

# Annotated list of Tortricidae recorded from Vietnam (Lepidoptera)

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Kuznetsov, V.I. 2000. Annotated list of Tortricidae recorded from Vietnam (Lepidoptera). *Zoosystematica Rossica*, 8(2), 1999: 337-348.

An annotated list of 208 species of tortricid moths from Vietnam is presented. In the course of this study collections of the Zoological Institute, St.Petersburg, including material from the northern and southern parts of Vietnam collected by the author, as well as all literature data on the vietnamese Tortricidae were used. The following new synonymies are established: *Rhopobota blanditana* (Kuzn.) = *Griselda nielseni* Kawabe; *Acanthoclita balanoptycha* (Meyr.) = *Eucosma hilarocrossa* (Meyr.). A description of *Penthostola tricolorana* sp. n. similar to *P. semna* Diak. (Olethreutini) from Southern Vietnam (Kannak, prov. Gialai) is given.

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## Introduction

The family Tortricidae forms a rather natural and well defined taxon, which may be used as a model group for study of different parameters of biodiversity. The necessity of studies in this group increases also with the growing damage caused by exophagous and endophagous larvae of Tortricidae to the fruit trees, forest, park and agricultural plants.

The tortricid moth fauna of Vietnam includes many species belonging to almost 80 genera, among them some species described recently. The data available and our field experience show that in spite of rather intense recent investigations this fauna still remains insufficiently known. Meanwhile, the necessity in a general list of these moths in Vietnam is obvious. During the preparation of this first general list of Tortricidae of the vietnamese fauna the following sources of information were used: collections of the Zoological Institute RAS (St.Petersburg) including author's own material of 1986 and 1988 from the northern and southern provinces of Vietnam; earlier works (Meyrick, 1931; Anonym, 1976), although some data recorded there need confirmation; the published regional reviews of Tortricinae, Olethreutini and Grapholitini in which identifications of species were based on genital structures

(Kuznetsov, 1988b, 1992b, 1994), as well as faunistic and taxonomic papers (Diakonoff, 1948; Kuznetsov, 1988a, 1988d, 1997a, 1997b; Razowski, 1989a, 1992; Jaroš & Spitzer, 1991) on the tortricids of this republic. Several papers on the Olethreutinae of Thailand (Kawabe, 1987a, 1987b, 1989) with a check-list and descriptions of species also were used. Additional data on the distribution of species and their host plants were taken from literature (Diakonoff, 1939, 1941, 1968, 1973, 1976, 1982, 1983a; Clarke, 1958; Common, 1965; Razowski, 1970, 1977, 1987, 1989b).

The main localities and characteristics of personal collecting of tortricid moths in 1986 and 1988 were reported earlier (Kuznetsov, 1988c, 1997b). Therefore only the general list of localities (Fig. 1) is given in this work.

## Northern Vietnam

Chapa (Shapa), prov. Laokay (Choanlienshon) (Meyrick, 1931, Petelot leg.; Diakonoff, 1948).

Chienghouan (Chiengchouan), prov. Sonla, 13.V. 1986 (V.I. Kuznetsov leg.).

Choganh (Tiegan), prov. Thanamninh (A. Dupont leg.), delta of Red River (Meyrick, 1931).

Hanoi, 29.III-7.IV.1986 (V.I. Kuznetsov leg.), also (Meyrick, 1931; Diakonoff, 1948).

Hoabinh, prov. Hashonbinh (Meyrick, 1931).

Hoangsuphi (Hoangduphi), prov. Hatuen (Robert leg.) (Meyrick, 1931).

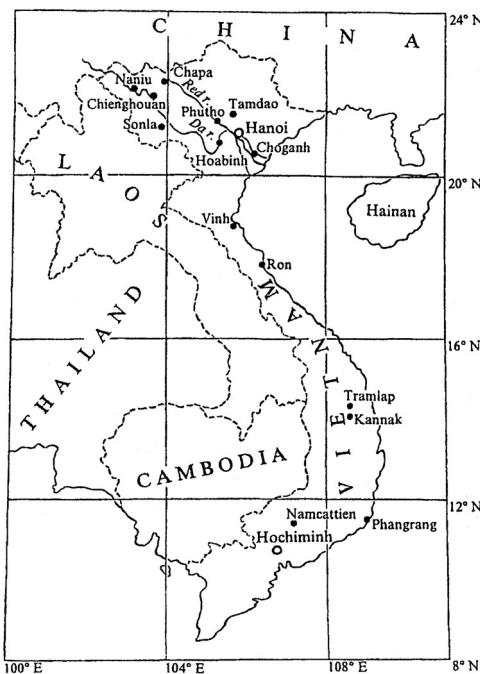


Fig. 1. The main collecting sites of tortricid moths in Vietnam.

Naniu, prov. Sonla, 4-12.V.1986 (V.I. Kuznetsov leg.).  
Phutho, prov. Vinhphu (A. Duport leg.) (Meyrick, 1931).  
Tamdao, prov. Vinhphu (A. Duport leg.) (Meyrick, 1931), 8-13.IV.1986 (V.I. Kuznetsov leg.), VII.1986 (J. Razowski leg.) (Razowski, 1989a, 1992).  
Thainguyen, prov. Bacthai, 14.IV.1986 (V.I. Kuznetsov leg.).

### Southern Vietnam

Kannak (Kannack), prov. Gialai (earlier Gialai-Kontum), 9-16.XI.1988 (V.I. Kuznetsov leg.).  
Namcattien forest reserve (National Park), prov. Dongnai (Jaroš & Spitzer, 1991).  
Tramlap, prov. Gialai (earlier Gialai-Kontum), 9-16.XI.1988 (V.I. Kuznetsov leg.).

As the composition and relationships of the genera are still insufficiently elaborated, genera and species are arranged according to the earlier proposed classifications of some tribes (Razowski, 1970, 1987, 1989b; Diakonoff, 1973; Kuznetsov, 1989, 1994) with new essential additions.

For most species mentioned, references to 1-2 published figures of the male (sometimes female) genitalia better showing the characters of morphological structures are given.

This is the feature distinguishing the present list from other taxonomic works. The preference is given to figures published by the author or in taxonomic revisions (Clarke, 1958; Diakonoff, 1973; Razowski, 1977). The male genitalia of some species of the Vietnamese fauna were described with musculature (Kuznetsov & Stekolnikov, 1991, 1994).

For some species the flight period of moths and host plants of larvae are recorded. The scientific names of the host plants are taken only from literature (Diakonoff, 1941, 1973; Kawabe, 1979). As a result, a list of 208 species of Tortricidae recorded from Vietnam with the main synonyms is given.

### List of species

#### Subfamily TORTRICINAE

##### Tribe Cochylini

**Eupoecilia wegneri** (Diakonoff, 1941). (Kuznetsov, 1992b, Fig. 1). Kannak, 12.XI.1988; Tramlap, 21.XI-7.XII.1988. – Indonesia.

**E. tengerensis** (Diakonoff, 1949). (Razowski, 1968, Figs 4-6). Tamdao, 23-29.VI.1986 (Razowski, 1989a), 10.IV.1986; Kannak, 15.XI.1988; Tramlap, 21.XI-15.XII.1988. – Indonesia.

**Apredopoda mimocharis** Meyrick, 1937. (Razowski, 1970, Pl. 161, Fig. 290, ♀). Chapa (Meyrick, 1931). Material from Hatay (Anonym, 1976) identified as *Euxanthis cosmolitha* Meyrick, 1931 apparently also belongs to *A. mimocharis* Meyr. – China.

**Phalonidia mellita** (Meyrick, 1916). Anchau (Meyrick, 1931). This record possibly refers to the transpalaearctic *Ph. vectisana* (Humphreys & Westwood, 1845). – China, Sri Lanka.

##### Tribe Euliini

**Terthreutis sphaerocosma** Meyrick, 1918 (= *duosictica* Wileman & Stringer, 1929). (Clarke, 1958, Pl. 115, Figs 1c, 1d). Chapa (Diakonoff, 1948). – China, India, Myanmar, Bangladesh.

**T. argentea** (Butler, 1886). (Razowski, 1992, Fig. 4, ♀). Tamdao, 18-21.VII.1990. (Razowski, 1992). – India.

##### Tribe Epitymbiini

**Mimeoclysia mauroprosopa** Diakonoff, 1983b, Figs 3-4. Tramlap, 26-30.XI.1988. – Indonesia.

##### Tribe Tortricini

**Paratorna dorcas** Meyrick, 1907. (Clarke, 1958, Pl. 85, Fig. 1d). Prov. Quangninh, Quanguen (Meyrick,

1931). – India, Indonesia. Larvae on leaves of *Schima noronhae* (Diakonoff, 1941).

**Cnestoboda celligera** (Meyrick, 1918) (= *glaucoprosopis* Meyrick, 1931). (Clarke, 1958, Pl. 55, Figs 2a, 2b). Hanoi, 30.III.1986; Tamdao, 10-14.IV.1986; Naniu, 5-10.V.1986; Chienghouan, 13.V.1986; Choganh (Meyrick, 1931). – China, India, Malaysia, Sri Lanka, Indonesia. Larvae on leaves of *Litchi chinensis*, *Nephelium lappaceum* and *Schleicheria oleosa* (Diakonoff, 1982).

**C. facialis** (Meyrick, 1912). (Clarke, 1958, Pl. 55, Figs 4a, 4b). Kannak, 11.XI.1988; Tramlap, 30.XI.1988. – India.

**Acleris extensana** (Walker, 1863) (= *divisana* Walker, 1863; *agrioma* Meyrick, 1920). (Clarke, 1958, Pl. 1, Fig. 2b). Chapa (Diakonoff, 1948). – Southern Asia to the Shandung Peninsula in the north. Larvae on *Malus* and *Rosa* (interlaced leaves).

**A. compsoptila** (Meyrick, 1923). (Clarke, 1958, Pl. 2, Figs 3a-3c). Tamdao, 13.IV.1986. – India. This species displays close relationship with *A. extensana* Meyr. and might be its junior synonym.

**Trophocosta maculifera** Kuznetsov, 1992b, Fig. 3. Tramlap, 25.XI.1988. – This species displays close relationship with *T. tucki* Razowski, 1986 from Nepal and might be its junior synonym.

**Tymbarcha cerinopa** Meyrick, 1908. (Clarke, 1958, Pl. 129, Fig. 1c). Kannak, 11.XI.1988. – India, Thailand, Malaysia, Indonesia.

**Spatialistis dulcedana** Kuznetsov, 1992a, Fig. 18. Tramlap, 9, 14.XII.1988.

**Reptilisocia paryphaea** (Meyrick, 1907). (Clarke, 1958, Pl. 113, Figs 2a, 2b). Tamdao, 10.IV.1986; 24.VI.1986 (Razowski, 1989a). – Thailand, India.

**Archigrapta limacinaoides** Kuznetsov, 1992a, Fig. 15. Kannak, 11.XI.1988.

### Tribe Schoenotenini

**Protarchella nivis** (Diakonoff, 1941). (Diakonoff, 1960, Figs 41, 43). Tamdao, 10.IV.1986. – Malaysia, Indonesia.

### Tribe Ceracini

**Cerace lemeepauli** Lemée, 1950. (Diakonoff, 1970, Figs 7-8, ♀). Haut Tonkin (North Vietnam), Backan. – This species known only from the female holotype from Vietnam displays close relationship with *C. stipatana* Walker, 1863.

**C. charidotes** Razowski, 1992, Fig. 3. Tamdao, 15-17.V.1990 (holotype, ♀).

### Tribe Archipini

**Ulodemis trigrapha** Meyrick, 1907. (Clarke, 1958, Pl. 130, Figs 1c, 1d). Hoangsuphi (Meyrick, 1931); Tamdao, 13.IV.1986, 27-29.VI.1986; Naniu, 8.V.1986; Tramlap, 21.XI-9.XII.1988. – Nepal, India, Indonesia. Polyphagous larvae on interlaced leaves of *Camellia*, *Cinnamomum*, *Citrus*, *Nephelium* (Diakonoff, 1941).

**Homona coffearia** (Nietner, 1861) (= *menciana* Walker, 1863; *simulana* Walker, 1866; *socialis* Meyrick, 1912). (Diakonoff, 1939, Figs F-H). Hoabinh (Diakonoff, 1948); Chaganh, Phutho, Hoangsuphi (Meyrick, 1931); Tamdao (Jaroš & Spitzer, 1991); Hoabinh, 1-4.VI.1990 (Razowski, 1992); town Sonla, 2.V.1986; Naniu, 8-12.V.1986; Chienghouan, 13.V.1986; Kannak, 12-16.XI.1988; Tramlap, 21.XI-9.XII.1988; Namcattien, XI.1989, Phangrang, Nhaho, IV-V.1982 (Jaroš & Spitzer, 1991). – Southern Asia to the Shandung Peninsula and Japan in the north. Polyphagous larvae on leaves of rainforest arboreal plants. Dangerous pest of tea plants, also of *Citrus* and other fruit plants.

**H. difficilis** (Meyrick, 1928) (= *permutata* Meyrick, 1928). (Clarke, 1958, Pl. 19, Figs 3a, 3b; Diakonoff, 1968, Fig. 16). Tamdao, 10.IV.1986; Kannak, 15.XI.1988; Tramlap, 26.XI.1988; Namcattien, XI.1989 (Jaroš & Spitzer, 1991). – Southern China, Thailand, Nepal, India, Philippines, Indonesia.

**H. encausta** (Meyrick, 1907). (Clarke, 1958, Pl. 19, Figs 4a, 4b). Tramlap, 28.XI, 7.XII.1988. – Thailand, Nepal, India, Sri Lanka.

**H. superbana** Kuznetsov, 1992a, Fig. 20. Tramlap, 21.XI-6.XII.1988.

**H. tabescens** (Meyrick, 1921). Choganh (Diakonoff, 1948); Kannak, 15.XI.1988. – China, Thailand, Indonesia. Polyphagous larvae on leaves and generative organs of *Gossypium*, *Jatropha*, *Eucalyptus*, *Calophyllum inophyllum*, *Lagerstroemia speciosa*, *Lantana camara* (Diakonoff, 1941).

**Syndemis duplex** Diakonoff, 1948. Chapa, Tamdao (Razowski, 1992). – Known only from Vietnam.

**Archips asiaticus** (Walsingham, 1900) (= *contemptrix* Meyrick, 1925). (Razowski, 1977, Figs 19-23). Prov. Bachai (Anonym, 1976). – China, Korea. Polyphagous larvae on fruit trees and forest plants (interlaced leaves).

**A. sedutiosus** (Meyrick, 1921) (= *brachytoma* Meyrick, 1932). Razowski, 1977, Figs 42, 43). Chapa and Hoabinh (Diakonoff, 1948). – Thailand, Malaysia, Indonesia. Polyphagous larvae on *Citrus*, *Ricinus*, *Glycine*, *Solanum*, *Albizza*, *Derris*, *Tephrosia*, *Cinnamomum*. Presumably on leaves, young shoots and buds (Diakonoff, 1941).

**A. oporanus** (Linnaeus, 1758) (= *similis* Butler, 1879; *impervia* Meyrick, 1931; *bathyglypta* Meyrick, 1932). (Razowski, 1977, Figs 44-45; Kuznetsov, 1978, Fig. 341, 3). Hoangsuphi (Meyrick, 1931). Description of the genital structures of holotype of *Caecocia impervia* Meyr. from Hoangsuphi has been published (Razowski, 1977). – Holarctic to Northern Vietnam in the south. Larvae on coniferous trees: *Pinus*, *Abies*, *Larix* (interlaced needles).

**A. atrolucens** (Diakonoff, 1941). (Razowski, 1977, Figs 76, 77). Hanoi (Diakonoff, 1948). – Indonesia. Larvae on *Melia azedarach* and *Ebodia* sp. (Diakonoff, 1941) on interlaced leaves.

**A. arcanus** Razowski, 1977, Figs 10, 12. Hanoi, 1-3.IV.1986; Tamdao, 9-10.IV.1986. – China.

**A. compitalis** Razowski, 1977, Figs. 90, 91. Tamdao, 24-28.VII.1986 (Razowski, 1989a). – China.

**A. dispilanus** (Walker, 1864) (= *mimicus* Walsingham, 1900). (Razowski, 1977, Figs 95-98). Vietnam (Diakonoff, 1982). This record possibly refers to

some of the following species. – India, Sri Lanka. Polyphagous larvae on leaves of *Citrus*, *Prunus*, *Duranta*, *Psidium guayana*, *Lantana camara*.

**A. micaceanus** (Walker, 1863) (= *epicyrta* Meyrick, 1905; *eucroca* Diakonoff, 1958). (Razowski, 1977, Figs 101, 102). Phutho (Meyrick, 1931); Hanoi (Razowski, 1977); Hoabinh, 25.V-9.VI (Razowski, 1992). – China, Thailand, Myanmar. Records from Malaysia and Indonesia not confirmed by material (Tuck, 1990). Polyphagous larvae on leaves of *Citrus*, *Ricinus*, *Iriga*, *Hibiscus*, *Phaseolus*, *Glycine*.

**A. machlopis** (Meyrick, 1912) (= *compacta* Meyrick, 1918; *isocryta* Meyrick, 1920; *seminubilus* Meyrick, 1931; *?excavatus* Meyrick, 1931; *transcavata* Meyrick, 1935; *micaceana* auct.). (Kuznetsov, 1992b, Fig. 4). Hoangsuphi (Meyrick, 1931); Tamdao, 25-29.VII.1986 (Razowski, 1989a), X.1989 (Jaroš & Spitzer, 1991); town Sonla, 2-3.V.1986; Naniu, 5-10.V.1986; Chienghoan, 13.V.1986; Kannak, 12-15.XI.1988; Namcattien, XI.1989; Phangrang, Nhaho, IV-V.1982; Ductrong, X.1984 (Jaroš & Spitzer, 1991). – Southern Asia to Nepal and China in the north. Polyphagous larvae presumably on leaves, also on shoots, seeds, pods of *Thea*, *Citrus*, *Medicago*, *Rumex*, *Salix*, *Litchi chinensis*, *Gloriosa superba*, *Cedrela toonica* (Tuck, 1990).

**A. magnificus** Tuck, 1990, Fig. 33. Tamdao, 25-27.VI.1986 (Razowski, 1992). – Malaysia, Indonesia.

**A. emitescens** (Meyrick, 1931). (Razowski, 1960, Figs 4, 5). Choganh, Chocay, 20-30.IV (Meyrick, 1931). – Systematic status remains vague, probably it is a synonym. The species is known only from the original description and type material from Vietnam.

**A. eductanus** (Walker, 1863). Choganh, Phutho (Meyrick, 1931). – Southern Asia. Larvae probably polyphagous, recorded on *Morus* and *Camellia* (interlaced leaves and flowers). The taxonomic position of this little-known species remains problematic.

**Chiraps alloica** (Diakonoff, 1948). (Diakonoff & Razowski, 1971, Fig. 1). Tamdao, 13.IV.1986, 14-24.V.1986 (Razowski, 1992); Tramlap, 27.XI and 3.XII.1988. – Indonesia.

**Meridemis vietorum** Razowski, 1989 (= *invalidana* auct.). (Kuznetsov, 1992b, Fig. 5). Hanoi (Meyrick, 1931); Tamdao, 23-29.VII.1986 (Razowski, 1989a), 15-21.V.1990 (Razowski, 1992), IX.1988, X.1984 (Jaroš & Spitzer, 1991); Chienghouan, 13.V.1986; Namcattien, X.1989, Nhaberungsat, XI.1989; Ductrong, X.1984 (Jaroš & Spitzer, 1991, as *Meridemis* sp.). – Known only from Vietnam.

**M. furtiva** Diakonoff, 1976, Figs 86, 87. Tamdao, 9-10.IV.1986; Naniu, 5-12.V.1986; Chienghouan, 13.V.1986; Kannak, 9.XI.1988; Tramlap, 26.XI.1988. – China, Nepal, Thailand, Malaysia, Indonesia.

**Lamoria probolias** (Meyrick, 1907) (= *minuta* auct.). (Razowski, 1987, Figs 444, 447). Tamdao, 26.VII.1986 (Razowski, 1989a); Tramlap, 21.XI-5.XII.1988. – China, Nepal, Thailand, India, Indonesia, Africa (Uganda, Malawi).

**Isodemis serpentinana** (Walker, 1863). (Diakonoff, 1952, Figs 12, 14). Tamdao, 9.IV.1986; Tramlap, 1.XII.1988. – Thailand, India, Sri Lanka, Indonesia, New Guinea. Polyphagous larvae on interlaced leaves of *Thea*, *Citrus*, *Linum*.

**I. illiberalis** (Meyrick, 1918) (= *interjecta* Meyrick, 1922; *montivola* Diakonoff, 1941). (Clarke, 1958, Pl. 120, Figs 4a, 4c, ♀). Chapa (Diakonoff, 1948); Tamdao, 25-29.VII.1986 (Razowski, 1989a); 9.IV.1986; 11-24.V.1990 (Razowski, 1992). – Nepal, India.

**Daemilus fulvus** (Filipjev, 1962) (= *mutuaria* Yasuda, 1975). (Razowski, 1987, Figs 521, 522). Tamdao, 15-21.V (Razowski, 1992). – Russia (Primorsk Terr.), Korea, Japan, China. Larvae on *Picea* and *Abies* (Razowski, 1987).

**Neocalyptis affinisana** (Walker, 1863). (Diakonoff, 1976, Pl. 3, Fig. 7). Choganh, Hanoi (Meyrick, 1931); Hoabinh (Diakonoff, 1948); Tamdao, 8-9.IV.1986; Naniu, 4-12.V.1986; Chienghouan, 13.V.1986; Kannak, 12-15.XI.1988; Tramlap, 24.XI-14.XII.1988; Hochimin (Saigon), IV.1984, Namcattien, XI.1989; Ductrong, X.1984 (Jaroš & Spitzer, 1991). – China, Japan, Nepal, India, Sri Lanka. Larvae probably polyphagous (Diakonoff, 1982).

**N. krzeminskii** Razowski, 1989a, Figs 9-11. Tamdao, 24.VII.1986; 1-4.VI.1990 (Razowski, 1992).

**N. sodaliana** Kuznetsov, 1992b, Fig. 6. Tramlap, 21.XI-12.XII.1986.

**N. tricensa** (Meyrick, 1912). (Clarke, 1958, Pl. 128, Figs 3a, 3b). Tramlap, 26.XI-12.XII.1988. – South-Eastern Asia to Primorsk Terr. of Russia and Japan in the north. This species is possibly a junior synonym of *N. liratana* (Christoph, 1881).

**Diplocalyptis apona** Diakonoff, 1976. (Razowski, 1987, Figs 495, 497). Tamdao, 10, 11.IV.1986, 26.VII.1986 (Razowski, 1989a); Naniu, 9.V.1986. – Nepal, India.

**Electraglaia isoazona** (Meyrick, 1908). (Clarke, 1958, Pl. 122, Figs 2a, 2b). Tamdao, 8-13.IV.1986; 26-28.VII.1986 (Razowski, 1989a). – China, Nepal, India.

**Isotenes inae** (Diakonoff, 1948). (Kuznetsov, 1992b, Fig. 7; Kuznetsov & Stekolnikov, 1994, Figs 9-10). Tramlap, 24.XI-20.XII.1988. – Thailand, Nepal, India, Malaysia, Indonesia. Polyphagous larvae on rainforest plants (leaves).

**Harmologa miserana** (Walker, 1863). Hoangsuphi (Meyrick, 1931). – Indonesia. Polyphagous larvae on *Thea*, *Citrus*, *Pinus merkusii* (Diakonoff, 1941).

**Planostocha cumulata** (Meyrick, 1907). (Clarke, 1958, Pl. 90, Figs 1c, 1d). Tramlap, 21.XI-3.XII.1988. – India, Sri Lanka, Indonesia. Larvae on leaves of *Lantana* (Diakonoff, 1939).

**Callibryastis pachnota** Meyrick, 1912. (Diakonoff, 1983a, Pl. 4, Figs. 7-8). Chapa, Tamdao (Diakonoff, 1948). – India.

**Ochetarcha elephantodes** (Meyrick, 1938). (Clarke, 1958, Pl. 85, Fig. 2a, 2b). Naniu, 7.V.1986. – Indonesia.

**Adoxophyes orana fasciata** (Walsingham, 1900). Tamdao (Meyrick, 1931). – China, Japan. This Asian subspecies is common on *Malus* and *Pyrus*, but occurs also on forest plants. Polyphagous larvae on leaves, buds and generative organs.

**A. privatana** (Walker, 1863). Tamdao, V-VII (Diakonoff, 1948; Razowski, 1992); Choganh, Hoangsuphi (Meyrick, 1931); Hoabinh, V.1990 (Razowski, 1992). – Eastern and Southern Asia to Korea and Japan in the north. Polyphagous larvae have been recorded on 30 species of plants (Diakonoff,

1941): *Thea*, *Citrus*, *Rosa*, *Eugenia*, *Glycine*, *Derris*, *Theobroma*, *Solanum*, *Linum*, *Litsea*, *Hibiscus*, *Carica papaya*, *Litchi chinensis* and other. On leaves, shoots and fruits.

*A. fasciculana* (Walker, 1866) (= *cyrtosema* Meyrick, 1886; *huzonica* Sauber, 1902; *epipepla* Lower, 1908). (Clarke, 1958, Pl. 10, Figs 1a, 1b). Tramlap, 24.XI-21.XII.1988. – Southern Asia, Australia, Pacific Islands. Polyphagous larvae on *Thea*, *Rosa*, *Morus*, *Gossypium*, *Arachis*, *Batat*, *Amaranthus*, *Euphorbia*, *Passiflora*, *Indigofera*, *Scutellaria*, *Emilia*, *Gnaphalium* and other (Diakonoff, 1982). This species is probably a junior synonym to *A. pri-vatana* Wlkr.

*A. parastropha* (Meyrick, 1912). (Kuznetsov, 1992b, Fig. 8). Choganh (Meyrick, 1931); Naniu, 9.V.1988; Chienghouan, 13.V.1988, Tramlap, ex. 1., 22.XII.1988. – Nepal, India.

*A. flagrans* (Meyrick, 1912). (Clarke, 1958, Pl. 10, Figs. 4a, 4b, ♀). Tamdao (Diakonoff, 1948). – Myanmar.

*Scotiophies* sp. (Kuznetsov, 1992b, Fig. 9). Tramlap.

*Antiphrastis galenopa* Meyrick, 1931. Choganh (Meyrick, 1931). – This species is known only from the original description based on the type material from Vietnam.

#### Tribe Phricanthini

*Phricanthes flexilineana* (Walker, 1863) (= *macroura* Lower, 1908). (Common, 1965, Figs 7c, 7d; Kuznetsov & Stekolnikov, 1994, Figs 1-4). Choganh (Meyrick, 1931); Tramlap, 30.XI-11.XII.1988. – India, Philippines, Indonesia, Australia, Guiana. Larvae on leaves of *Dillenia indica* (Common, 1965).

#### Subfamily CHLIDANOTINAE

##### Tribe Hilarographini

*Mictocommiosis nigromaculata* (Issiki, 1930) (= *takaonis* Matsumura, 1931). (Kuznetsov, 1992b, Fig. 2). Tramlap, 13.XII.1988. – Southern Asia to Japan in the north.

##### Tribe Polyorthini

*Loparcha kopeci* Razowski, 1992, Figs 1-2. Tamdao, 11-14.V.1990 (holotype). – Note. The original publication contained two spellings, *kopeki* (p. 108) and *kopeci* (p. 107, 111, 118). As the name is given after the collector M.J. Kopć, the spelling *kopeci* is selected here as the correct original spelling.

#### Subfamily OLETHREUTINAE

##### Tribe Gatesclarkeanini

*Gatesclarkeana idia* Diakonoff, 1973. (Kuznetsov, 1988b, Fig. 1). Naniu, 9-10.V.1986; Chienghouan, 13.V.1986. – Japan, China, Indonesia, Thailand. Polyphagous larvae on shoots, leaves and blossoms

of *Litchi chinensis*, *Thea*, *Ricinus*, *Aleuritis*, *Durio*, *Eugenia*, *Averrhoa*, *Perilla* (Diakonoff, 1973).

*G. erotias* (Meyrick, 1905). (Clarke, 1958, Pl. 252, Figs 4a, 4b). Vietnam (Meyrick, 1931). Possibly the material from Vietnam belonged to the preceding species. – Thailand, India, Sri Lanka, Indonesia. Polyphagous larvae on stems, shoots, and leaves of *Mangifera*, *Loranthus*, *Cynoglossum*, *Bauhinia*, *Guzmania*, *Lantana*, *Sapindus* and other plants (Diakonoff, 1982).

*Asymmetrarcha melallicana* Kuznetsov, 1992a, Fig. 16. Tramlap, 30.XI.1988.

##### Tribe Endotheniini

*Endothenia mollisana* (Walker, 1863). (Kuznetsov, 1988b, Fig. 14). Tamdao, 10.IV.1986. – China.

##### Tribe Microcorsini

*Allobrachygonia helota* (Meyrick, 1905). (Kuznetsov, 1988b, Fig. 1.5). Hanoi, 3.IV.1986; 21.X (Meyrick, 1931); Tamdao, 9.IV.1986. – China, Japan, India, Sri Lanka.

##### Tribe Bactrini

*Bactra helophaea* Meyrick, 1928. (Kuznetsov, 1988b, Fig. 2.1). Naniu, 5-11.V.1986. – India. This species displays close relationship with the transpalaearctic *B. lacteana* Car., 1916, and might be its junior synonym.

*Chiloïdes tornastis* (Meyrick, 1909). (= *gretae* Diakonoff, 1959). (Kuznetsov, 1988b, Fig. 2.2). Hanoi (Meyrick, 1931). – Africa, Southern Asia.

*Ch. cerata* (Meyrick, 1909). (Kuznetsov, 1988b, Fig. 2.3). Chapa (Diakonoff, 1948). – India, Sri Lanka, Indonesia, New Guinea, Fiji.

*Ch. venosana truculenta* (Meyrick, 1909) (= *scythropa* Meyrick, 1911; *geraropa* Meyrick, 1931). (Kuznetsov, 1988d, Fig. 1, ♀). Naniu, 4.V.1986; Chienghouan, 13.V.1986; Kannak, 9-11.XI.1988. – Southern Asia from China and southern Japan to Indonesia and Sri Lanka in the south; Australia, Pacific Islands to the Hawaii in the east. Larvae on stems of *Cyperus* (Diakonoff, 1967).

*Bubonoxena ephippias* (Meyrick, 1907). (Kuznetsov, 1988b, Fig. 2.4). Chocay, 20-30.IV, Tonkin (Meyrick, 1931). – Southern Africa, Southern Asia (Thailand, India, Sri Lanka, Philippines, Indonesia). Larvae on *Commelina bengalensis* (Kawabe, 1979). Common pest of bamboo (*Bambusa*) (Diakonoff, 1982). Borer of young stems.

*B. aspersana* Kuznetsov, 1988a, Fig. 4, ♀. Naniu, 5, 9.V.1986.

##### Tribe Olethreutini

*Gnathocerodes petrifraga* (Diakonoff, 1968). (Diakonoff, 1973, Fig. 53). SE Vietnam, 15 km W of Phangrang, ex. 1, *Barringtonia acutangula* (Spitzer & Jaroš, 1985), 20.IV.1982, 1-7.XI.1984. – India, Bangladesh, Philippines. Larvae in rolled or folded leaves.

**Thysanocrepis crossota** (Meyrick, 1909). (Diakonoff, 1973, Fig. 63). Kannak, 11.XI.1988. – Thailand, Indonesia, Solomon Islands, New Guinea.

**Dactylioglypha tonica** (Meyrick, 1911). (Kuznetsov, 1988b, Fig. 3.1). Tamdao, 10-13.IV.1986. – Southern Asia: Japan, China, Thailand, Malay Peninsula, India, Sri Lanka, Indonesia. Larvae on leaves of *Elaecocarpus japonicus*, *E. sylvestris* (Kawabe, 1989).

**D. pallens** Diakonoff, 1973, Fig. 271. (Kuznetsov, 1997a, Fig. 2). Kannak, 16.XI.1988. – Indonesia.

**Cephalophyes cyanura** (Meyrick, 1909). (Clarke, 1958, Pl. 249, Fig. 3a). Tamdao, 13.IV.1986. – Japan, Malay Peninsula, India.

**Semniotes bellana** Kuznetsov, 1988a, Fig. 5.6. Tamdao, 11.IV.1986.

**Statherotis discana** (Felder & Rogenhofer, 1974). (Diakonoff, 1973, Fig. 354). Choganh, VIII (Meyrick, 1931); Tamdao, 11.IV.1986; Chienghouan, 13.V.1986. – China, Japan, Thailand, India, Malay Peninsula, Indonesia, Philippines, Solomon Islands. Larvae on rolled leaves of *Litchi chinensis* and *Nephelium lappaceum* (Diakonoff, 1973).

**S. diakonoffi** Kuznetsov, 1988b, Fig. 3.3. Tamdao, 9-11.IV.1986.

**Dicephalarcha herbosa** (Meyrick, 1909). (Kuznetsov, 1988b, Fig. 3.4). Naniu, 8.V.1986. – Thailand, India, Indonesia.

**Asaphistis praeceps** (Meyrick, 1909). (Clarke, 1958, Pl. 151, Fig. 1c). Hanoi, 31.X.1988. – China, Japan, Thailand, Northern India.

**Hoplitendemis inaudita** Kuznetsov, 1988b, Fig. 4.1. Tamdao, 10.IV.1986.

**Statherotmantis laetana** Kuznetsov, 1988b, Fig. 3.5. Tamdao, 10.IV.1986.

**Phaeocasiophora attica** (Meyrick, 1907). (Kuznetsov, 1988b, Fig. 4.2). Tamdao, 13.IV.1986. – China, Myanmar, Thailand, India.

**Ph. cornigera burmensis** Diakonoff, 1959. (Kuznetsov & Stekolnikov, 1994, Figs 11-12). Tramlap, 30.XI-7.XII.1988. – Thailand, Myanmar, India.

**Ph. maculosana** Kuznetsov, 1997b, Fig. 4. Tramlap, 30.XI, 7.XII.1988.

**Ph. finitima** Kuznetsov, 1997b, Fig. 5. Tramlap, 30.XI.1988.

**Sycacantha inodes** (Meyrick, 1911) (= *conchifera* Meyrick, 1931). (Kuznetsov, 1988b, Fig. 4.3). Chienghouan, 13.V.1986; Tramlap, 26-30.XI.1988. – Thailand, India, Philippines, Indonesia, New Guinea, Pacific Islands (Solomon and Bismarck Islands). Larvae on leaves of *Anonaceae* sp. (Diakonoff, 1973).

**S. inopinata** Diakonoff, 1973, Fig. 247. (Kuznetsov, 1997a, Fig. 1). Tramlap, 25.XI.1988. – Thailand, Indonesia.

**S. obtundata** Kuznetsov, 1988a, Fig. 1. Tamdao, 9.IV.1986.

**Dudua tetanota** (Meyrick, 1909). (Kuznetsov, 1988b, Fig. 6.1; Kuznetsov & Stekolnikov, 1991, Fig. 3). Tamdao, 9-13.IV.1986; Tramlap, 21-26.XI.1988. – Southern China, Thailand, India, Indonesia.

**D. aprobola** (Meyrick, 1886) (= *metallota* Lower, 1901). (Kuznetsov, 1988b, Fig. 6.2). Hanoi, 4.IV.1986; Tamdao, 9-13.IV.1986; Naniu, 8.V.1986; Chienghouan, 13.V.1986; Tramlap, 9.XII.1988. –

Seychelle Islands, Southern Asia to China and Japan in the north, Australia, Pacific Islands. Polyphagous larvae on leaves and blossoms of *Rosa*, *Salix tetrasperma*, *Mangifera indica*, *Lantana camara*, *Litchi chinensis*, *Cassia tora*, *Polyalthia longifolia* and other rainforest plants (Diakonoff, 1973), *Psidium*, *Metrosideros*, *Eugenia*, *Lagerstroemia*, *Bidens*, *Dahlia*, *Ficus* (Kawabe, 1989).

**D. ptarmicopa** (Meyrick, 1936). (Kuznetsov, 1997a, Fig. 3). Tramlap, 9.XII.1988. – Japan, China, Thailand. Larvae on leaves of *Glochidion obolatum* (Kawabe, 1989).

**Lasiognatha mormopa** (Meyrick, 1906). (Diakonoff, 1973, Fig. 634). Choganh (Meyrick, 1931). – Thailand, India, Sri Lanka, Philippines, Indonesia. Larvae on Myrtaceae: *Jambosa*, *Eugenia* (stems and galls).

**L. cellifera** (Meyrick, 1912) (= *codonectis* Meyrick, 1927). (Kuznetsov, 1988b, Fig. 6.5). Naniu, 5.V.1986; prov. Binhthithien, Vinh, ex. I. 20.XI.1988; Kannak, 11.XI.1988. – India, Sri Lanka, Malay Peninsula, Philippines, Indonesia. Larvae on leaves, stems, and seeds of *Eugenia* and *Nephelium lappaceum* (Diakonoff, 1973).

**Hedaia iophaea** (Meyrick, 1912). (Kuznetsov, 1988d, Fig. 2). Tamdao, 10-13.IV.1986; Naniu, 8.V.1986. – Japan, China, Thailand, India, Sri Lanka. Larvae on *Euria japonica* (Kawabe, 1989).

**Loxoterna pereixigana** Kuznetsov, 1988b, Fig. 6.5. Tamdao, 11.IV.1986.

**Pelatea assidua** (Meyrick, 1914). (Kuznetsov, 1988b, Fig. 6.6). Hanoi (Meyrick, 1931). – China.

**Stathignatha novitana** Kuznetsov, 1992a, Fig. 15. Tramlap, 27.XI.1988. – The position of the genus in the classification of the family remains problematic.

**Arcesia threnodes** (Meyrick, 1905) (= *hemipta* Meyrick, 1905; *tetracona* Meyrick, 1907). (Kuznetsov, 1988b, Fig. 4.4; Kuznetsov & Stekolnikov, 1991, Fig. 4). Hanoi, 2-3.IV.1986; Tamdao, 9-13.IV.1986. – Japan, Thailand, India, Sri Lanka.

**Neopotamia armatana** Kuznetsov, 1988a, Fig. 2.3. Hanoi, 1.IV.1986; Tamdao, 10-11.IV.1986.

**Phaeocadophora fimbriata** Walsingham, 1900 (= *metactena* Meyrick, 1909; *eucrossa* Meyrick, 1914; *aeolotechna* Meyrick, 1935; *peucostenis* Diakonoff, 1953). (Clarke, 1958, Pl. 251, Figs 3a, 3b, Pl. 254, Figs 3a, 3b; Diakonoff, 1973, Figs 471-478, ♀). Tramlap, 25.XI.1988. – China, Japan, Thailand, India, Indonesia, New Guinea. Larvae on leaves of *Quercus glauca* (Kawabe, 1989), but probably polyphagous.

**Tennolopha mosaica** Lower, 1901 (= *clydonias* Meyrick, 1907). (Kuznetsov, 1988b, Fig. 5.1). Vietnam (Razowski, 1992). – Japan, Thailand, Cambodia, Philippines, Indonesia, Sri Lanka, Australia. Larvae in leaves of? *Alpinium* (Zingiberaceae) (Diakonoff, 1973).

**T. abstrusana** Kuznetsov, 1988b, Fig. 5.2. Hanoi, 2.IV.1986; Tamdao, 14.IV.1986.

**Eudemopsis brevis** Liu & Bai, 1982, Sinozoologia, 2, Pl. 2, Fig. 13. Tramlap, 1-11.XII.1988 (Kuznetsov & Stekolnikov, 1994). – China, Thailand.

**Sorolopha archimedias** (Meyrick, 1912). (Kuznetsov, 1988b, Fig. 7.1). Tamdao, 13.IV.1986; Naniu, 4, 11.V.1986; Kannak, 14-15.XI.1988. –

China, Thailand, India, Sri Lanka, Philippines, Indonesia. Larvae on *Litsea*, *Cinnamomum*, *Eugenia* (interlaced leaves) (Diakonoff, 1973).

*S. saitoi* Kawabe, 1989. (Kuznetsov, 1997a, Fig. 1). Tramlap, 1.XII.1988. – Thailand.

*S. prasinias* (Meyrick, 1916). (Clarke, 1958, Pl. 269, Figs 2a, 2b). Choganh (Meyrick, 1931). – Sri Lanka.

*S. callichlora* (Meyrick, 1909). (Kuznetsov, 1988b, Fig. 7.3). Naniu, 10.V.1986. – India.

*S. herbifera* (Meyrick, 1909). (Kuznetsov, 1988b, Fig. 7.4). Tamdao, 9-13.IV.1986. – Thailand, India, Indonesia. Larvae on *Cinnamomum camphora* (interlaced leaves) (Diakonoff, 1973).

*S. plinthographa* (Meyrick, 1931). (Kuznetsov, 1997a, Fig. 6). Kannak, 15.XI.1988. – Japan, Southern China, Thailand, Indonesia. Larvae on leaves of *Machilis thunbergii*, *Cinnamomum japonicum*, *C. camphora* (Kawabe, 1979).

*S. semiculta* (Meyrick, 1909) (= *heteraspis* Meyrick, 1936). (Kuznetsov, 1988b, Fig. 8.1). Choganh (Meyrick, 1931). – China, Thailand, India, Sri Lanka, Solomon Islands. Larvae on *Alceodaphne semicarpifolia*, *Persea americana* (interlaced leaves) (Diakonoff, 1973).

*S. sphaerocopa* (Meyrick, 1931). (Kuznetsov, 1988b, Fig. 6.2). Tamdao, 9-11.IV.1986, Choganh (Meyrick, 1931). – Japan, China, India, Indonesia. Larvae on leaves of ? *Cinnamomum* sp. (Diakonoff, 1973).

*S. ghillarovi* Kuznetsov, 1988b, Fig. 9.1. (Kuznetsov & Stekolnikov, 1991, Fig. 4). Hanoi, 3.IV.1986; Tamdao, 10-13.IV.1986.

*Theorica secunda* Kuznetsov, 1997b, Fig. 6. Kannak, 11.XI.1988.

*Didrimys philocompsa* (Meyrick, 1921). (Diakonoff, 1973, Fig. 572). Kannak, 12.XI.1988. – Thailand, Indonesia.

*Lobesia aeolopa* Meyrick, 1907 (= *proterandra* Meyrick, 1921). (Kuznetsov, 1988b, Fig. 9.3). Hanoi, Choganh (Meyrick, 1931); Tamdao, 10-13.IV.1986; Thainguyen, 24.IV.1986; Naniu, 8-10.V.1986; Chienghouan, 13.V.1986. – Southern and Eastern Asia from Japan to Indonesia and Sri Lanka in the south. Polyphagous larvae on leaves, buds, flowers and shoots of *Citrus*, *Ricinus*, *Melochia*, *Pluchea* (Diakonoff, 1982).

### Tribe Enarmoniini

*Rhopaltripiasia insignata* Kuznetsov, 1997b, Fig. 1. Tramlap, 21.XI-14.XII.1986.

*Loboschiza koenigana* (Fabricius, 1775) (= *aurantiana* Poyer, 1877; *aurana* Matsumura, 1931). (Kuznetsov, 1988d, Fig. 3; Kuznetsov & Stekolnikov, 1991, Fig. 6). Choganh (Meyrick, 1931); Tamdao, 14.IV.1986; Naniu, 12.V.1986; Chienghouan, 13.V.1986; Tramlap, 13.XI.1988. – South-Eastern Asia from China and Japan to Sri Lanka and Indonesia in the south; Australia. Larvae on rolled leaves of *Melia azedarach* and *Jasminum sambac* (Diakonoff, 1982).

*Tetramoera schistaceana* (Snellen, 1890). (Kuznetsov, 1988d, Fig. 4). Northern Vietnam: Hatay,

Namha, Nghean (Anonym, 1976). – Madagascar, Mauritius, Reunion, China (to Shandung Peninsula in the north), Malay Peninsula, India, Philippines, Indonesia, Pacific Islands, Hawaii. Larvae on *Saccharum officinarum*, *S. dulce*. Notorious pest, a borer of the young shoots of sugar cane plants (Diakonoff, 1968).

*T. flavescentis* Kuznetsov, 1988a, Fig. 7. Naniu, 4-12.V.1986; Chienghouan, 13.V.1986.

*Helictophanes dryocoma* (Meyrick, 1916). (Kuznetsov, 1997a, Fig. 4). Tramlap, 1.XII.1988. – India.

*Semnostola arquatana* Kuznetsov, 1988a, Fig. 9. Tamdao, 10-13.IV.1986 (♂, Fig. 2).

*S. atrana* Kuznetsov, 1988a, Fig. 11, ♀. Tamdao, 10.IV.1986.

*Eucosmomorpha figurana* Kuznetsov, 1997b, Fig. 9. Tramlap, 28.XI.1988.

*Cimeliamorpha nabokovi* Kuznetsov, 1997b, Fig. 7. Tramlap, 24.XI-1.XII.1988.

*Semutophila saccharopa* Tuck, 1986. (Kuznetsov, 1997a, Fig. 7). Naniu, 8.VI.1986. – Malaysia. Larvae in the sheaths of leaves on young shoots of *Gigantochloa scorzecchiai*. Symbiont of ants.

*Anacylis hylaea* Meyrick, 1912. (Clarke, 1958, Pl. 145, Fig. 1a; Kuznetsov, 1988d, Fig. 5). Northern Vietnam, Hatay (Anonym, 1976). – India, Thailand.

*A. aromatias* Meyrick, 1912 (= *cyanostoma* Meyrick, 1916). (Clarke, 1958, Pl. 143, Fig. 3a; Kuznetsov, 1988d, Fig. 7). Choganh (Meyrick, 1931). – Thailand, India. Larvae on leaves of *Zizyphus jujuba*.

*A. lutescens* Meyrick, 1912. (Clarke, 1958, Pl. 145, Fig. 2a; Kuznetsov, 1988d, Fig. 8). Hanoi (Meyrick, 1931). – India.

*A. ancorata* Meyrick, 1912. (Clarke, 1958, Pl. 143, Figs 1a, 1b; Kuznetsov, 1988d, Fig. 9). Choganh (Meyrick, 1931). – Sri Lanka.

*A. rostrifera* Meyrick, 1912. (Clarke, 1958, Pl. 146, Fig. 2a). Kannak, 12.XI.1988; Tramlap, 25.XI.1988; Namcattien, XI.1989 (Jaroš & Spitzer, 1991). – Sri Lanka, Indonesia.

### Tribe Eucosmini

*Rhopobota antecellana* Kuznetsov, 1988a, Fig. 16. Tamdao, 10-13.IV.1986; Tramlap, 16-27.XI.1988.

*R. punctiferana* Kuznetsov, 1988a, Fig. 18. Tamdao, 10.IV.1986.

*R. ancyloides* Kuznetsov, 1988a, Fig. 19. Tamdao, 9-10.IV.1986.

*R. blanditana* (Kuznetsov, 1988a) (= *nielseni* Kawabe, 1989, syn. n.). (Kuznetsov, 1988a, Fig. 12; Kawabe, 1989, Fig. 118). Tamdao, 11-13.IV.1986. – Thailand. The new synonymy has been established by comparison of the holotype of *Griselda blanditana* Kuzn. with description and figure of the genitalia of the holotype of *G. nielseni* Kaw.

*Metacosma miratorana* Kuznetsov, 1988a, Fig. 21. Tamdao, 8.IV.1986; Tramlap, 26.XI.1988.

*Noduliferula niphada* (Diakonoff, 1984). (Kuznetsov, 1997a, Fig. 9). Chienghouan, 13.V.1986; Tramlap, 12.XII.1988. – Indonesia.

*N. insuentana* Kuznetsov, 1997b, Fig. 16. Tramlap, 25-27.XI.1988.

- Gypsonoma infuscana** Kuznetsov, 1988a, Fig. 14. ♀. Naniu, 10.V.1986.
- Assulella litigiosa** (Meyrick, 1912) (Kuznetsov, 1988d, Fig. 15). Tamdao, 14.IV.1986. – Thailand, India.
- A. archaea** Diakonoff, 1983a, Fig. 14. (Kuznetsov, 1997a, Fig. 10). Tramlap, 3.XII.1988. – Thailand, Indonesia.
- Spilonota albitegulana** Kuznetsov, 1997b, Fig. 14. Tramlap, 3.XII.1988.
- Dicnecidia fumidana** Kuznetsov, 1997b, Fig. 15. Kannak, 11.XI.1988.
- Acroclita cheradota** (Meyrick, 1912). (Clarke, 1958, Pl. 133, Fig. 4a; Kuznetsov, 1988d, Fig. 29). Choganh (Meyrick, 1931); Kannak, 14.XI.1988. – India, Sri Lanka, Bangladesh. Larvae in rolled leaves of *Ficus religiosa*. Probably, this species was erroneously placed in *Acroclita* Ld.
- A. nigrovenana** Kuznetsov, 1988d, Fig. 27. Tamdao, 10-13.IV.1986. – Known only from Southern Japan and Vietnam. Larvae in rolled leaves of *Litchi chinensis* (Nasu, 1993).
- A. corinthia** Meyrick, 1912. (Clarke, 1958, Pl. 134, Fig. 4a). Choganh (Meyrick, 1931). – Thailand, Sri Lanka.
- A. convergens** Meyrick, 1931: 715. Choganh (Meyrick, 1931). – The species is known only from the original description based on one specimen (holotype) from Vietnam.
- Eucoenogenes cyanopsis** (Meyrick, 1912). (Kuznetsov, 1988d, Fig. 19). Tamdao, 10-13.IV.1986. – Japan, India, Indonesia.
- E. levatana** Kuznetsov, 1997a, Fig. 11. Tramlap, 24.XI.1988.
- E. segregana** Kuznetsov, 1997b, Fig. 10. Tramlap, 24.XI.8.XII.1988.
- Strepsicrates rhothia** (Meyrick, 1910). (Kuznetsov, 1997b, Fig. 14). Tramlap, 12.XII.1988. – Mauritius, Japan, Thailand, India, Sri Lanka. Larvae on *Psidium guayava*, *Eugenia jambolana* (Kawabe, 1989).
- Peridea dalata tonkiniana** Kuznetsov, 1988d, Fig. 13. Tamdao, 8-11.IV.1986; Tramlap, 27.XI.5.XII.1988.
- P. biuncana** Kuznetsov, 1997b, Fig. 12. Tramlap, 3.XII.1988. – Thailand, Indonesia.
- Bipartivalva aquilana** Kuznetsov, 1988d, Fig. 16. Naniu, 9.V.1986.
- Fibuloides modificana** Kuznetsov, 1997b, Fig. 17. Tramlap, 26-27.XI.1988.
- Epinotia bicolor** (Walsingham, 1900). (Kuznetsov, 1988d, Fig. 18). Naniu, 2.V.1986; Chienghouan, 13.IV.1988. – Russia (Primorsk Terr.), China, Korea, Japan, Thailand, Northern India. Larvae on *Quercus glauca*, *Q. phillyraeoides*, *Q. acutissima* (Kawabe, 1989).
- Megaherpystis melanoneura** (Meyrick, 1912). (Kuznetsov, 1988d, Fig. 18). Choganh (Meyrick, 1931); Hanoi, 2.IV.1986. – China, Japan, Thailand, India.
- Neohermenias apertana** Kuznetsov, 1988a, Fig. 13. Naniu, 9.V.1986.
- Hermenias pachnitidis** (Meyrick, 1912). (Clarke, 1958, Pl. 211, Fig. 2a; Kuznetsov, 1997a, Fig. 12). Tramlap, 26.XI-3.XII.1988. – Indonesia, Sri Lanka.
- H. melanocopa** (Meyrick, 1922). (Clarke, 1958, Pl. 293, Fig. 1a; Kuznetsov, 1997a, Fig. 13). Tramlap, 26.XI-11.XII.1988. – Thailand, India, Sri Lanka.
- Herpystis mica** Kuznetsov, 1988a, Fig. 22. Tamdao, 11.IV.1986; Tramlap, 22.XI.1988.
- H. assimilantana** Kuznetsov, 1997a, Fig. 16. Tramlap, 22.XI.1988.
- Lepteucosma fuscicaput** (Diakonoff, 1948). (Kuznetsov, 1988d, Fig. 21). Chapa (Diakonoff, 1948); Tamdao, 9-11.IV.1986. – Known only from Vietnam.
- L. siamensis** (Kawabe, 1989). (Kuznetsov, 1997b, Fig. 15). Tramlap, 30.XI-5.XII.1988. – Thailand.
- L. oxychrysa** Diakonoff, 1971. (Kuznetsov, 1988d, Fig. 22). Tamdao, 8-13.IV.1986; Naniu, 10.V.1986; Chienghouan, 13.V.1986; Tramlap, 24.XI-7.XII.1988. – India, Pakistan.
- L. blanda** (Kawabe, 1989). (Kawabe, 1989, Fig. 121). Tramlap, 24.XI-7.XII.1988.
- L. oxychrysoides** Kuznetsov, 1997b, Fig. 11. Tramlap, 24-30.XI.1988.
- L. ceroides** (Meyrick, 1909). (Clarke, 1958, Pl. 175, Fig. 2a; Kuznetsov, 1988d, Fig. 24). Choganh (Meyrick, 1931). Probably the specimens from Vietnam were erroneously identified as this species. – China, India. Larvae in Vietnam on ? *Rubus* (sur une ronce) (Meyrick, 1931).
- Eucosma creminitis** Meyrick, 1912. (Clarke, 1958, Pl. 177, Fig. 4a; Kuznetsov, 1988d, Fig. 25). Choganh (Meyrick, 1931). – Sri Lanka.
- E. pedisignata** Diakonoff, 1948. (Kuznetsov, 1988d, Fig. 26). Shapa (Diakonoff, 1948). – This species is known only from the original description based on the type specimens from Vietnam.
- E. doiinthanonensis** Kawabe, 1989, Fig. 123. Kannak, 13-15.XI.1988. – Thailand.
- E. australis** Kuznetsov, 1988a, Fig. 15, ♀. Naniu, 9.V.1986.
- E. calligrapha** (Meyrick, 1912). (Clarke, 1958, Pl. 174, Fig. 2a). Choganh (Meyrick, 1931). – India, Myanmar. This species was erroneously placed by Meyrick (1931) in the genus *Eucosma*.

### Tribe Grapholitini

- Ricula dubitana** Kuznetsov, 1992a, Fig. 13. Tamdao, 13.IV.1986.
- Cryptophlebia ombrodelta** Lower, 1899 (= *carpopagha* Walsingham, 1899; *lasiandra* Meyrick, 1909; *illepida* auct.). (Kuznetsov, 1988d, Fig. 11; Kuznetsov & Stekolnikov, 1991, Fig. 7). Choganh, Phutho, Hanoi (Meyrick, 1931), 1-5.IV.1986; Tamdao, 25.III.1990 (Sugonjaev leg.), 10.IV.1986; Naniu, 5-12.V.1986; Chienghouan, 13.IV.1986; Kannak, 9-14.XI.1988; Tramlap, 25.IV.1988. – Southern Japan, China, Thailand, Philippines, India, Sri Lanka, Australia, Guam, Hawaii. Polyphagous larvae on leaves, young shoots, blossoms, pods, fruits (Diakonoff, 1957; Kuznetsov, 1988d) of Caesalpinaeae (*Parkinsonia*, *Caesalpinia*, *Bauhinia*, *Cassia*), Fabaceae (*Sesbania*, *Tamarindus*, *Phaseolus*, *Poinciana*), Mimosaceae (*Acacia*, *Adenanthera*, *Pithecellobium*, *Prosopis*), Rutaceae (*Citrus*, *Aegle*, *Teronia*), Sapindaceae (*Indigofera*, *Nephelium*, *Litchi*), Euphorbiaceae (*Euphorbia*), and Proteaceae (*Macadamia*), also on *Cocos nucifera*.
- C. repleta** (Walker, 1863) (= *trichosema* Meyrick, 1904; *tetraploca* Meyrick, 1928).

(Kuznetsov, 1994, Figs 1-2; Kuznetsov & Stekolnikov, 1994, Figs 13-14). Kannak, 8-15.XI.1988; Tramlap, 23.XI-16.XII.1988; Namcattien, XI.1989 (Jaroš & Spitzer, 1991). – Southern Japan, China, Thailand, India, Philippines, Indonesia, New Guinea, Fiji.

*C. encarpa* (Meyrick, 1920). (Kuznetsov, 1988d, Fig. 10). Choganh (Meyrick, 1931). – Philippines, India, Indonesia. Polyphagous larvae on *Citrus tangerina*, *Litchi chinensis*, *Zizyphus jujuba* (fruits, pods, rolled leaves).

*C. hemitoma* Diakonoff, 1976. (Kuznetsov, 1988d, Fig. 12). Hanoi, 3.IV.1986; Tamdao, 13.IV.1986; Naniu, 10.V.1986; Chienghouan, 13.V.1986. – Japan, Nepal.

*Matsumuraes felix* Diakonoff, 1972. (Kuznetsov, 1988d, Fig. 4). Chienghouan, 13.V.1986. – Indonesia. Larvae on leaves of *Litsea* (Diakonoff, 1972).

*M. falcana* (Walsingham, 1900). (Kuznetsov, 1994, Fig. 5). Tamdao, 11-13.IV.1986. – China, Japan, Nepal. Larvae on *Glycine*, *Lupinus*, *Trifolium*, *Robinia* (rolled leaves, pods).

*M. metacritica* (Meyrick, 1935). (Diakonoff, 1972, Fig. 4). Tamdao, 11-13.IV.1986. – China, Nepal.

*Grapholita bicineta* Diakonoff, 1976. (Kuznetsov, 1994, Fig. 7). Hanoi, 1-5.IV.1986; Tamdao, 8-11.IV.1986; Naniu, 8-9.V.1986; Kannak, 13.IX.1988; Tramlap, 24.IX.1988. – Nepal.

*G. orbipex* Kuznetsov, 1988d, Fig. 31. Tamdao, 10-11.IV.1986.

*G. omittana* Kuznetsov, 1988d, Fig. 32. Tamdao, 11-13.IV.1986.

*G. arcuatana* Kuznetsov, 1992a, Fig. 4. Naniu, 8-10.V.1986; Chienghouan, 13.V.1986.

*G. opulentica* Kuznetsov, 1992a, Fig. 1. Hanoi, 3.IV.1986; Tamdao, 9-11.IV.1986.

*G. seclusana* (Walker, 1866) (= *magnana* Kuznetsov, 1988). (Kuznetsov, 1988d, Fig. 33). Tamdao, 10-11.IV.1986. – Indonesia, New Guinea.

*G. valens* Kuznetsov, 1988d, Fig. 34. Tamdao, 11.IV.1986.

*G. prolopha* (Meyrick, 1912) (Kuznetsov, 1992a, Fig. 9). Hanoi, 2-4.IV.1986; Tamdao, 9-13.IV.1986. – India.

*G. comanticosta* Kuznetsov, 1992a, Fig. 35. Tamdao, 9-14.IV.1986; Hanoi, 2-3.IV.1986.

*Acanthoclita balanopticha* (Meyrick, 1910) (= *Eucosma hilarocrossa* Meyrick, 1931, syn. n.). (Kuznetsov, 1988d, Fig. 30). Choganh (Meyrick, 1931); Tamdao, 10-13.IV.1986. – India, Sri Lanka, Indonesia, Pacific Islands. Larvae on *Pongamia glabra*, *Derris elliptica* (Diakonoff, 1982). The male genitalia of the holotype of *Eucosma hilarocrossa* Meyr. from Choganh were examined by Razowski (1960, Fig. 6). This holotype is very similar in genital characters to *A. balanopticha* Meyr. (Diakonoff, 1982, Pl. 7, Fig. 13).

*Parapammene longipalpana* Kuznetsov, 1992a, Fig. 6. Tamdao, 11.IV.1986.

*Pammene refraga* Meyrick, 1931. (Razowski, 1960, Fig. 18, ♀). Choganh (Meyrick, 1931). – This species is known only from the original description and holotype. Its systematic status remains problematic.

*Strophedra quercivora* (Meyrick, 1920). (Kuznetsov, 1994, Fig. 11). Tamdao, 9.IV.1986. –

Russia (Kunashir Isl.), Northern India. Larvae on *Quercus griffithii*, possibly also on other species of *Quercus*.

*Selania asquiescens* Diakonoff, 1976. (Kuznetsov, 1994, Fig. 12). Naniu, 2-12.V.1986; Chienghouan, 13.IV.1986. – Nepal.

*Coniostola stereoma* (Meyrick, 1912). Tramlap, 12.XI-6.XII.1988. – Thailand.

*Leguminivora glycinivorella* (Matsumura, 1900). (Kuznetsov, 1994, Fig. 14). Southern Vietnam, Hungloc – Eastern Asia from Amur Prov., Primorsk Terr. and Japan to Northern India in the south. Larvae on pods of *Glycine* and *Lespedeza* (Kuznetsov, 1994).

*Metriophlebia meridiana* Kuznetsov, 1992a, Fig. 8. Kannak, 11-16.XI.1988.

*Fulcrifera fulturana* Kuznetsov, 1992a, Fig. 10. Chienghouan, 13.V.1986.

*F. tricentra* (Meyrick, 1907) (= *pseudonectis* Meyrick, 1907; *crocpa* Meyrick, 1907). (Clarke, 1958, Pl. 229, Figs 1a, 2a, 3a; Kuznetsov, 1994, Fig. 14). Hoangshufi (Meyrick, 1931); Chienghouan, 13.V.1986; Kannak, 10-16.XI.1988. – Afghanistan, China, India, Sri Lanka, Indonesia. Larvae in shoots, stems and galls on *Crotalaria juncea*, *Phaseolus mungo*, *Dolichos lablab*, *Tephrosia purpurea* (Diakonoff, 1982).

*Cydia pynochra* Meyrick, 1920. (Kuznetsov, 1994, Figs 16-17, ♀). Chienghouan, 13.V.1986; Kannak, 11.XI.1988. – India.

*C. obumbrana* Kuznetsov, 1992a, Fig. 11. Naniu, 10.V.1986.

*C. tropicana* Kuznetsov, 1992a, Fig. 12, ♀. Tamdao, 12.IV.1986.

### A new species of the genus *Penthostola* Diakonoff

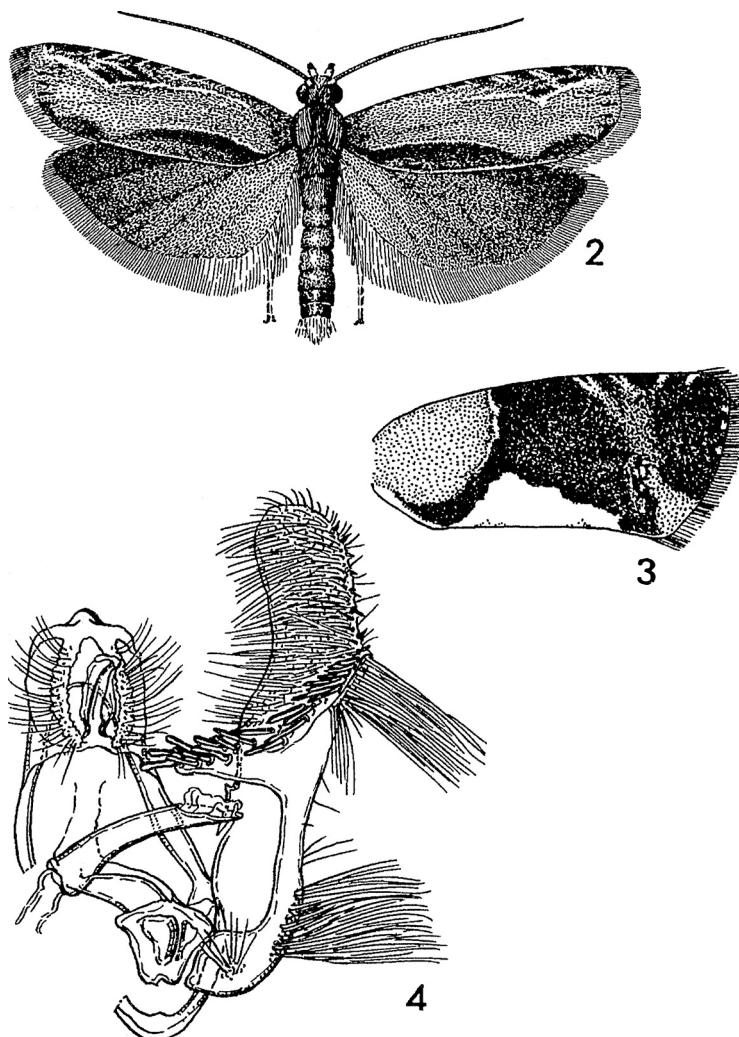
The genus *Penthostola* belonging to the tribe Olethreutini was erected (Diakonoff, 1978) for 2 species: *Argyroploce hemeronyx* (Diakonoff, 1953) from New Guinea (type species) and *P. semina* Diakonoff, 1978 from West Java (Indonesia). The third species of this genus was found by me in 1988 on the Plato Thainguen, 600-900 m, in Southern Vietnam.

The terminology of morphological characters is used here according to Kuznetsov, 1978. The holotype is kept in the Zoological Institute, St.Petersburg.

#### *Penthostola tricolorana* sp. n. (Figs 3-4).

*Holotype.* ♂, Southern Vietnam, prov. Gialai, Kannak, 600 m, at light, 11.XI.1988 (V.I. Kuznetsov leg.).

*Description.* Wingspan 14.5 mm. Forewing (Fig. 3) oblong, rather narrow, not excised below apex. Costal edge slightly rounded. Termen scarcely convex. Forewing ground



Figs 2-4. 2, *Semnostaola arguatana* Kuzn. (paratype), habitus of moth; 3, 4, *Penthostola tricolorana* sp. n. (holotype); 3, forewing; 4, male genitalia.

colour black; markings white or yellow-ochreous mixed with brown. Subtriangular yellow-ochreous patch with base along basal 1/3 of costa, its rounded top not reaching the base of dorsal edge. External rounded edge of this patch bordered finely with white line. Dorsal subtrapezoidal blotch ( $2.5 \times 1.5$  mm) uniformly white, stretching along dorsal edge of wing. Upper edge of this blotch with 3-4 small saw-teeth. Top of blotch hardly reaching fold, the corner connected by fine white line along dorsal edge with root of wing. Before the middle of costal edge no costal marks. Along apical half of costal

margin of wing there are 4 short and small costal marks, of which 2 basal marks are double and greyish white and 2 apical marks are single, white and shorter. Tornus with a small, triangular, yellow-ochreous spot. External margin with a series of 3 white points along base of cilia. Cilia black, ochreous opposite to tornal spot. Hindwing pale greyish-fuscous, without dorsal fold. Dorsum black anteriorly and whitish posteriorly; head fuscous grey; palpi small, grey.

Male genitalia (Fig. 4) symmetrical. Top of tegumen with triangular appendix (? rudiment of uncus). Gnathos without medial appendage, almost pointed. Socii long and narrow, freely suspended, covered with fine bristles. Valva with a single bunch of bristles beyond base of sacculus; rectangular projection at base of cucullus absent, but ventral margin of cucullus with a brush of dense bristles. Lobe on inner surface of valva on border of cucullus and sacculus very large, with a stripe of large blunt spines. Triangular lamel-

liform process present on tegumen near its articulation with vinculum. Aedeagus moderately long, curved and narrowed; cornuti absent. Caulis long.

*Comparison.* The new species is close to *P. semna*, but the forewing is without a spot at 3/4 of costa, cucullus without rectangular projection at base, socii somewhat broader, gnathos almost pointed.

#### Acknowledgements

I am thankful to S.V. Baryshnikova (Seksjaeva) and I.M. Kerzhner (St.Petersburg) for various help in preparation of this paper. I am also grateful to

V.G. Mironov for typing the manuscript. The work was supported by grants No. 2.1-326.1/98 of FPP (Federal Purpose Programme) "Integration" and of the State Scientific and Technical Programme "Biodiversity", and fulfilled using collections of the Zoological Institute, Russian Academy of Sciences, which obtain financial support from the Science and Technology State Committee of Russian Federation (Reg. No. 98-03-16).

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Received 25 March 1999