.1995, leg. SINJAEV & einh. Sammler.

Paratypes: 2♂♂ 1♀ same locality.

3♂♂, N. Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2250 m, 22°15'N, 103°45'E, prim. Nebelwald, 28.-29.III.1995, leg. SINJAEV & einh. Sammler.

4♂♂, N. Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2240 m, 22°15'N, 103°45'E, prim. Nebelwald, 2.-4.III.1995, leg. SINJAEV & einh. Sammler.

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600 m, 22°20'N, 103°40'E, Sek. Wald, 25.-30.3.1995, leg. SCHINTLMEISTER & SINJAEV.

Male: Wings and body of the dark greyish-rose coloration; forewings short and broad, with two dark grey medial bands, small white discal spot and well observed dark-grey externa. Hindwings slightly lighter. Expanse 53-56 mm, forewing length 21-23 mm.

Male genitalia (Text-fig. 17): tegumen and vinculum band-shaped; socii presented; valvae bilobated, the upper lobe flattened from the side, slightly curved and teeth on ventral edge, the lower one - membranous and covered by large number of setae. Distal processes of vinculum obvious, similar to those of *Kunugia tamsi* DE LAJONQUIÈRE, 1973, but shorter and covered by more numerous thorns.

Female genitalia: not studied.

Preimaginal stages and biology are unknown.

Plate 6

34 *Kunugia vulpina victori* ssp. n. Holotype ♂

N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2200 m, 22°15'N, 103°45'E, Primärnebelwald, 9. Juli 1994, leg. BRECHLIN & SCHINTLMEISTER.

35 *Kunugia vulpina victori* ssp. n. Paratype ♂

N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

36 *Kunugia burmensis* (GAEDE, 1932) ♂

N. Vietnam, Mt. Fan-si-pan, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, Juni 1994, leg. SINJAEV & einh. Sammler.

37 *Kunugia mediacolorata* sp. n. Holotype ♂

N-Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2250 m, 22°15'N, 103°45'E, prim. Nebelwald, 28.-29. III. 1995, leg. SINJAEV & einh. Sammler.

38 *Kunugia mediacolorata* sp. n. Paratype ♀

N-Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2250 m, 22°15'N, 103°45'E, prim. Nebelwald, 28.-29.III.1995, leg. SINJAEV & einh. Sammler.



Fig. 17. Male genitalia of *Kunugia mediacolorata* sp. n., Paratype.

Comments: the species is very similar to *Kunugia tamsi* DE LAJONQUIÈRE, 1973 but can be distinguished as following: larger (expanse of *tamsi* is only 34-41 mm) with more large wings (by *tamsi*, the forewings' length is 15-19 mm). Coloration darker, medial fasciae contrasting with wings' colour (by *tamsi* both medias are only slightly darker than the background and the dark longitudinal stripes between post- and antemedias, that are typical for *mediacolorata* sp. n., are never present). In male genitalia, the new species has shorter and more massive distal processes of vinculum with stronger thorns; its valvae are also more massive and of another shape; top of the aedeagus shorter.

***Kunugia divaricata* (MOORE, 1884)**

Gastropacha divaricata MOORE, Trans. ent. Soc. London 3: 374-375.

Locus typicus: [India] Darjiling.

Distribution: central and southern China, India, Burma, Thailand, Nepal, Peninsular Malaysia.

Material:

1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 21°34'N, 105°20'E, 1200 m, 1.-15.XI.1992, leg. SINJAEV & SIMONOV.

10♂♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

9♂♂, N. Vietnam, Mal-chau 14.-18.XI.1994, 25 km SE Moc-chau, 1400 m, 20°50'N, 104°40'E, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Farin-Pass, 11.-13.XI.1994, 20 km NW Son-la, 21°22'N, 103°52'E, 1600 m, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Cuc Phuong, 120 km SW Hanoi, 400 m, 20°15'N, 105°20'E, 1/2. IV. 1995, leg. SINJAEV & SCHINTLMEISTER.



Plate 7

39-44 *Kunugia lineata* (MOORE, 1897), different instars of caterpillar from Fan-si-pan
39. L1, 11 mm long; **40.** L3; **41.** L3; **42.** L4, 30 mm long; **43.** L5; **44.** female in resting position (Photo D. STÜNING).

Kunugia lineata (MOORE, 1897) (Plate 7 figs 39-44)

Lebeda lineata MOORE, in HEWITSON & MOORE, Descr. new Indian lepid. Ins. Colln Atkinson, 1879 1: 81.

Locus typicus: India, Darjiling.

Distribution: northern India, Nepal, southern China, northern Thailand, northern Vietnam, Burma.

Material:

- 15♂♂, N-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.
- 2♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.
- 4♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.
- 13♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-seite, Cha-pa (= Sapa), 2000 m, 22°15'N, 103°45'E, 5.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.
- 3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler.
- 10♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, November 1994, leg. SINJAEV & einh. Sammler.
- 1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, 25.-30.III.1995, leg. SCHINTLMEISTER & SINJAEV.
- 1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 21°34'N, 105°20'E, 950 m, 23.-31.III.1995, leg. A. SCHINTLMEISTER.
- 5♂♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

Bionomics: a great number of caterpillars hatched in a laboratory from eggs laid by a female from Fan-si-pan (Plate 7 figs 39-44). They rejected the following plants as food: *Pinus*, *Cedrus*, *Abies*, *Araucaria*, *Cypressus*, *Poa*, *Bambus*, *Carex*, *Betula*, *Corylus*, *Alnus*, *Quercus*, *Fagus*, *Prunus*, *Padus*, *Rosa*, *Cotoneaster*, *Pyrus*, *Malus*, *Geum*, *Rhododendron*, *Peon*, *Magnolia*, *Berberis*, *Platanus*, *Hedera*, *Chrysanthemum*, *Petunia*, *Fuxia*, *Castanea*, *Geranium*, *Genista*, *Caragana*, *Vicia*, *Lotus*, *Galium*, *Fikus*, *Aster*, *Companula*, *Syringa*, *Fraxinus*, *Liguster*, *Acer*, *Tilia*, *Solanum* and *Brassica* but surprisingly accepted *Gingko biloba*. Probably in nature they are oligophagous or, less possibly, monophagous.

***Lebeda* WALKER, 1855**

***Lebeda nobilis* WALKER, 1855**

Lebeda nobilis WALKER, List. Spec. lepid. Insects Colln Br. Mus., 1855 6: 1456.

Locus typicus: Nepal and Silhet.

Distribution: India, Nepal, central and southern China, Taiwan, Thailand, Vietnam, Peninsular Malaysia, Sumatra.

Material:

- 2♂♂, Hinterindien, Tonking [Tonkin, Cha pa, leg. LEMAI], ex coll. F. DANIEL.
- 1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.
- 76♂♂, Tam Dao, 60 km NW Hanoi, 21°34'N, 105°20'E, 1200 m, 1.-15.XI.1992, leg. SINJAEV & SIMONOV.
- 1♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 950 m, 17.X.1994, leg. SINJAEV.
- 1♂, Tonkin, Bourguiquon (MNHN).
- 6♂♂, N. Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Tam Dao, h = 1200 m, 1.-15.XI.1992, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

***Lebeda trifascia* (WALKER, 1855)** (Plate 8 fig. 45)

Lasiocampa trifascia WALKER, List. Lep. Het. Brit. Mus. 1855, 6: 1439.

Locus typicus: Northern Bengal.

Distribution: India, Nepal, southern China, northern Vietnam.

Material:

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.

1♀, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Cuc Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 400 m, Nat. Park, 1.-2.IV.1995, leg. SINJAEV & SCHINTLMEISTER

Comments: moths of first generation almost two times smaller than those of second one. The complex of *Lebeda trifascia* – *metaspila* – *brauni* needs special investigations, after that, possibly, the status of the Vietnamese population will be changed.

***Paralebeda* AURIVILLIUS, 1894**

***Paralebeda femorata* (MÉNÉTRIÉS, 1858)**

Lasiocampa femorata MÉNÉTRIÉS, Bull. Acad. Imp. Sci. St. Petersburg, 1858, 17 (24): 218, ♂.

Locus typicus: [Russia] Amur region.

Distribution: from Russian Far East, Korea, NE and E China (ssp. *femorata* MÉNÉTRIÉS), Taiwan (ssp. *mirabilis* ZOLOTUHIN) to Nepal, India and NE Pakistan (ssp. *karnata* ZOLOTUHIN) and N. Vietnam (ssp. *titanica* ssp. n.).

***Paralebeda femorata titanica* ssp. n.** (Plate 8 fig. 46)

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler (MWM).

Paratypes: 5♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler (GenPr. Het. 3925 ♂).

3♂♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 1700 m, 22°15'N, 103°46'E, VI.1994, leg. SINJAEV & einh. Sammler.

2♂♂, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

4♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, Juni 1995, leg. SINJAEV (MWM).

Diagnosis: Well differs from all other subspecies of *femorata* by larger size (expanse 79-89 mm, forewing length 39-43 mm), more dark and contrast coloration, by strong hump-like projection on the inner margin of the forewing's loop, by a presence of 3-4 white-coloured veins in this loop and by the strong development of a silver-blue touch on the forewings; tornal spot large and dark.

Male genitalia: similar to those of the nominate subspecies but more massive and top of the aedeagus slightly shorter.

Females, preimaginal instars and biology are still unknown.

***Paralebeda plagifera* (WALKER, 1855) (Plate 8 fig. 47)**

Lebeda plagifera WALKER, List. Spec. Lepid. Insects Colln Br. Mus., 1855 6: 1459-1460, ♂.

Locus typicus: Nepal.

Distribution: Northern and central India, Nepal, southern and south-eastern China, Northern Thailand and northern Vietnam.

Material:

1♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°45'E, VI.1994, leg. V. SINJAEV & einh. Sammler.

3♂♂ 2♀♀, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

14♂♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 21°34'N, 105°20'E, 1200 m, 1.-5.XI.1992, sek. Wald, leg. SINJAEV & SIMONOV (GenPr. Het. 3876).

1♂, Vietnam borealis, VII. 1979, Halong, M. HLAVA leg. (ZSSM).

***Streblote* HÜBNER [1820] 1816**

***Streblote stupidum* (STAUDINGER, 1887) (Plate 9 figs 48, 49)**

Megasoma stupidum STAUDINGER, 1887, Mem. lep. Ed. N. M. Romanoff 3: 210, t. 12, f. 5.

Locus typicus: Russian Far East (Wladiwostock).

Distribution: Russian Far East, eastern China, northern Thailand, Vietnam.

Material:

1♀, Saigon, Paralectotype (ZMHUB).

3♂♂ 4♀♀, Saigon (MNHN).

1♂ 4♀♀, Cochinchina, de Vaage, 1868 (MNHN).

3♂♂, Cochinchine, Saigon (MNHN).

***Streblote igniflua* (MOORE, [1883]), comb. nov. (Plate 9 Figs 50, 51)**

Taragama igniflua MOORE, 1882-1883, Lep. Ceylon, 2: 147, pl. 142, figs. 2, 2a.

Locus typicus: [Sri-Lanka] Ceylon.

Distribution: India, Sri-Lanka, Nepal, northern Vietnam.

Material:

1♂, N. Vietnam, Mal-chau, 14.-18.XI.1994, 25 km SE Moc-chau, 1400 m, 20°50'N, 104°40'E, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler.

1♀, Vietnam, Hanoi, 1.III.1975.

***Streblote dorsalis* (WALKER, 1866)**

Megasoma dorsalis WALKER, 1866, List Lepid. Heteroc. Colln Brit. Mus., Bd. 35, pp. 1947-1948.



Plate 8

- 45 *Lebeda trifascia* (WALKER, 1855) ♂
N. Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N 105°20'E, 400 m, Nat. Park, 1.-2. IV. 1995,
leg. SINJAEV & SCHINTLMEISTER.
- 46 *Paralebeda femorata titanica* ssp. n. Holotype ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek.
Wald, September 1994, leg. SINJAEV & einh. Sammler.
- 47 *Paralebeda plagifera* (WALKER, 1855) ♂
N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°45'E, VI.1994, leg. V. SINJAEV & einh.
Sammler.

Locus typicus: Borneo.

Distribution: Borneo, Bali, Sumatra, Java.

Literature: CANDÈZE 1927: 123; LEMÉE & TAMS 1950: 35.

The specimens of CANDÈZE and LEMÉE & TAMS preserved in Museum National d'Histoire Naturelle (Paris) were examined. All they are the light-coloured specimens of *Streblote stupidum* STAUDINGER. So *Streblote dorsalis* is deleted from the list of Vietnamese lasiocampids. The occurrence of *Streblote dorsalis* from the continent is less possible, because it is an insular species, known only from islands of Sundaland.

Pyrosis OBERTHÜR, 1880

Pyrosis rotundipennis (DE JOANNIS, 1929) (Plate 9 figs 52, 53)

Bhima rotundipennis DE JOANNIS, 1929, Ann. Soc. ent. France 48: 565-566.

Locus typicus: [Vietnam] Cha-pa.

Literature: DE JOANNIS 1929: 565-566; DE LAJONQUIÈRE 1975.

Distribution: Northern India, Southern & Central China, Northern Thailand, Northern Vietnam.

Material:

7♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

21♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.

10♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

10♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.

Plate 9

48 *Streblote stupidum* (STAUDINGER, 1887), ♂
Thailand, Pattaya (ZSSM).

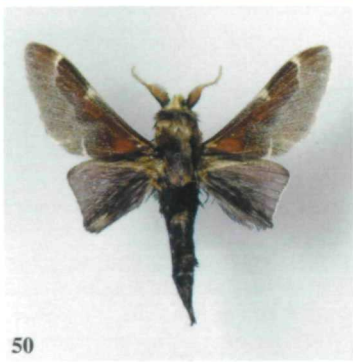
49 *Streblote stupidum* (STAUDINGER, 1887), ♀
Thailand, Pattaya (ZSSM).

50 *Streblote igniflua* (MOORE, [1883]) ♂
N. Vietnam, Mal-chau, 14.-18.XI.1994, 25 km SE Moc-chau, 1400 m, 20°50'N, 104°40'E, leg. SINJAEV & SIMONOV.

51 *Streblote igniflua* (MOORE, [1883]) ♀
Vietnam, Hanoi, 1.III.1975.

52 *Pyrosis rotundipennis* DE JOANNIS, 1929 ♂
S. Vietnam, Bao Loc, Rung Cat Tien, 11°32'N, 107°48'E, 1500 m, 10.-20.XII.1992, leg. SINJAEV & SIMONOV.

53 *Pyrosis rotundipennis* DE JOANNIS, 1929 ♀
S. Vietnam, Bao Loc, Rung Cat Tien, 11°32'N, 107°48'E, 1500 m, 10.-20.XII.1992, leg. SINJAEV & SIMONOV.



2♂♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 21°34'N, 105°20'E, 950 m, 14.-15.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

Comments: this small genus, consisting so far of eight described species, needs special investigation for more correct definition of the status of oriental taxa. The first attempt to revise *Pyrosis* OBERTHÜR, 1880 (see ZOLOTUHIN 1990) as *Bhima* MOORE, 1988 by Y. DE LAJONQUIÈRE (1975) has to be considered as unsuccessful because of confusion of many taxa. No problem deals with *Pyrosis rotundipennis* because this species is characterized by larger size, dark coloured semitransparent wings with distinct brown-red tint; hindwings without yellow scales and their external margin rounded. Flight period from September to December (this is very important in a study of *Pyrosis* because they all have monocyclic flighting in low temperature seasons – in spring or in autumn. For each species only spring or only autumn flight of imagines is typical.)

***Pyrosis fulviplaga* (DE JOANNIS, 1929), stat. rev.** (Plate 10 fig. 54)

Bhima fulviplaga DE JOANNIS, 1929, Ann. Soc. ent. France 48: 563-564.

Locus typicus: [Vietnam] Hoang su phi.

Literature: DE JOANNIS 1929: 563-564; DE LAJONQUIERE 1975: 146 (the typical male specimen is illustrated).

Distribution: hitherto known only from Northern Vietnam and Nepal.

Material:

Holotype ♂: Hoang su phi (MNHNP).

Comments: the status of the taxon, described by DE JOANNIS as a good species, was downgraded by DE LAJONQUIÈRE (1975) as subspecies of *undulosa* WALKER. They both occur sympatric in Nepal that proves them to be separate species. Moreover, *fulviplaga* differs well from *undulosa* as well as from all other species of the genus known so far by smallest size, by very long and narrow forewings and by very small semitransparent, practically triangular concave hindwings. Perhaps, it has to be considered as being member of a separate specific group.

Plate 10

54 *Pyrosis fulviplaga* (DE JOANNIS, 1929) ♂

Nepal, Ganesh Himal, valley of Trisuli River, 2 km S of Betrawati, 930 m, 25.IX.1995, leg. L. NÉMETH.

55 *Pyrosis matronata* sp. n. Paratype, ♂

N-Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, prim. Urwald, 25.-30.III.1995, leg. SCHINTLMEISTER & SINJAEV.

55a *Pyrosis matronata* sp. n. Paratype

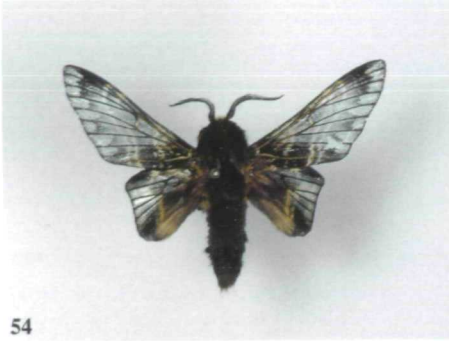
male in resting position. Fan-si-pan (photo V. SINJAEV).

56 *Pyrosis matronata* sp. n. Paratype, ♀

N-Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, prim. Urwald, 25.-30.III.1995, leg. SCHINTLMEISTER & SINJAEV.

57 *Pyrosis dierli* sp. n. Holotype ♂

N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.



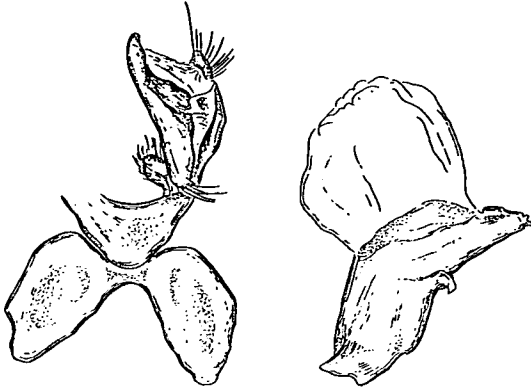


Fig. 18. Male genitalia of *Pyrosis matronata* sp. n., Paratype.

***Pyrosis matronata* sp.n.** (Plate 10 figs 55, 55a, 56)

Holotype ♂: N-Vietnam, Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler (MWM).

Paratypes: 37♂♂ 1♀, N. Vietnam, Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler.

38♂♂ 1♀, N. Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, prim. Urwald, 25.-30.III.1995, leg. SCHINTLMEISTER & SINJAEV.

13♂♂, N. Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2240 m, 22°15'N, 103°45'E, prim. Nebelwald, 2.-4.III.1995, leg. SINJAEV & einh. Sammler.

32♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, 20.-30.IV.1995, leg. SINJAEV & einh. Sammler.

2♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

17♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, April 1995, leg. SINJAEV & einh. Sammler (MWM).

Male: a large contrastly coloured powerful *Pyrosis*. Head and patagia sandy-yellow, lateral surfaces of head and palpi brown; thorax brownish with a lot of light-brown and yellowish hairs in complicate pattern; abdomen sandy-brownish cranial and blackish-brown caudal. Forewings blackish-brown, not semitransparent; dentated whitish externa, four lunulated yellowish medial lines and whitish discal spot present. Sometimes the zone limited by medial fasciae is lightened with yellowish scales that is more typical for anal and cubital fields of the wing. Hindwings yellowish with dark brown outer margin, blackish-brown dentated transversal external band and narrow reddish-brown straight medial fascia. Basal part of the hindwings with brownish tint. Expanse 44-53 mm, forewing length 23-27 mm.

Female: considerably larger, expanse 79-93 mm, forewing length 39-45.5 mm. Forewings very elongated with sharpened top. Body monotonous brown; fore- and hindwings of similar colour, dark-brownish with lunulated transversal fasciae of dark sandy-brownish colour.

Male genitalia (Text-fig. 18): typical for the genus construction. Valvae strong conical, lower lobe well developed. Distal processes of vinculum compact, not toothed on caudal edge. Aedeagus with short top covered by few rounded small thorns. Vesica without cornuti.

Female genitalia have not been studied.

Biology is unknown. All specimens were collected on light in the first half of night in primary tropical forest. Flight period is March and April. The strong smell that is typical even for dried moths allows to suggest that its foodplants are rich of alcaloids or other chemical substances. Probably develops 2 generations with flight period from mid March to early May and from end of October to November, but the second generation occasionally; only 6 moths collected in autumn are known.

Pyrosis dierli sp.n. (Plate 10 fig. 57)

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 10.-30.X.1994, leg. SINJAEV & SIMONOV (MWM).

Paratypes: 1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 10.-30.X.1994, leg. SINJAEV & SIMONOV (MWM).

Male: a species of the middle size. Front sandy-yellow, lateral surfaces of head and palpi brown; vertex and patagia brown with single sandy-yellow hairs; thorax brown with singular yellowish hairs on the edge of tegulae; abdomen also brown. Forewings short and broad, blackish-brown, slightly transparent; dentated, white outer border of externa obvious, medial lines yellowish, lunulated and yellowish or whitish discal spot present as a point. Medial zone blackish. Hindwings with rounded outer margin, broad, double, medial, yellow fascia, bordered distally by blackish, toothed band and 2-3 yellowish, semilunar spots by anal angle. Expanse 56mm, forewing length 32 mm. Expanse 50 mm, forewing length 22.5 mm.

Female: unknown.

Male genitalia (Text-fig. 19): not diagnostic.

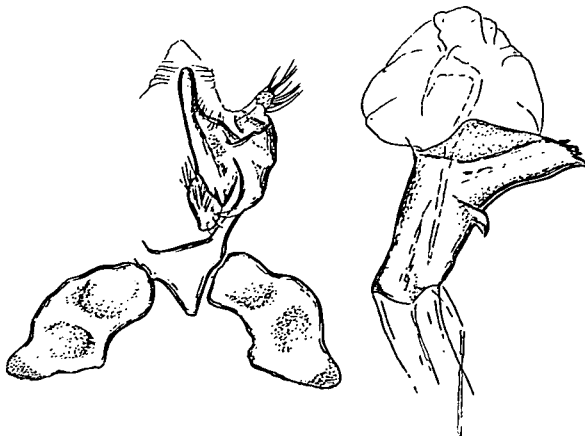


Fig. 19. Male genitalia of *Pyrosis dierli* sp. n., Paratype.

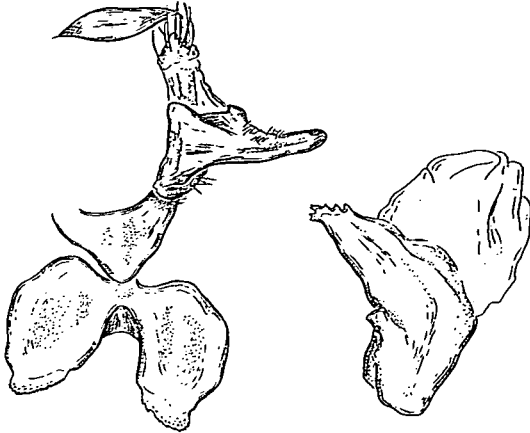


Fig. 20. Male genitalia of *Pyrosis hyalata* sp. n., Paratype.

Comments: well differing from *matronata* sp.n. by more dark and contrast coloration, less lunulate white forewing's fasciae, lacking of the narrow reddish-brown straight medial fascia of the hindwings and by the flight period to be late autumn to ?early spring. It is possible that *Pyrosis dierli* sp.n. forms with *Pyrosis matronata* the same pair of vicariant species as *idiota* GRAESER–*undulosa* WALKER, *eximia* OBERTHÜR–*potanini* ALPHÉRAKY or *rotundipennis* DE JOANNIS–*borneana* HOLLOWAY.

The species is dedicated after the late Dr. W. DIERL (1935-1996) who worked many years in the Zoologische Staatssammlung München and studied *Bombyces* et *Sphinges* of the Orientalis and especially of South-eastern Asia.

***Pyrosis hyalata* sp.n.** (Plate 11 figs 59, 60)

Holotype ♂: S. Vietnam, Bao Loc, Rung Cat Tien, 11°32'N, 107°48'E, 1500 m, 10.-20.XII. 1992, leg. SINJAEV & SIMONOV (MWM).

Paratypes: 7♂♂ 2♀♀ same data (MWM).

Male: species of the middle size. Head sandy-yellow, lateral surfaces of head and palpi brown; patagia brown with sandy-yellow hairs laterally; thorax brownish with singular yellowish hairs on the edge of tegulae; abdomen reddish-brown. Forewings blackish-brown semitransparent; strong dentated black, whitish bordered externa, four lunulated yellowish fasciae and yellowish discal spot present. Hindwings small, with distinctly sharpened tornal angle and straight outer margin. Their costal zone as well as anal patch black-brown with outer yellowish spot, central and outer zones of the wings practically almost transparent yellowish with blackish external zone. This hyaline zone is very characteristic and differs well this species from all others *Pyrosis*. Expanse 41-48 mm, forewing length 23-25 mm.

Female: considerably larger, expanse 82-86 mm, forewing length 44-46 mm. Wings red-brown with extreme lunated yellowish-grey fasciae, creamish whitish discal spot and distinct dark brown medial zone with distinct central markings. Hindwings with vague dark and light brownish wavy fasciae in costal zone. Only 3 equal in size triangular spots are present in the tornal zone of external fascia. Thorax is reddish-brown; abdomen yellowish-brown with cream-grey anal hair-tuft.

Male genitalia (Text-fig. 20): typical for the construction of the genus. Valvae strong conical, lower lobe weakly developed. Distal processes of vinculum compact, covered caudally by numerous small teeth. Aedeagus with short but elongated top covered by few strong thorns. Vesica without cornuti.

Female genitalia were not studied.

Distribution: known only from the type-locality.

Biology is unknown. All specimens were collected on light before midnight in primary tropical forest. Flight period is December and, probably, January.

Pyrosis sp. (Plate 11 fig. 58)

Material:

1♀, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.

1♀, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2250 m, 22°15'N, 103°46'E, 28.-29.III.1995.

1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, April 1995, leg. SINJAEV & einh. Sammler.

Female: Wings dark red-brown with lunated whitish-grey fasciae, triangular whitish discal spot and distinct, dark brown, central markings. Hindwings with vague, dark brown bands repeating the shape of those in the males. Thorax and abdomen dark brown. Expanse 57-64 mm, forewing length 30-33 mm.

Comments: the female cannot be confused with the females of other *Pyrosis* that are also on the wings in the same period because of more small size, more short and broad wings, dark reddish-brown coloration and differing pattern of wings. Their systematic position will be defined more precisely only after males will have been found.

Suana WALKER, 1855

Suana concolor (WALKER, 1855)

Lebeda concolor WALKER, List Specimens lepid. Insects Colln Br. Mus., 1855 6: 1463.

Locus typicus: North-India, Silhet.

Distribution: India, Sri Lanka, Burma, southern China, Thailand, Vietnam, Malaysia, Philippines, Sumatra, Borneo, Java.

Literature: CANDÈZE 1927: 123; DE JOANNIS 1929: 560; LEMÉE & TAMS 1950: 35.

Material:

1♀, Tonkin, Phu tho (MNHN).

1♀, Mes du Ht Song-Ghai, Rabier, 258-95 (MNHN).

1♀, Tonkin, Region de Hoa-Binh (MNHN).

2♀♀, Tonkin, Cho-Sonh (MNHN).

1♀, Tonkin, Cho Cau. VI. 08. (MNHN).

1♂ 1♀, Tonkin, Phu Sho (MNHN).

Was noted by DE JOANNIS from Cho ganh; Station experimentale de Phu tho; region de Hoa binh; Yen bai; Hoang su phi; Lao kay. Also was mentioned by LEMÉE & TAMS from Backan. According to DE JOANNIS, the food plant in Vietnam is *Albizzia*.

***Metanastria* HÜBNER [1820] 1816**

***Metanastria hyrtaca* (CRAMER, 1779) (Plate 12 figs 61, 62)**

Phalaena hyrtaca CRAMER, *Uitlandsche Kapellen* (Papillons exot.) 3: 97, pl. 249 F.

Locus typicus: stated to be Surinam; this was an error as *Phalaena hyrtaca* is not known from the New World, but occurs in the oriental region.

Literature: CANDÈZE 1927: 123; DE JOANNIS 1929: 566.

Distribution: China, Taiwan, India, Nepal, Burma, Thailand, Vietnam, Malaysia, Sumatra, Borneo.

Material:

7♂♂ 2♀♀, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Hoa Bihn, 400 m, 70 km NW Hanoi, 28.V.1990, leg. E. PALIK.

2♂♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 1.-15.XI.1992, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Cuc Phuong, 60 km SW Hanoi, 400 m, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Cuc Phuong, 400 m, 18.XI.-3.XII.1992, leg. SINJAEV & SIMONOV.

3♂♂, N. Vietnam, Mal-chau, 14.-18.XI.1994, 25 km SE Moc-chau, 1400 m, 20°50'N, 104°40'E, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Farin-Pass, 11.-13.XI.1994, 20 km NW Son-la, 21°22'N, 103°52'E, 1600 m, leg. SINJAEV & SIMONOV.

Comments: was noted by DE JOANNIS for Cho ganh and Hoang su phi.

***Metanastria gemella* DE LAJONQUIÈRE, 1979**

Metanastria gemella DE LAJONQUIÈRE, *Annl. Soc. ent. France*, 1979 15 (4): 686-688, pl. 1 D, E, fig. 4-7.

Locus typicus: Sumatra.

Distribution: southern and south-eastern China, India, Nepal, Vietnam, Malaysia, Sumatra, Borneo.

Material:

68♂♂ 10♀♀, N-Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV (MWM).

1♀, Hoang Saphi, Tonkin (MNHN).

***Metanastria capucina* sp.n. (Plate 12 figs 63, 64)**

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1000-1800 m, 22°20'N, 103°40'E, 30.VI-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER (MWM).

Paratypes: 6♂♂ same locality.

1♂, Hinterindien, Tonking, Cha-pa, leg. LEMÉE.

1♀, N. Vietnam, Tam Dao, 60 km NW Hanoi, 21°34'N, 105°20'E, 950 m, 14.-15.VI.1994, leg. BRECHLIN & SCHINTLMEISTER.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 10.VI.-6.VII.1994, leg. SINJAEV & einh. Sammler.

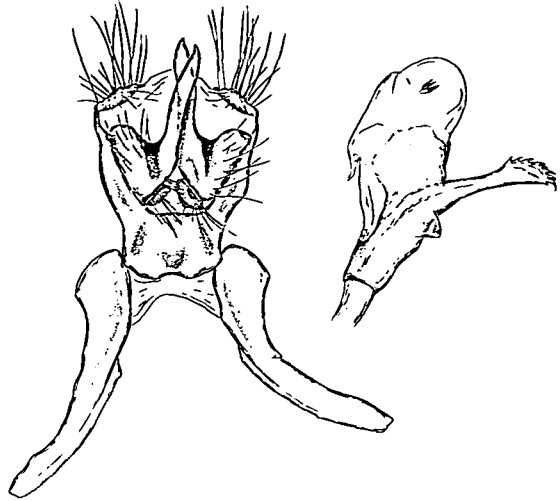


Fig. 21. Male genitalia of *Metanastria capucina* sp. n., Paratype.

Male. Antennae bipectinated greenish-yellow, flagellum covered by brown and yellowish scales. Head and patagia dark chocolate-brown; thorax greenish-sandy coloured, abdomen light brown with greenish-yellow coloured anal tuft. Forewings elongated, greenish-sandy coloured with two medial and one basal weakly curved thin brown lines and dentated externa of the same colour. The large black-brown discal spot, crossed by yellowish veins, is typical. Hindwings monotonous reddish-brownish without pattern.

Female. Considerably larger and more light. Discal spot is absent, hindwings of the same coloration as the forewings, with brownish transversal medial line. Abdomen monotonous sandy-rose.

Expanse ♂ 41-44 mm, ♀ 62 mm, forewing length ♂ 20-22 mm, ♀ 30,5 mm.

Male genitalia (Text-fig. 21): in the whole they are typical for the structure of the genus and characterized by very long styletto-shaped valvae, weakly flattened laterally; narrow distal processes of vinculum with teathed inner margin; elongated apical top of aedeagus and two pairs of short conical cornuti from two sides of vesica.

Female genitalia: apophyses long; both vaginal plates presented, well sclerotized and modified; ostium broad, antrum and ductus short weakly sclerotized; bursa large membranous with distinct band-shaped signum covered inside by small thorns.

Biology and preimaginal instars are still unknown.

Comments: the new species cannot be confused with other so far described species of the genus.



Plate 11

58 *Pyrosis* sp. ♀

N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.

59 *Pyrosis hyalata* sp. n., Holotype, ♂

S. Vietnam, Bao Loc, Rung Cat Tien, 11°32'N, 107°48'E, 1500 m, 10.-20.XII.1992, leg. SINJAEV & SIMONOV.

60 *Pyrosis hyalata* sp. n., Paratype, ♀

S. Vietnam, Bao Loc, Rung Cat Tien, 11°32'N, 107°48'E, 1500 m, 10.-20.XII.1992, leg. SINJAEV & SIMONOV.

Gastropachini NEUMOEGEN & DYAR, 1893

***Gastropacha* OCHSENHEIMER, 1810**

***Gastropacha quercifolia* (LINNAEUS, 1758)**

Phalaena quercifolia LINNAEUS, 1758, Syst. Nat. (Ed. 10) 1: 497.

Locus typicus: not stated [Europa].

Distribution: everywhere in the Palearctic region except Iran, Iraq, Afghanistan, Turkmenia, Tajikistan and Taiwan; northern Vietnam.

***Gastropacha quercifolia* ssp. *prope lucens* MELL, 1939 (Plate 12 fig. 65)**

Gastropacha quercifolia lucens MELL, Dt. ent. Z. Iris 52: 137.

Locus typicus: Yunnan, S-China.

Literature: CANDÈZE 1927: 123 (*Gastropacha quercifolia*); DE JOANNIS 1929: 568 (*Lasiocampa quercifolia*).

Material:

1♂, Tonkin (ZFMK).

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

13♂♂ 1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, April 1995, leg. SINJAEV & einh. Sammler.

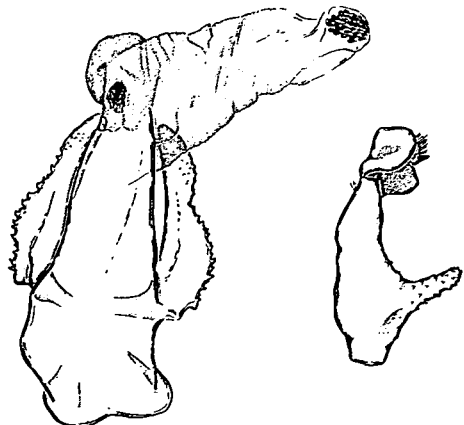


Fig. 22. Male genitalia of *Gastropacha quercifolia* ssp. *prope lucens* MELL, 1939: aedeagus with juxta and right valva.

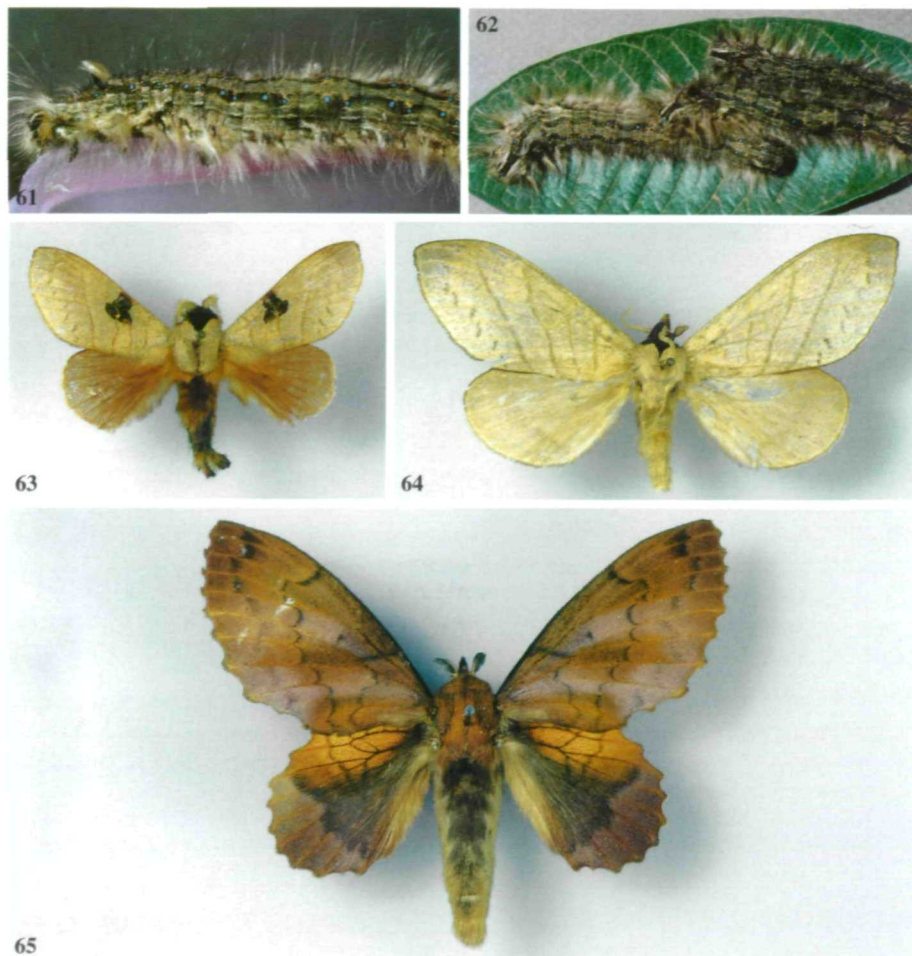


Plate 12

- 61-62 *Metanastria hyrtaca* (CRAMER, 1779) mature larvae (Photo Dr. R. RABENSTEIN).
63 *Metanastria capucina* sp. n. Holotype ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1000-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.
64 *Metanastria capucina* sp. n. Paratype ♀
N. Vietnam, Tam Dao, 60 km NW Hanoi, 21°34'N, 105°20'E, 950 m, 14.-15.VI.1994, leg. BRECHLIN & SCHINTLMEISTER.
65 *Gastropacha quercifolia* ssp. *prope lucens* MELL ♀
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, April 1995, leg. SINJAEV & einh. Sammler.

Comments: was noted by CANDÈZE from Annam and by DE JOANNIS from Tonkin.

Male genitalia (Text-fig.22): as illustrated.

***Gastropacha populifolia* (ESPER, 1784)**

Bombyx populifolia ESPER, 1784, Die Schmett. in Abb. 3: 62, Taf. 6, figs 3-4, Taf. 7, fig. 1.

Locus typicus: Germany, Frankfurt/Main.

Distribution: transpalearctic, but absent in the middle-asiatic republics of the former USSR, Iran, Iraq, Afghanistan, on Caucasus and on Taiwan.

***Gastropacha populifolia* ssp. (Plate 13 figs 66, 67)**

Material:

1♂, N-Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI-3.XII.1992, 400 m, leg. SINJAEV & SCHINTLMEISTER.

1♀, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

Comments: the only male and the only female from the complex *populifolia/clathrata/sikkima/horishana* was at our disposal. The male genitalia peculiarities differ well this taxon from *horishana* MATSUMURA, 1927 and from *clathrata* BRYK, 1948 and external characters – from *sikkima* MOORE, 1879. At the same time the preliminary work with the lasiocampids of the *populifolia*-group from China (ZFMK) has shown that some different species are joined now under the name „*populifolia*“. Besides that, the male genitalia of the pointed species are considerably variable in different points of its area therefore a study of additional material is necessary for defining more precisely the status of the Vietnamese specimens.

***Gastropacha xenapates* TAMS, 1935**

Gastropacha xenapates TAMS, 1935 Mem. Mus. Royal Hist. Nat. Belgique 4(12): 52-53, pl. III fig. 3, textfig. 4, 5.

Locus typicus: India, Darjiling.

Distribution: India, southern China, Thailand, Vietnam.

Material:

1♂, S. Vietnam, Bao Loc (Sec. Wald), Rung Cat Tien, 1500 m, (11°34'N, 107°48'E), 10.-20.XII.1992, leg. SINJAEV & SIMONOV (GenPr. Het. ♂ 3965).

5♂♂ 1♀, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25' E, 1200 m, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Cuc Phuong, 120 km SW Hanoi, 400 m, 20°15'N, 105°20'E, 1/2.IV.1995, leg. SINJAEV & SCHINTLMEISTER.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mai-chau, 14.-18. XI. 1994, 25 km SE Moc-chau, 1400 m, 20°50'N, 104°40'E, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

2♂♂, N. Vietnam, Tam Dao, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, 23.-31.3.1995, leg. SINJAEV.

19♂♂, Vietnam, Tuyen Quang, Na Nang Nature Reserve, 300 m, 105°05'E, 22°03'N, 22.II.-5.III. 1997, leg. G. CSORBA.

Comments: usually the area of this species is pointed as “from India to Sundaland” but in reality in Sundaland *xenapates* TAMS is replaced by others species.

***Gastropacha leopoldi* TAMS, 1935**

Gastropacha pardale leopoldi TAMS, Mem. Mus. Royal Hist. Nat. Belgique, 1935 IV (12): 51, pl. III fig. 5, fig. 6.

Locus typicus: Borneo, Balikpapan.

Distribution: Sundaland, Peninsula Malaysia, southern Vietnam.

Literature: LEMÉE & TAMS, 1950: 68.

Material:

1♂, S. Vietnam, Ma Don, 9.I.1990 (GenPr. Het. ♂ 3843).

Comments: was noted by LEMÉE & TAMS from Saigon.

***Gastropacha philippinensis* TAMS, 1935**

Gastropacha pardale philippinensis TAMS, Mem. Mus. Royal Hist. Nat. Belgique, 1935, IV (12): 51 pl. III, fig. 9.

Locus typicus: Philippines, Luzon, subprov. Benguet, Klondyke.

Distribution: Pakistan, India, Nepal, southern China, Thailand, Vietnam, Philippinen, Sumatra.

Material:

1♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, NN, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. ♂ 3844).

1♂, N. Vietnam, prov. Lao Cai, Cat Cat, 3 km SW Sa Pa, 1100 m, 22.X.1993, leg. BARKOVICS & CSORBA (GenPr. Het. ♂ 3845).

2♂♂, N-Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV (GenPr. Het. ♂ 4013).

1♂, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

***Gastropacha pardale* (WALKER, 1855)**

Megasoma pardale WALKER, List. Spec. Lepid. Insects Colln Brit. Mus., 1855, VI: 1453.

Locus typicus: India, Darjeeling.

Distribution: Pakistan, India, southern China, Taiwan, Thailand, Vietnam, Malaysia, Java, Sumatra.

Literature: DE JOANNIS 1929: 567; DE LAJONQUIÈRE 1977: 144.

Material:

1♂, N. Vietnam, Farin-Pass, 11.-13.XI.1994, 20 km NW Son-la, 21°22'N, 103°52'E, 1600 m, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 15.-25.III.1995, leg. SINJAEV & einh. Sammler.

2♂♂, N. Vietnam, Cuc Phuong, 120 km SW Hanoi, 400 m, 20°15'N, 105°20'E, 1/2.IV.1995, leg. SINJAEV & SCHINTLMEISTER.

1♂, Phu tho, Tonkin (MNHN).

1♂, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

1♂, Vietnam, Tuyen Quang, Na Nang Nature Reserve, 300 m, 105°05'E, 22°03'N, 22.II.-5.III.1997, leg. G. CSORBA.

2♂♂, N. Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2240 m, 22°15'N, 103°45'E, prim. Nebelwald, 2.-4.III.1995, leg. Dr. BRECHLIN.

1♂, Vietnam sept., 1400 m, Mai Chau SE Moc-chau, 20°50'N, 104°50'E, Urwald, 7.-15.IV.1985, leg. SINJAEV & einh. Sammler.

Comments: was noted by DE JOANNIS from Phu tho and mapped by DE LAJONQUIÈRE from northern Vietnam.

***Gastropacha* sp. (Plate 13 fig. 68)**

Material:

2♂♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

Diagnosis: Well differs from all other Vietnamese *Gastropacha* by its smaller size, by darker coloration and shorter wings. The male genitalia show an affinity to *leopardi* and *pardale* simultaneously having the valvae of *leopardi*-like type and vesica equipment of *pardale*-like type. It allows to suggest that this taxon is only a natural hybrid between the pointed species. But in habitus the undescribed species is not similar to one of both and also *leopardi* is not expected to be inhabiting this northern region of Vietnam.

***Paradoxopla* DE LAJONQUIÈRE, 1976**

***Paradoxopla sinuata* (MOORE, 1879)**

Gastropacha sinuata MOORE, 1879 Descr. New Indian lepid. Insects colln late Mr. Atkinson 1: 76.

Locus typicus: India, Darjeeling.

Distribution: Northern India, Pakistan, Nepal, South and Central China, Vietnam and Taiwan (as ssp. *taiwana* WILEMAN, 1915).

Material:

1♂, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

Odonestini TUTT, 1902

***Syrastrena* MOORE, 1884**

***Syrastrena* sp. (Plate 13 fig. 69)**

Further material of the *Syrastrena-sumatrana*-group is at disposal. It belongs to a new species to be treated in a revision of the whole genus which is in work by A. ZWICK, Tübingen.

***Syrastrena lanaoensis* TAMS, 1935**

Syrastrena minor lanaoensis TAMS, 1935, Mem. Mus. Royal Hist. Nat. Belgique, 4 (12): 47, fig'd.

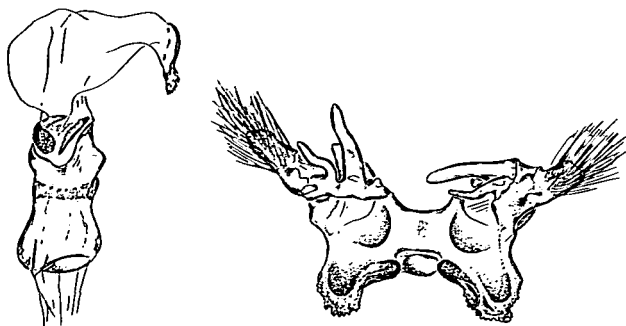


Fig. 23. Male genitalia of *Syrastrena regia* sp. n., Holotype.

Locus typicus: Philippines, Mindanao.

Distribution: Philippines (Mindanao, Luzon), Borneo, Sumatra, Peninsula Malaysia, Vietnam.

***Syrastrena lanaoensis continentalis* ssp.n. (Plate 13 fig. 70)**

Holotype ♂: N-Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI-3.XII. 1992, 400 m, leg. SINJAEV & SCHINTLMEISTER (GenPr. Het. ♂ 3870) (MWM).

Paratypes: 3♂♂ same locality (GenPr. Het. A. ZWICK AZ/70, 71, 74).

2♂♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV (GenPr. Het. A. ZWICK AZ/57).

1♂, same locality, 18°40'N (nec 19°40'N) leg. SINJAEV & SCHINTLME[STER] (GenPr. Het. A. ZWICK AZ/75) (MWM).

Diagnosis: This subspecies is smaller in size. Wings are not semitransparent as in nominate subspecies, more lightly coloured, ground colour yellowish cream-rose. Pattern as in sp. *lanaoensis*. Expanse ♂ 25-29 mm, length of forewing 12-14 mm (the same data in nominate subspecies are 31-35 mm and 17-18 mm respectively).

Male genitalia (Text-fig. 23): as illustrated.

Female, preimaginal instars and biology are unknown.

***Syrastrena lajonquierei* HOLLOWAY, 1982 (Plate 13 fig. 71)**

Syrastrena lajonquierei HOLLOWAY, 1982, in BARLOW: Intr. Moths SE Asia: 198, fig. 27.

Locus typicus: north-eastern Burma, Kambaiti.

Distribution: north-eastern Burma, Nepal, northern Vietnam.

Material:

2♂♂, N. Vietnam, Mt. Fan-si-pan, W-seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER (GenPr. Het. ♂ 3868).

3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.

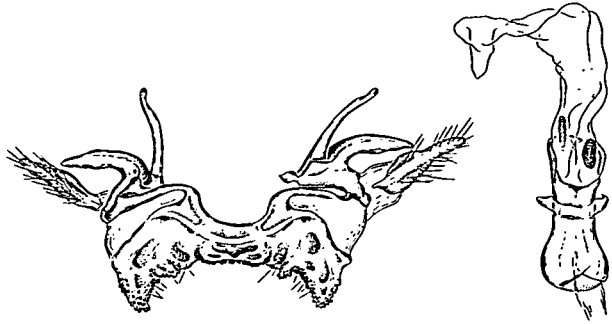


Fig. 24. Male genitalia of *Syrastrena lanaoensis continentalis* ssp. n., Paratype.

***Syrastrena regia* sp.n.** (Plate 13 fig. 72)

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler (MWM).

Paratypes: 1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. MONG.

3♂♂, N. Vietnam, Mt. Fan-si-pan, N.Side, 1600 m, 22°17'N, 103°44'E, primary forest, 1.-7.XI. 1995, leg. V. SINJAEV & E. AFONIN (MWM).

Male: Body and wings greyish-rose. Forewings with two brownish smooth transversal medial fasciae. Antemedial one is straight, almost perpendicular to anal edge, the postmedial one 3-shaped, slightly diagonal; both fasciae are pointed proximally by light rose bands. Hindwings monotonous without pattern. Expanse 27-35 mm, forewings' length 15-17 mm.

Male genitalia (Text-fig. 24): tegumen reduced, socii developed well, long and narrow-conical; valvae bilobated, the lower lobe broad, curved and flattened, the upper one thin, lightly teathed apical; distal processes of vinculum powerful; saccus short and covered on the outer surface by small but strong chetae. Aedeagus tubular, vesica with two basal plate-shaped granulated cornuti; top of vesica without cornuti.

Female, biology and preimaginal stages are unknown. Probably develops two generations. The moths of the first (March) have a much broader postmedial fasciae.

Comments: can not be confused with other *Syrastrena* spp. neither in external characters nor in male genitalia construction.

***Syrastrena minor* (MOORE, 1879)**

Metanastria minor MOORE, 1879, in HEWITSON & MOORE, Descr. new Indian lepid. Insects Colln late Mr W. S. Atkinson (1): 78.

Locus typicus: India, Darjeeling.

Distribution: North India.

Literature: DE JOANNIS 1929: 566-567; LEMÉE & TAMS 1950: 35.

Comments: Hitherto known only from the type-locality. Uncorrectly noted by DE JOANNIS from Hoang su phi and by LEMÉE & TAMS from Backanbut. Deleted from the list of Vietnamese Lasiocampids.



Radhica MOORE, 1879

***Radhica flavovittata* MOORE, 1879**

Radhica flavovittata MOORE, in HEWITSON & MOORE, 1879, Descr. new Indian lepid. Insects Colln late Mr W. S. Atkinson (1): 79.

Locus typicus: India, Naini Tal.

Distribution: Northern India, Nepal, S-China, Taiwan, Burma, N-Thailand, Vietnam, Sumatra, Borneo, Peninsula Malaysia.

Plate 13

- 66 *Gastropacha populifolia* (ESPER, 1784) ssp. ♂
N-Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SCHINTLMEISTER.
- 67 *Gastropacha populifolia* (ESPER, 1784) ssp. ♀
N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.
- 68 *Gastropacha* sp. ♂
N-Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.
- 69 *Syrastrena* sp. ♂
N-Vietnam, Cuc Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SCHINTLMEISTER.
- 70 *Syrastrena lanaoensis continentalis* ssp. n., Paratype ♂
N-Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SCHINTLMEISTER.
- 71 *Syrastrena lajonquierei* HOLLOWAY, 1982 ♂
N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.
- 72 *Syrastrena regia* sp. n., Holotype, ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, 15.-25.III.1995, leg. SINJAEV & einh. Sammler.
- 73 *Arguda viettei* DE LAJONQUIÈRE, 1977, ♂
N. Vietnam, Farin-Pass, 11.-13.XI.1994, 20 km NW Son-la, 21°22'N, 103°52'E, 1600 m, leg. SINJAEV & SIMONOV.
- 74 *Arguda insulindiana inexpectata* ssp. n., Holotype ♂
Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN (GenPr. Het. 4423).
- 75 *Arguda tayana* sp.n., Holotype, ♂
Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN (GenPr. Het. 4348).
- 76 *Odontocraspis hasora* SWINHOE, 1894
S. Vietnam, Bao Loc, Rung Cat Tien, 11°32'N, 107°48'E, 1500 m, 10.-20.XII.1992, Sek. Wald, leg. SINJAEV & SIMONOV.
- 77 *Odontocraspis collieri* sp. n., Holotype, ♂
Nord-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. 4035).

Material:

- 2♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.
4♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.
1♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.
7♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/ Kulturland, November 1994, leg. SINJAEV & einh. Sammler.
2♂♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI. 1994, leg. SINJAEV & einh. Sammler.

Comments: the male specimen ex coll. ATKINSON (ZMHNB) collected in Nainital here is designated as the lectotype, a second male from Dharmsala (BMNH) is designated as the paralectotype.

***Radhica elisabethae* DE LAJONQUIÈRE, 1977**

Radhica elisabethae DE LAJONQUIÈRE, 1977, Bull. Soc. ent. Fr. 82: 186.

Locus typicus: Sumatra.

Distribution: Sumatra, Borneo, Peninsula Malaysia, Thailand, northern Vietnam.

Material:

- 2♂♂, N. Vietnam, Tam Dao, Sekundärwald, 60 km NW Hanoi, 1200 m, 21°34'N, 105°20'E, April 1995, leg. SINJAEV.
4♂♂, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN.

***Arguda* MOORE, 1879**

***Arguda vinata* MOORE, 1865**

Arguda vinata MOORE, Proc. zool. Soc. London 1865: 820.

Locus typicus: Sikkim, Darjeeling.

Distribution: northern India, Nepal, S. China, northern Thailand, northern Vietnam.

Material:

- 1♂, Hinterindien, Tonking [Tonkin, Cha pa, leg. LEMAI], ex coll. F. DANIEL.
2♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.
1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.
3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.
1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.
5♂♂, N. Vietnam, Mt. Fan-si-pan, 1700 m, 22°15'N, 103°44'E, VI.1994, leg. SINJAEV & einh. Sammler.

Arguda viettei DE LAJONQUIÈRE, 1977 (Plate 13 fig. 73)

Arguda viettei DE LAJONQUIÈRE, 1977, Bull. Soc. entomol. France 82: 178-179, pl. 1 C, fig. 5.

Locus typicus: Sumatra.

Distribution: Sumatra and N. Vietnam.

Material:

2♂♂, N. Vietnam, Farin-Pass, 11.-13.XI.1994, 20 km NW Son-la, 21°22'N, 103°52'E, 1600 m, leg. SINJAEV & SIMONOV.

2♂♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

Comments: Firstly recorded from the continent.

Arguda insulindiana DE LAJONQUIÈRE, 1977

Arguda insulindiana DE LAJONQUIÈRE, 1977, Bull. Soc. Ent. France 82: 182-184, pl. 1B, figs 7, 7a.

Locus typicus: North-eastern Sumatra, Dolok Merangir.

Specific Distribution: Sumatra, Borneo, peninsular Malaysia. A new subspecies is described here from North Vietnam.

Arguda insulindiana inexpectata ssp. n. (Plate 13 fig. 74)

Holotype ♂: Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN (GenPr. Het. 4423).

Paratypes: 2♂♂, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN (GenPr. Het. 4343, 4349).

Male: expanse 38-45 mm, forewing length 20-22 mm. Similar in appearance on the nominative subspecies.

Male genitalia (Text-fig. 25): as illustrated, with sharpened lateral lobes on subvalvar area and very small or absent medio-caudal projection of vinculum. Outer margin of vinculum teethed irregularly and almost straight.

Female and preimaginal stages are unknown.

Distribution: so far known only from the type-locality.

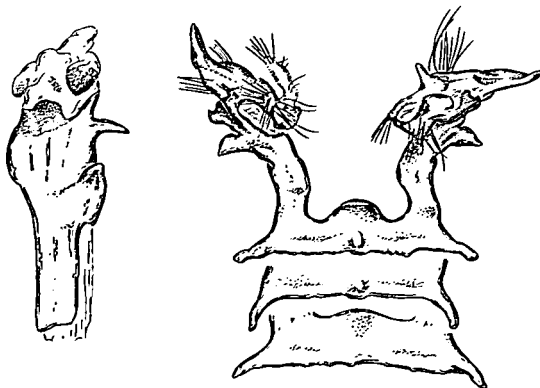


Fig. 25. Male genitalia of *Arguda insulindiana inexpectata* ssp. n., showing the variability of vinculum equipment.

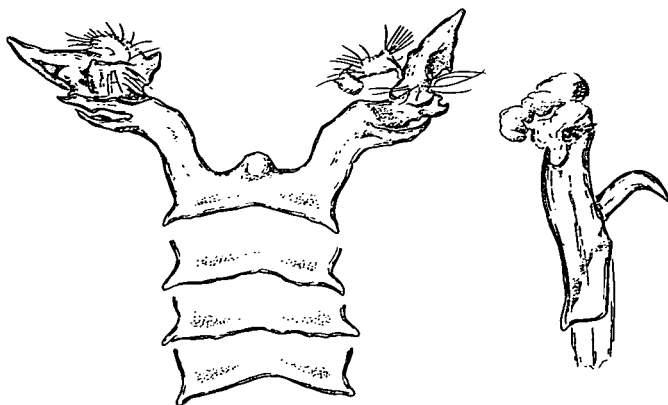


Fig. 26. Male genitalia of *Arguda tayana* sp. n., showing the variability of vinculum equipment.

Comments: differs from the nominative subspecies by smaller size and the peculiarities of male genitalia, first of all by the shape of distal processes of vinculum. In new subspecies vinculum with smaller teeth or already without any. See also under *Arguda tayana*, sp.n.

***Arguda tayana* sp. n.** (Plate 13 fig. 75)

Holotype ♂: Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN (GenPr. Het. 4348).

Paratypes: 5♂♂, Vietnam sept., Plateau TayNguyen, Mt. NgocLinh, 900-1400 m, 15°02'N, 107°59'E, 10.-25.VIII.1996, leg. V. SINJAEV & E. AFONIN (GenPr. Het. 4346, 4322).

Male: *Arguda* of middle size, expanse 46-51 mm, forewing length 24-25 mm. Forewings rosish grey, darker in outer zone with black small discal point. Three transversal diagonal lines are presented. Both medias are distinct, red-brown, limited interiorly by whitish scales; antemedia straight, postmedia slightly curved S-shaped and falls in external third of costal part of the wing. External fascia irregular toothed, dark grey, limited exteriorly by yellow scales. Hindwings dark reddish-brown without pattern, their Sc-R zone of dark reddish grey colour.

Male genitalia (Text-fig. 26): as illustrated, subvalvar lobe sharpened, valvae complicate; socii obvious membranous; tegumen reduced; vinculum relatively narrow with two elongated caudal thorns; caudal margin of vinculum slightly concave but almost smooth. Variability is not high. Aedeagus of *vinatalinsulindiana* type – with tubular base and curved ventro-medial spur. Vesica with two lateral groups of toothed fields, with subterminal zone of short needle-shaped cornuti and separate scobination in apical part.

Female and preimaginal stages are unknown.

Distribution: known only from the type-locality.

Comments: in appearance very similar on other species of this complex, especially on *Arguda insulindiana* and *Arguda vinata*. From the latter differs easily by its size, being almost two times smaller. From *Arguda insulindiana* differs easily by the pattern of upperside of the wings. In the new species upper side of the forewings is monotonous reddish-brown without dark brown postmedial and external fasciae (lighter with obvious dark postmedia and externa in *insulindiana*). The genitalia of the new species are remarkable.

***Arguda* spp.**

There are at least two more species of *Arguda* at our disposal from Mt. Fan-si-pan, Cha-pa (= Sapa), probably they are also new to science. It will be decided more precisely only after revision of this genus and obtaining of additional material.

***Hallicarnia* KIRBY, 1892**

***Hallicarnia albipectus* (WALKER, 1855)**

Gastropacha albipectus WALKER, 1855, List Specimens lepid. Insects Colln Br. Mus. 6: 1395.

Locus typicus: not stated [unknown].

Distribution: from NE Himalaya over Vietnam and Peninsula Malaysia to Sumatra and Borneo.

Material:

1♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

9♂♂, N. Vietnam, Cuc Phuong, 60 km SW Hanoi, 400 m, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, leg. SINJAEV & SIMONOV.

***Odontocraspis* SWINHOE, 1894**

***Odontocraspis hasora* SWINHOE, 1894 (Plate 14 fig. 76)**

Odontocraspis hasora SWINHOE, 1894, Ann. Mag. Nat. Hist. 14 (6): 439.

Locus typicus: [India] Shillong.

Distribution: northern India, southern China, Burma, northern Thailand, northern Vietnam, Peninsula Malaysia, Borneo, Sumatra.

Material:

1♂, S. Vietnam, Bao Loc, Rung Cat Tien, 11°32'N 107°48'E, 1500 m, 10.-20.XII.1992, Sek. Wald, leg. SINJAEV & SIMONOV.

***Odontocraspis collieri* sp. n. (Plate 14 fig. 77)**

Holotype ♂: Nord-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV (GenPr. Het. 4035) (MWM).

Paratypes: 3♂♂, Nord-Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 8.-29.V.1993, leg. SINJAEV & SIMONOV.

1♂, N-Vietnam, 1200 m, Tuan-giao, street Lai-chau to Hanoi, 21°35'N, 103°25'E, 5.-10.X.1994, leg. SCHINTLMEISTER (MWM).

Description: Expanse 37-45 mm, forewing length 20-22 mm. In appearance very similar to *Odontocraspis hasora* SWINHOE, but larger (expanse of *hasora* is 31-34, rare up to 42 mm), slightly lighter, with larger transparent apical spot on the forewings. The most characteristic is a coloration of R-Cu cell in the forewing, that is in the new species almost ochreous-red but in *hasora* only the discal vein is covered with ochreous scales.

Male genitalia (Text-fig. 27): also remarkable – tegumen broad with two strong conical projections, rounded of the tops; vinculum flattend, distally with two pairs of finger-shaped appendages; valvae with flattened lower lobe, covered densely by not numerous long setae, and bifurcal upper lobe. Aedeagus tubular with ventro-caudal flattened top and three zones of small

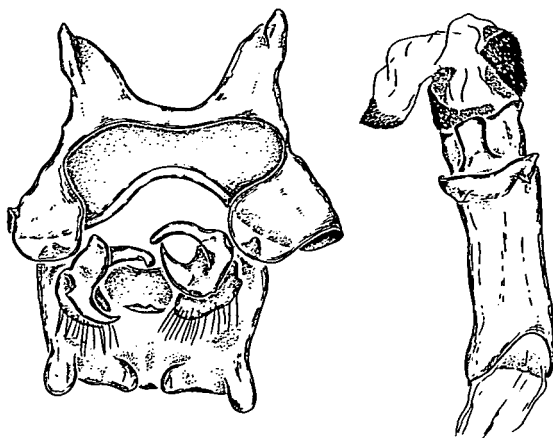


Fig. 27. Male genitalia of *Odontocraspis collieri* sp. n., Paratype.

needle-shaped cornuti. The genitalia constructions are quite different from those of *Odontocraspis hasora* Swinhoe (see HOLLOWAY, 1987, fig. 69), their teguminal projections are bifurcate and sharpened on the tops, vinculum of another shape, aedeagus has no obvious top and vesica has only one group of granulated cornuti like a plate.

Distribution: so far known only from the type locality.

The new species is dedicated after Mr W. A. COLLIER, who had made a titanic work, preparing the *Lasiocampidae*-part in „Lepidopterorum Catalogus” edited by Embrik STRAND (1936).

Odonestis GERMAR, 1812

Odonestis erectilinea (SWINHOE, 1904)

Arguda erectilinea SWINHOE, Trans. ent. Soc. London 1904: 152.

Locus typicus: Borneo.

Distribution: Sundaland, Peninsula Malaysia, Vietnam and Thailand.

Material:

19♂♂ 1♀, N. Vietnam, Cuc Phuong, 60 km SW Hanoi, 400 m, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, leg. SINJAEV & SIMONOV.

1♂, N. Vietnam, Cuc Phuong, 120 km SW Hanoi, 400 m, 20°15'N, 105°20'E, 1/2.IV.1995, leg. SINJAEV & SCHINTLMEISTER.

6♂♂ 1♀, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

2♂♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

Odonestis bheroba MOORE, 1858-1859

Odonestis bheroba MOORE, 1858-1859, Cat. Lepid. Insects Mus. Hist. East-India House 2: 424, pl. 12a, fig. 5.

Locus typicus: Darjeeling.

Distribution: northern India, Nepal, northern Thailand, northern Vietnam, southern and eastern China and (as ssp. *formosae* WILEMAN, 1910) Taiwan.

Material:

2♂♂, Vietnam, Tuyen Quang, Na Nang Nature Reserve, 300 m, 105°05'E, 22°03'N, 22.II.-5.III.1997, leg. G. CSORBA.

***Odonestis vita* MOORE, 1859**

Odonestis vita MOORE, in HORSFIELD & MOORE, 1859: 424.

Locus typicus: Java.

Literature: DE JOANNIS 1929: 566.

Distribution: India, Sri Lanka, Southern China, Thailand, Vietnam, Sundaland.

Material:

1♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV (MWM).

1♂, Tonkin (ZFMK).

1♂, Hanoi, 12.VIII. (MNHN).

1♀, Saigon (MNHN).

1♀, Cho-Ganh, Tonkin (MNHN).

1♀, Ita noi (MNHN).

Comments: was noted by DE JOANNIS for Hanoi.

***Odonestis pruni* (LINNAEUS, 1758)**

Phalaena pruni LINNAEUS, 1758, Syst. Nat. (Ed. 10) 1: 498.

Locus typicus: Germania.

Distribution: through the Palearctic region but absent in Middle Asia.

***Odonestis pruni* ssp. (Plate 14 fig. 78)**

Material:

4♂♂, N. Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994, leg. SINJAEV & SIMONOV.

Comments: The Vietnamese population of the species differs well from those of China, Nepal and India, but its taxonomic position is still not yet clear.

***Bharetta* MOORE [1866] 1865**

***Bharetta cinnamomea* MOORE [1866] 1865**

Bharetta cinnamomea MOORE, Proc. zool. Soc. Lond. 1865: 820, pl. 43, fig. 6.

Locus typicus: India, Darjeeling.

Distribution: India, Nepal, S. China, Vietnam.

Material:

1♂, N. Vietnam, Mt. Fan-si-pan, W-seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 30.VI.-12.VII.1994, leg. BRECHLIN & SCHINTLMEISTER.

2♂♂, N. Vietnam, Mt. Fan-si-pan (West), Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 10.VI.-6.VII.1994, leg. SINJAEV & einh. Sammler.

- 5♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 15.-25.III.1995, leg. SINJAEV & einh. Sammler.
1♂, N. Vietnam, Mt. Fan-si-pan N-Seite, Cha-pa (= Sapa), 2250 m, 22°15'N, 103°45'E, 28.-29.III.1995, leg. SINJAEV & einh. Sammler.
8♂♂, N. Vietnam, Mt. Fan-si-pan N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, 25.-30.III.1995, leg. SCHINTLMEISTER & SINJAEV.

***Bharetta owadai* KISHIDA, 1986** (Plate 14 fig. 79)

Bharetta owadai KISHIDA 1986, Japan Heterocerists' J. 138: 202.

Locus typicus: Taiwan.

Material:

1♂, N. Vietnam, Fan-si-pan, 1600 m, 25.-30.III.1995, leg. SCHINTLMEISTER & SINJAEV.

Comments: no real differences were found between populations of Taiwan and Vietnam. First observation from the continent.

Systematic position uncertain.

***Chonopla* DE LAJONQUIÈRE, 1979**

***Chonopla modulata* (SWINHOE, 1890)**

Kosala modulata SWINHOE, Trans. Ent. Soc. Lond. 1890: 197, t. 6, fig. 18.

Locus typicus: Bhamo, Burma.

Distribution: Burma, northern Vietnam.

Material:

1♂, N. Vietnam, Cuc Phuong, 60 km SW Hanoi, 400 m, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, leg. SINJAEV & SIMONOV.

2♂♂, N. Vietnam, Mal-chau, 14.-18.XI.1994, 25 km SE Moc-chau, 1400 m, 20°50'N, 104°40'E, leg. SINJAEV & SIMONOV.

***Alompra* MOORE, 1872**

***Alompra roepkei* TAMS, 1953**

Alompra roepkei TAMS, 1953, Tijdschr. Plant., 59: 166.

Locus typicus: northern India, Assam.

Distribution: north-western Himalaya, northern Vietnam, northern Thailand, Peninsula Malaysia, Sundaland, Philippines.

Material:

1♂, N. Vietnam, Tuan-giao, 5.-10.XI.1994, 21°35'N, 103°25'E, 1200 m, leg. SINJAEV & SIMONOV.

3♂♂, N. Vietnam, Cuc. Phuong, 60 km SW Hanoi, 20°15'N, 105°20'E, 18.XI.-3.XII.1992, 400 m, leg. SINJAEV & SIMONOV (GenPr. Het. ♂ 3880).



Plate 14

- 78 *Odonestis pruni* (LINNAEUS, 1758) ♂
N-Vietnam, Ben En Nat. Park, 200 m, 40 km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.XI.1994,
leg. SINJAEV & SIMONOV
- 79 *Bharetta owadai* KISHIDA, 1986 ♂
North Vietnam, Fan-si-pan, 1600 m, 25.-30.III.1995, leg. SCHINTLMEISTER & SINJAEV.
- 80 *Kosala flavosignata* (MOORE, 1879), ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek.
Wald/Kulturland, December 1994, leg. SINJAEV & einh. Sammler.
- 81 *Kosala flavosignata* (MOORE, 1879), ♀
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek.
Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.
- 82 *Kosala reducta* sp. n., Holotype ♂
N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek.
Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler (GenPräp. Het. 4028).

***Kosala* MOORE, 1879**

***Kosala rufa* HAMPSON, 1892**

Kosala rufa HAMPSON, 1892, Fauna Brit. India, Moths 1: 419.

Locus typicus: Naga Hills.

Distribution: northern India, southern China, northern Vietnam.

Material:

4♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

3♂♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1525 m, 22°17'N, 103°44'E, prim. Urwald, 28.X.-3.XI.1994, leg. SINJAEV & einh. Sammler.

***Kosala flavosignata* (MOORE, 1879) (Plate 14 figs 80, 81)**

Eutricha flavosignata MOORE, 1879, Descr. new Indian lepid. Insects Colln late Mr W. S. Atkinson 1: 77-78, pl. 3, f. 17.

Locus typicus: Darjiling.

Distribution: northern India, Northern Vietnam, southern China.

Material:

2♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler.

1♂♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, December 1994, leg. SINJAEV & einh. Sammler.

***Kosala reducta* sp. n. (Plate 14 fig. 82)**

Holotype ♂: N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler (GenPräp. Het. 4028).

Paratypes: 1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, November 1994, leg. SINJAEV & einh. Sammler (GenPräp. Het. 4030).

1♂, N. Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2240 m, 22°15'N, 103°45'E, prim. Nebelwald, 2.-4.III.1995, leg. Dr. BRECHLIN (GenPräp. Het. 4250).

2♂♂, N. Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, prim. Urwald, 25.-30.III.1995, leg. SCHINTLMEISTER & SINJAEV (GenPräp. Het. 4029).

1♂♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, Decembre 1994, leg. SINJAEV & einh. Sammler.

1♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald/Kulturland, Novem. 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N, 103°44'E, prim. Urwald, 25.-30.III.1995, leg. SINJAEV & SCHINTLMEISTER.

1♀, N. Vietnam, Mt. Fan-si-pan, Cha-pa, 2400 m, 22°15'N, 103°46'E, 10.-30.X.1994, leg. SINJAEV & SIMONOV.

2♀♀, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, 10.VI.-6.VII.1994, leg. SINJAEV & einh. Sammler.

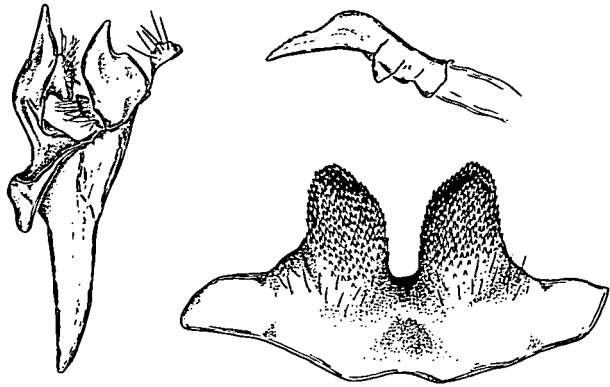


Fig. 28. Male genitalia of *Kosala reducta* sp. n., Paratype.

- 15♂♂, N. Vietnam, Fan-si-pan, N-Seite, Cha-pa (= Sapa), 2240 m, 22°15'N, 103°45'E, prim. Nebelwald, 2.-4.III.1995, leg. Dr. BRECHLIN.
- 3♂♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, 20.-30.X.1994, leg. SINJAEV & einh. Sammler.
- 10 ♂♂, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 18 km NW of Fang, 2100 m, 6.-7.XII.1998, leg. M. HREBLAY, Y. SHERPA & L. SOÓS.
- 6♂♂ 1♀, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 18 km NW of Fang, 2100 m, 17.XII.1998, leg. M. HREBLAY, Y. SHERPA & L. SOÓS.
- 1♂, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 16 km NW of Fang, 2000 m, 18. XII.1998, leg. M. HREBLAY & C. SZABÓKY.
- 5♂♂, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 18 km NW of Fang, 2000 m, 9.-13.I.1999, leg. A. CSABÓ & Z. CZERE.
- 13♂♂ 2♀♀, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 18 km NW of Fang, 2100 m, 18.-20.I.1999, leg. A. CSABÓ & Z. CZERE.
- 11♂♂, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 16 km NW of Fang, 2000 m, 24.II.1998, leg. M. HREBLAY & C. SZABÓKY (MWM).

In external characters similar on *Kosala flavosignata* (MOORE, 1879) and characterized by smaller size (expanse 32-39 mm, forewing length 17.5-19.5 mm), reduction of the red coloration on the forewings (present only as some spots in basal field of the forewing), by reduction of yellow discal spot to small reddish-yellow point, by more light brownish-red background and by peculiarities of the male genitalia (Text-fig. 28): vinculum cup-shaped long and slender; aedeagus elongated without cornuti; VIII sternite of the characteristic shape.

Female larger (expanse 46-50 mm, forewing length 25-27 mm) and slightly lighter; wings more prominent, transversal fasciae are narrow and brown not blackish as in males; in most female specimens medial lines are pointed with whitish scales and external line is vague. Cilia reddish-brown with white distal scales.

Female genitalia: Biology and preimaginal instars are unknown. Mountain species, flying at the altitude 1600-2240 m. Probably develops in two generations.

Distribution: northern Vietnam and northern Thailand.

Argonestis ZOLOTUHIN, 1995

Argonestis flammans (HAMPSON, 1892)

Bharetta flammans HAMPSON, Fauna Brit. India, 1: 416.

Locus typicus: [India] Manipur.

Literature: ZOLOTUHIN 1995.

Distribution: India, Nepal, northern Thailand, northern Vietnam.

Material:

1♂, N. Vietnam, Mt. Fan-si-pan, W-Seite, Cha-pa (= Sapa), 1600-1800 m, 22°20'N, 103°40'E, Sek. Wald, September 1994, leg. SINJAEV & einh. Sammler.

1♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa (= Sapa), 1700 m, 22°15'N, 103°46'E, Sek. Wald, 8.-29. Mai 1993, leg. SINJAEV & SIMONOV.

Acknowledgements

The authors are grateful to Dr. D. STÜNING, (ZFMK), Bonn, for the loan of photographs of *Kunugia lineata* (MOORE, 1897), to Dr. RENATE RABENSTEIN, (SMFL), Frankfurt am Main, for the loan of photographs of *Metanastria hyrtaca* (CRAMER, 1779) and to Dr. A. SCHINTLMEISTER (Dresden) for photographs of *Lasiocampidae* in resting position taken in their natural biotope.

References

- CANDÈZE, L., 1927. Lépidoptères Hétérocères de l'Indochine Française. – Encyclopédie Entomologique, Série B, III, Lepidoptera Tome II (2): 73-133.
- JOANNIS, J. DE, 1929. Lépidoptères Hétérocères du Tonkin. 3e partie. – Ann. Soc. ent. France 48: 559-569.
- HAMPSON, G. F., 1892. The Fauna of British India including Ceylon and Burma. – Moths. Part 1. London. 527 p.
- HOLLOWAY, J. S. & BENDER, R., 1990. The Lasiocampidae of Sumatra. – Heterocera Sumatrana 6: 137-204.
- LAJONQUIÈRE, Y. DE, 1975. Le Genre *Bhima* MOORE, 1888. – Bulln Soc. ent. France 80 (mai-juin): 141-153.
- LAJONQUIÈRE, Y. DE, 1977. Le genre *Gastropacha* en Asie (Note complémentaire et rectificative). 21^e Contribution à l'Étude des Lasiocampidae [Lep.]. – Bulln Soc. ent. France 82 (mai-juin): 138-145.
- LEMÉE, A. & W. H. TAMS, 1950. Contribution à l'étude des Lépidoptères du Haut-Tonkin (Nord-Vietnam) et de Saïgon. S. 82.
- ZOLOTUHIN, V. V., 1995. To a study of asiatic Lasiocampidae. 1. The Lasiocampidae of Thailand. – Tinea 14 (3): 157-170.
- ZOLOTUHIN, V. V., 1999. *Bhima* Moore, 1888 is a junior subjective synonym of *Pyrosis* Oberthür, 1880 (Lepidoptera, Lasiocampidae). – Atalanta 29 (1/4): 283-284

Authors' adresses:

Dr. VADIM V. ZOLOTUHIN, Ablukova 13-12, Russia 432005 Uljanovsk
Dipl.-Kfm. THOMAS J. WITT, Tengstraße 33, D-80796 München

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Entomofauna Suppl.](#)

Jahr/Year: 2000

Band/Volume: [S11](#)

Autor(en)/Author(s): Zolotuhin Vadim V., Witt Thomas Josef

Artikel/Article: [The Lasiocampidae of Vietnam 25-104](#)