

New species, distribution records and synonymies of plume moths (Lepidoptera, Pterophoridae) from the Palaearctic region

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Abstract. Six new species of Pterophoridae are described, namely, *Stenoptilia kosterini* sp. n. from Kamchatka, *S. dubatolovi* sp. n. from Turkmenistan, *Amblyptilia zhdankoi* sp. n., *Marasmarcha aibasovi* sp. n. and *Porrittia herzi* sp. n. from Kazakhstan, *Merrifieldia nivella* sp. n. from Tajikistan. New distribution records for provinces of Russia and former Soviet republics are given for 41 Pterophoridae species. Four species are newly synonymized: *Agdistis detruncatum* Zagulajev & Blumental, 1994 syn. n. with *A. gerasimovi* Zagulajev & Blumental, 1994, *Platyptilia diversicila* Filipjev, 1931 syn. n. with *Buszkoiana capnodactylus* (Zeller, 1841), *Gillmeria uralskiensis* Gibeaux, 1995 syn. n. with *G. armeniaca* Zagulajev, 1984, and *Oxyptilus perunovi* Ustjuzhanin, 1996 syn. n. with *O. chrysodactyla* (Denis & Schiffermüller, 1775).

Zusammenfassung. Sechs neue Arten der Familie Pterophoridae werden aus dem Gebiet der früheren Sowjetunion beschrieben (*Stenoptilia kosterini* sp. n. aus Kamchatka, *S. dubatolovi* sp. n. aus Turkmenistan, *Amblyptilia zhdankoi* sp. n., *Marasmarcha aibasovi* sp. n. und *Porrittia herzi* sp. n. aus Kasachstan, sowie *Merrifieldia nivella* sp. n. aus Tadschikistan). Für 41 weitere Arten werden neue Verbreitungsnachweise erbracht. Vier nominelle Arten wurden neu synonymisiert: *Agdistis detruncatum* Zagulajev & Blumental, 1994 syn. n. mit *A. gerasimovi* Zagulajev & Blumental, 1994, *Platyptilia diversicila* Filipjev, 1931 syn. n. mit *Buszkoiana capnodactylus* (Zeller, 1841), *Gillmeria uralskiensis* Gibeaux, 1995 syn. n. mit *G. armeniaca* Zagulajev, 1984, und *Oxyptilus perunovi* Ustjuzhanin, 1996 mit *O. chrysodactyla* (Denis & Schiffermüller, 1775).

Resumé. Six nouvelles espèces de Pterophoridae sont décrites, à savoir *Stenoptilia kosterini* sp. n. du Kamtchatka, *S. dubatolovi* sp. n. du Turkménistan, *Amblyptilia zhdankoi* sp. n., *Marasmarcha aibasovi* sp. n. et *Porrittia herzi* sp. n. du Kazakhstan, et *Merrifieldia nivella* sp. n. du Tadjikistan. De nouvelles données de répartition, relatives aux diverses provinces de Russie et des anciennes républiques soviétiques, sont présentées pour 41 autres espèces de Pterophoridae. Quatre noms sont nouvellement désignés comme synonymes: *Agdistis detruncatum* Zagulajev & Blumental, 1994 syn. n. de *A. gerasimovi* Zagulajev & Blumental, 1994, *Platyptilia diversicila* Filipjev, 1931 syn. n. de *Buszkoiana capnodactylus* (Zeller, 1841), *Gillmeria uralskiensis* Gibeaux, 1995 syn. n. de *G. armeniaca* Zagulajev, 1984 et *Oxyptilus perunovi* Ustjuzhanin, 1996 syn. n. de *O. chrysodactyla* (Denis & Schiffermüller, 1775).

Key words. Lepidoptera, Pterophoridae, plume moths, USSR, Russia, Siberia, Central Asia, taxonomy, new species, new synonymys, new records

The present work makes available new taxonomic data and distribution records for Pterophoridae from the territory of the former Union of Soviet Socialist Republics (USSR). In the first section, six new species are described. In the second section, four new synonymies are established and distributional records for 41 species are given. The paper is based on materials preserved in the author's collection as well as in the collections of the Zoological Museums of Sankt Petersburg and Novosibirsk. The type specimens of the taxa being described are preserved as follows: The holotypes of *Stenoptilia kosterini* sp. n., *S. dubatolovi* sp. n., *Amblyptilia zhdankoi* sp. n., *Marasmarcha aibasovi* sp. n., *Porrittia herzi* sp. n. are preserved in Siberian Zoological Museum at the Institute of Systematics and Ecology of Animals of Siberian Division of the Russian Academy of Sciences (Novosibirsk), the holotype of *Merrifieldia nivella* sp. n. is deposited in the collection of Zoological Institute of the Russian Acad-

emy of Sciences (Sankt Petersburg), the paratypes are located in these two institutes and in the private collection of the author.

I. Descriptions of new species

Stenoptilia kosterini sp. n.

(Figs. 1, 7–8)

Material. – Holotype: ♂, S Kamchatka, 2 km SW of Ust'-Bol'sheretsk, 10.VIII.1992 (Kosterin leg.); Allotype: ♀, Kamchatka, settlement Klychevskoe on the Kamchatka River, 5.VIII.1908 (A. Derzhavin, leg.) Paratypes: 1 ♂, same data as the holotype; 5 ♂, same data as the allotype.

External characters. – Frons covered with tightly pressed dark-brown scales forming a conical tuft 2–2.5 times shorter than eye diameter. Labial palpi brown, rather short, with a length equal or slightly shorter than eye diameter; they look like dense brushes, apically skewed and pointed. Antennae thin, brown. Thorax and tegulae brown, with some admixture of white scales. Wing span: 18–21 mm (18 mm in holotype). Fore wings brownish-grey. At cleft base there are two elongate dark-brown spots, sometimes fused. On the first lobe in its middle part there is a slanting dark-brown band, outer of which there is a distinct white streak which continues, there being wider, on the second lobe. Between wing base and cleft there is an obscure elongate dark-brown spot, in some specimens reduced. Fringe inside cleft is lighter than wing ground colour. On fringe of the first lobe there are two dark-brown spots, at apex and on lower angle of the lobe. Fringe of the second lobe also has two dark spots: at apex and in middle of outer margin. Hind wings evenly brown-grey, with fringe of the same colour. Legs brown with whitish inner side.

Male genitalia. – Valva with a convex upper margin, Apical part of valva curved smoothly, its apex blunt. Uncus relatively wide, with a rounded apex; hardly (at 1/4 of its length) protruding behind tegumen hind margin. Arms of anellus short, bent at an angle of 125°, with blunt apices. Aedeagus slightly shorter than valva, cornutus weakly expressed. Basal processus of aedeagus directed perpendicular to coecum.

Female genitalia. – Ostium slightly widened at base, outline of its body even, without concavity, margins of its base somewhat stretched out and sharpened. Antrum tube-like, disposed along body axis, almost thrice as short as ductus, gradually narrowing to ductus. Hind margin of lamella praevaginalis straight, situated almost in the middle of ductus. In middle part of ductus bursae there is a sclerotized string. Signa narrow, with non-toothed margins. Apophyses posteriores narrow throughout their length, long, reaching ostium. Papillae anales of oval shape; bursa drop-shaped.

Fig. 1. *Stenoptilia kosterini* sp. n., holotype, male, S Kamchatka, Ust'-Bol'sheretsk, imago. – a. color photograph; – b. black-and-white photograph.

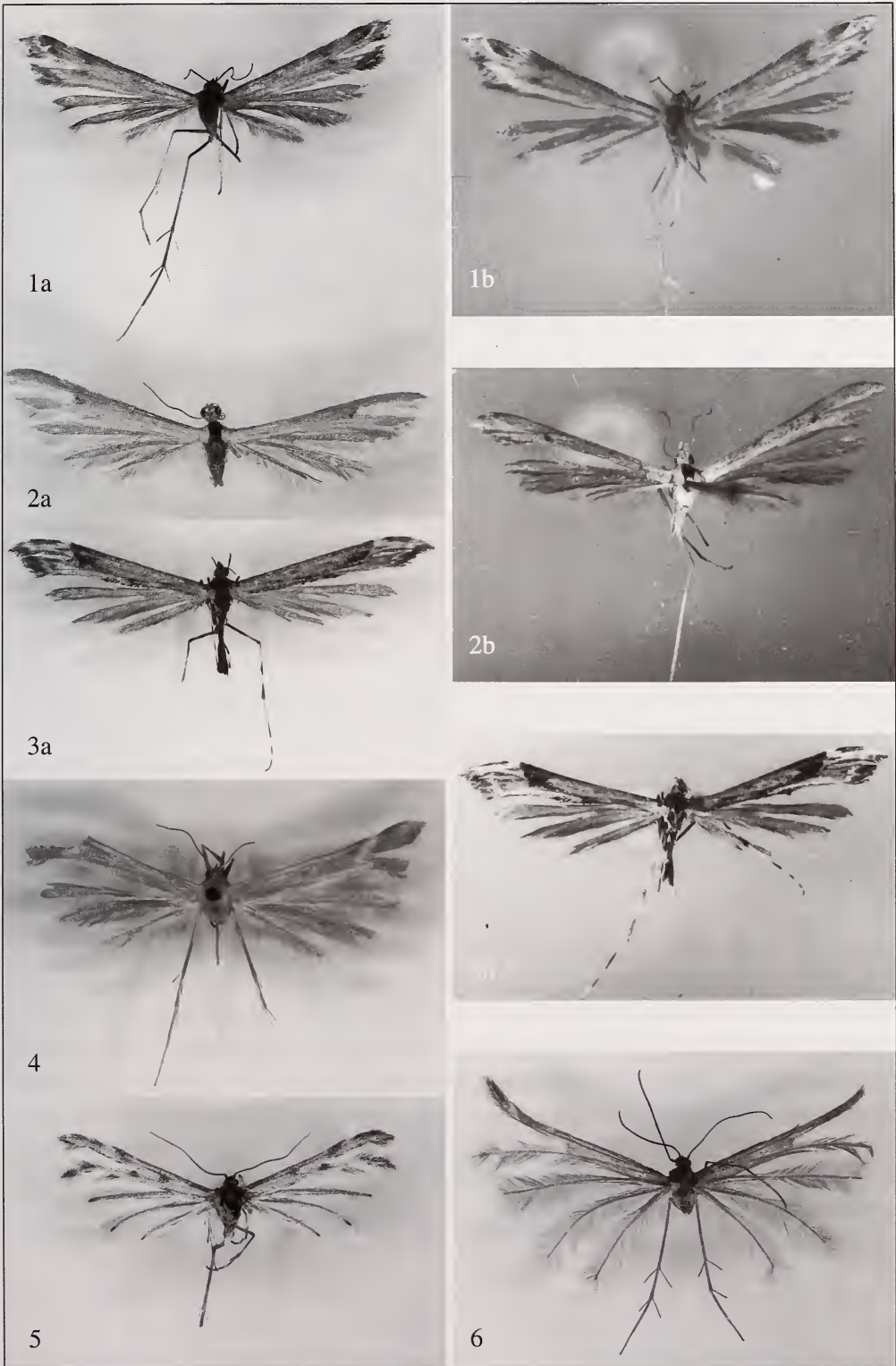
Fig. 2. *Stenoptilia dubatolovi* sp. n., paratype, female, Turkmenistan, the Kuhitangh Mountains, imago. – a. color photograph; – b. black-and-white photograph.

Fig. 3. *Amblyptilia zhdankoi* sp. n., paratype, female, Kazakhstan, Lake Issyk, imago. – a. color photograph; – b. black-and-white photograph.

Fig. 4. *Marasmarcha aibasovi* sp. n., holotype, female, West Kazakhstan, Urda, imago.

Fig. 5. *Porrithia herzi* sp. n., paratype, male, Turkmenistan, the Kuhitangh Mountains, imago.

Fig. 6. *Merrifieldia nivella* sp. n., holotype, male, Tadjikistan, the Pamirs, imago.



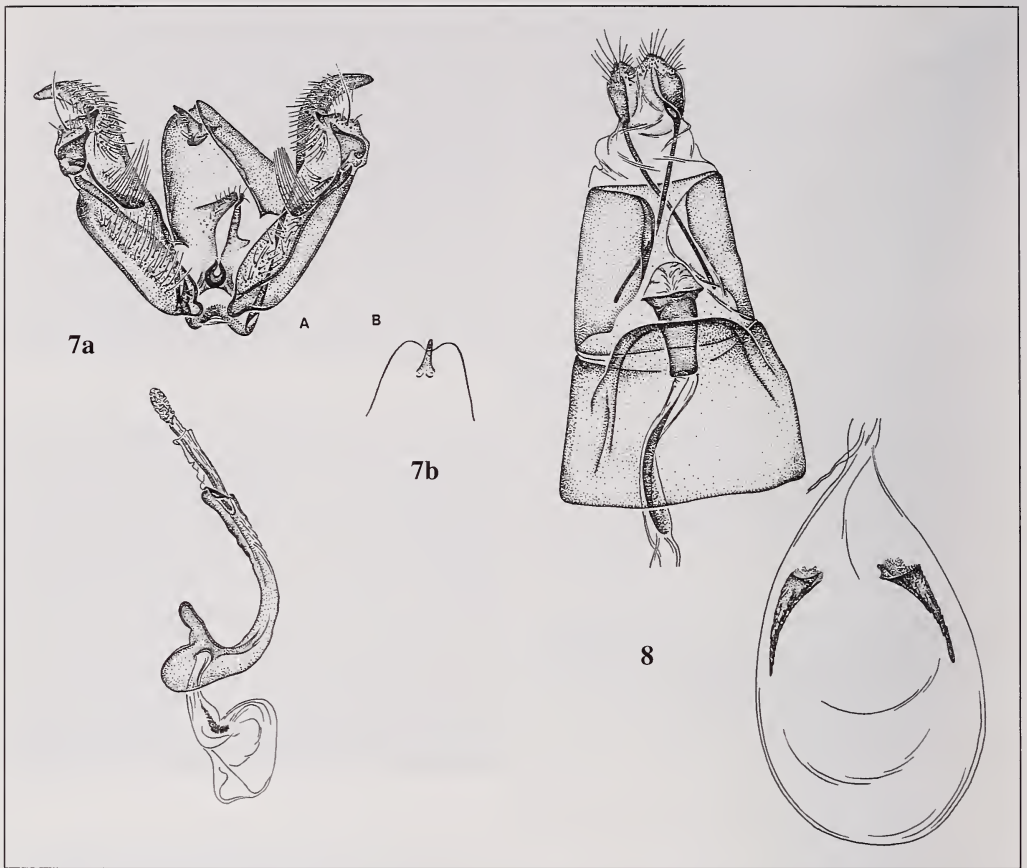


Fig. 7. *Stenoptilia kosterini* sp. n., holotype, male genitalia. – a. ventral view. – b. uncus and tegumen viewed frontally; – **Fig. 8.** *Stenoptilia kosterini* sp. n., allotype, female genitalia.

Diagnosis. – By the wing pattern the new species is close to *S. millieridactyla* (Bruand, 1861) and *S. latistriga* (Rebel, 1916) but differs from them by the genitalia structure. In the male genitalia, the valva shape, short arms of anellus and short uncus resemble those of *S. bipunctidactyla* (Scopoli, 1763), but the aedeagus structure is different: the basal processus is directed perpendicular to the coecum, whereas in *S. bipunctidactyla* it is slanting to the aedeagus. Besides, the new species differs from the mentioned one by the genitalia structure of females and much different wing colouration. By the female genitalia the new species is close to *Stenoptilia islandica* (Staudinger, 1857), from which it differs by a more smooth transition of antrum to ductus and an even margin of the antrum base, while in *S. islandica* the margin is concave. Beside, in the new species the signae are larger, as long as the antrum, while in *S. islandica* they are 1.5 times as short. The male genitalia and wing pattern also distinguish these two species significantly.

Comparison of the new species with a Japanese *Stenoptilia admiranda* Yano, 1963 provides significant differences in the male and female genitalia structures. In the new species the uncus protrudes behind the tegumen margin while in *S. admiranda* Yano it

just reaches the margin. In the female genitalia *S. kosterini* sp. n. has a short antrum, only one third in length compared to the ductus bursae, while in *S. admiranda* it is long, twice longer than the ductus bursae.

Range. – Kamchatka.

Habitat. – Two males, including the holotype, were collected by O. Kosterin on a marshy coastal plain at the western coast of South Kamchatka (8 km east of the coast, about 30 m) covered with fruticulose (*Empetrum nigrum* Linnaeus, 1758, *Chamaedaphne calyculata* (Linnaeus) Moench, 1794, *Betula exilis* Sukaczew, 1911) - sedge (*Carex* spp.) marshes with sparse bushy *Betula ermanii* Chamisson, 1831 and *Alnus hirsuta* (Spach) Fischer ex Ruprecht, 1857 (not *Alnus fruticosa* Ruprecht, 1845), on a meadow patch rich in herbaceous plants (among flowering plants noted are *Cirsium kamtschaticum* Ledebur ex DeCandolle, 1838, *Senecio cannabifolius* Less., 1831, *Acronitum maximum* Pallas ex DeCandolle, 1847, *Pedicularis resupinatum*, *Gentianella auriculata* (Pallas) Gillet, 1957). The other specimens were collected in the Central Kamchatka Depression, a territory of Kamchatka most isolated from the severe influence of the surrounding cold seas, but, judging from a general map, the Kluchevskoe environs as well abounds of marshes.

Etymology. – The species is named in honour of the naturalist and biologist Oleg Engel'sovich Kosterin (Novosibirsk) who collected this species.

Stenoptilia dubatolovi sp. n.

(Figs. 2, 9–10)

Material. – Holotype ♀, Turkmenistan, Kuhitangh Mts., Dzheilyau Plateau, foot of Airi-Baba Mt., about 2200 m, 13.VII.1991 (V.V. Dubatolov leg.) Paratypes: 1 ♂ the same label; 2 ♂, the same label but 2150 m, attracted by light, 21.V.1991; 1 ♂ and 1 ♀, Turkmenistan, 5 km of Bazar Depe, ruins Khodzha Karaul, 10.V.1991 (V.V. Dubatolov leg.).

External characters. – Frons covered with tightly pressed brownish-grey scales forming a small tuft 3 times shorter than eye diameter. Labial palpi brownish-grey, rather short, with a length equal or slightly greater than eye diameter; they look like dense brushes, somewhat widened apically. Antennae thin, brown. Thorax and tegulae also brownish-grey. Wing span: 17–21 mm (17 mm in holotype). Fore wings brownish-grey; at cleft base there are a dark-brown spot as if formed by two fused quadrangular spots. Between wing base and cleft there is another elongate dark-brown spot, in some specimens weakly expressed or reduced. Fringe inside cleft is lighter than wing ground colour. On fringe of the first lobe at apex there is a dark-brown spot. Fringe of the second lobe also has two dark spots: at apex and in middle of outer margin, the latter may be reduced or absent. Hind wings evenly brown-grey, with fringe slightly lighter on all the three lobes. Legs of the same colour as wings, may be somewhat lighter on inner side.

Male genitalia. – Valva with a straight upper margin, with apical part smoothly curved, its apex blunt. Uncus narrow, stick-like, protruding behind tegumen hind margin on 2/3 of its length. Arms of anellus short, with bluntly rounded apices. Aedeagus slightly shorter than valva, distally of its basal process much narrower than coecum; cornutus well expressed. Basal process of aedeagus is slanting to coecum.

Female genitalia. – Ostium wide, 2–2.5 times wider than antrum. Antrum very short, slightly narrowed to ductus spring, looks like a tridental crown. In middle part of

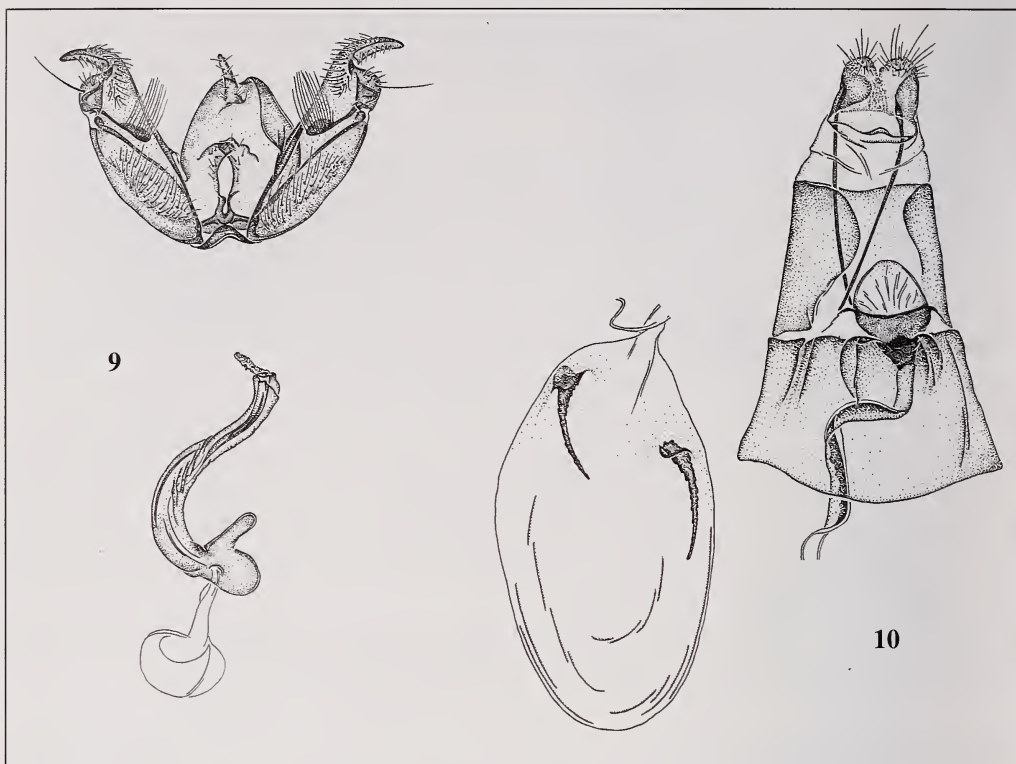


Fig. 9. *Stenoptilia dubatolovi* sp. n., holotype, male genitalia. **Fig. 10.** *Stenoptilia dubatolovi* sp. n., paratype, female genitalia.

ductus bursae there is a sclerotized string. Signa thin, with a toothed inner margin. Apophyses posteriores slightly curved, long, reach ostium.

Diagnosis. – The new species is most close to *Stenoptilia elkefi* Arenberger, 1984, from which it differs by structure of both the male and female genitalia. In *Stenoptilia dubatolovi* sp. n. the uncus is narrow, stick-like and is pointed bluntly while in *S. elkefi* the uncus is noticeably swollen at base and pointed apically. In the female genitalia the new species well differs from *S. elkefi* by the shape of antrum, in the former it resembles a trident crown while in the latter it is cup-like.

Concerning the female genitalia, by a short antrum the new species approaches also to *Stenoptilia millieridactyla* (Bruand, 1861), but the antrum shape is different as resembling a cup rather than a crown, and it bears no teeth. In the male genitalia, by short arms of anellus and a blunt valva apex the new species resembles *S. bipunctidactyla* from which it differs with an uncus more protruding forward, a slightly curved (but not bow-shaped) apical part of the valva, and a basal processus of aedeagus which is slightly slanting to the coecum, while in *S. bipunctidactyla* it is slanting to the opposite site.

Range. – Turkmenistan, the Kuhitangh Mountains.

Habitat. – The moths were collected in the upper part of a gorge slope on the Dzhailyau Plateau, in the upper part of the arboreal juniper altitudinal belt with dominance of highland xerophytic plants, at altitudes above 2000 m. This species develops at least in

two broods. The moths were collected at daytime as well as attracted by light at night.
Etymology. – The new species is named in honour of Vladimir Viktorovich Dubatolov (Novosibirsk) who collected this species.

Amblyptilia zhdankoi sp. n.

(Fig. 3, 11–12)

Material. – Holotype: ♂, Kazakhstan, 50 km east of Alma-Ata, Zailiiskii Alatau Mts., Lake Issyk, 1700 m, 20.IX.1994 (A.B. Zhdanko leg.). Paratypes: 4♂, 1♀, the same label.

External characters, Males. – Frons covered with tightly pressed brownish-grey scales forming a small tuft with length equal or slightly less than eye diameter. Labial palpi thin and rather long, twice as long as eye diameter, their outer side brown and inner side whitish. Antennae thin, brownish-grey; thorax and tegulae also brownish-grey. Wings elongate, rather narrow, wing span 26–27 mm (26 mm in holotype). Fore wings brownish-grey, with somewhat lighter first lobe and darker brown costal margin; at cleft base there is a dark-brown spot; second lobe with a weakly expressed light vertical stroke in centre. Fringe inside cleft light-grey, with an admixture of brownish hairs; fringe of fore wing anal margin whitish, only at its middle with a small bunch of dark-brown hairs. Hind wings evenly greyish-brown with a grey fringe which contain an admixture of brown hairs only at base on hind margin of the third lobe. Hind legs yellowish, with brown rings at spores and middle parts of femora and tibia.

Female. – Frons with a longer tuft which is 1.5 longer than eye diameter. Wing span 30 mm. As different from males, fore wing pattern more contrasted. Distal part of first lobe of fore wing has a slanting white band, it continues on second lobe; light vertical stroke on second lobe more developed than in males. Fringe of fore wing anal margin light-grey, in middle part with distinct patches of dark-brown scales. Hind legs with more developed dark-brown circles.

Male genitalia. – Cucculus on valva with a pointed apex directed downward. Uncus narrow, strongly pointed at apex. Hind margin of vinculum has a dense brush of setae along hind margin. Arms of anellus short and wide, of an angular shape, with triangular apices. Saccus without distinct incisions on inner margin, relatively even, only slightly concave in central part, it widens proximally and sharply narrows apically. Aedeagus bent at a straight angle, its proximal part on its inner margin bears small teeth. Basal processus directed perpendicularly to aedeagus.

Female genitalia. – Vaginal plate saddle-shaped with long ends which continue into apophyses anteriores, which are slightly curved but do not form angular projections. Apophyses posteriores straight, narrow and thin. Papillae anales of oval shape. Ductus bursae thin, weakly sclerotized, weakly swollen and bearing a sclerite just before confluence with bursa copulatrix. Antrum shifted to the right, heavily sclerotized, it reaches fore margin of tergite VIII. Bursa copulatrix prolonged with two horn-like signa.

Diagnosis. – In the male genitalia, the shape of the valva and cucculus resemble those of *Amblyptilia grisea* Gibeaux, 1996, but the new species differs from it by the vinculum shape and a presence of angular teeth on the inner margin of the proximal part of the aedeagus, while in *A. grisea* dentation is observed as well on its outer side. By

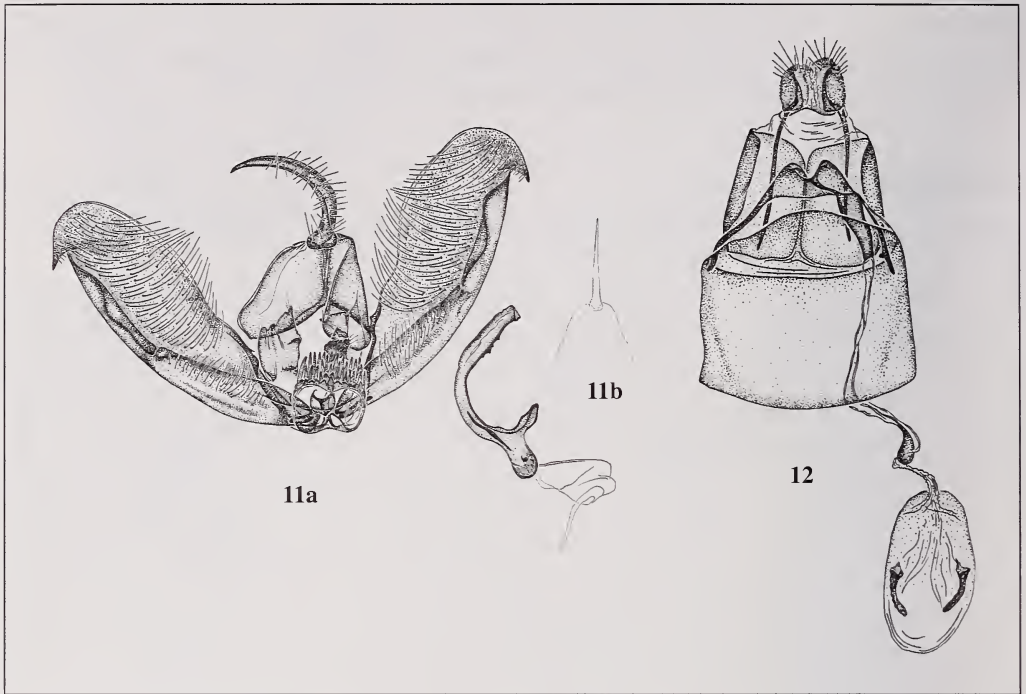


Fig. 11. *Amblyptilia zhdankoi* sp. n., holotype, male genitalia. – a. ventral view. – b. uncus and tegumen viewed frontally. **Fig. 12.** *Amblyptilia zhdankoi* sp. n., paratype, female genitalia.

the shape of saccus, with an even inner margin, it is close to *A. acanthadactyla* Hübner [1813] 1796, but differs from it by a pointed uncus and wide arms of anellus. In the female genitalia, by a crescent-shaped vaginal plate and a presence of a swelling with a sclerite in the ductus bursae the new species is close also to *A. acanthadactyla* but differs from it by the apophyses anteriores, which do not form angular projections.

From a very common North Eurasian species *Amblyptilia punctidactyla* Haw. the new species well differs both in external appearance and in the male genitalia, by a narrow apically pointed uncus and wide arms of anellus.

R a n g e . – Kazakhstan, the Zailiiskii Alatau Mts.

H a b i t a t . – The moths were collected at daytime, on a clearing in a Tien Shan spruce (*Picea schrenkiana*) forest on a western slope, at 1700 m.

E t y m o l o g y . – The species is named in honour of the lepidopterist Alexandr Borisovich Zhdanko, Alma-Ata, who collected these moths.

Marasmarcha aibasovi sp. n.

(Figs. 4, 13–14)

Material. – Holotype: ♂, West Kazakhstan, environs of v. Urda, 27.VII.1971 (Ch. A. Aibasov leg.)
Paratypes: 1 ♂, 2 ♀, the same locality, 22–28.VI.1971; 1 ♀, Turgai Province, 23 km N of town Turgai, 22.VI.1973 (Ch. Aibasov leg.).

External characters. – Frons covered with tightly pressed yellowish-brown scales. Labial palpi light-brown, straight, adpressed to frons, 1.5 times longer than eye diameter.

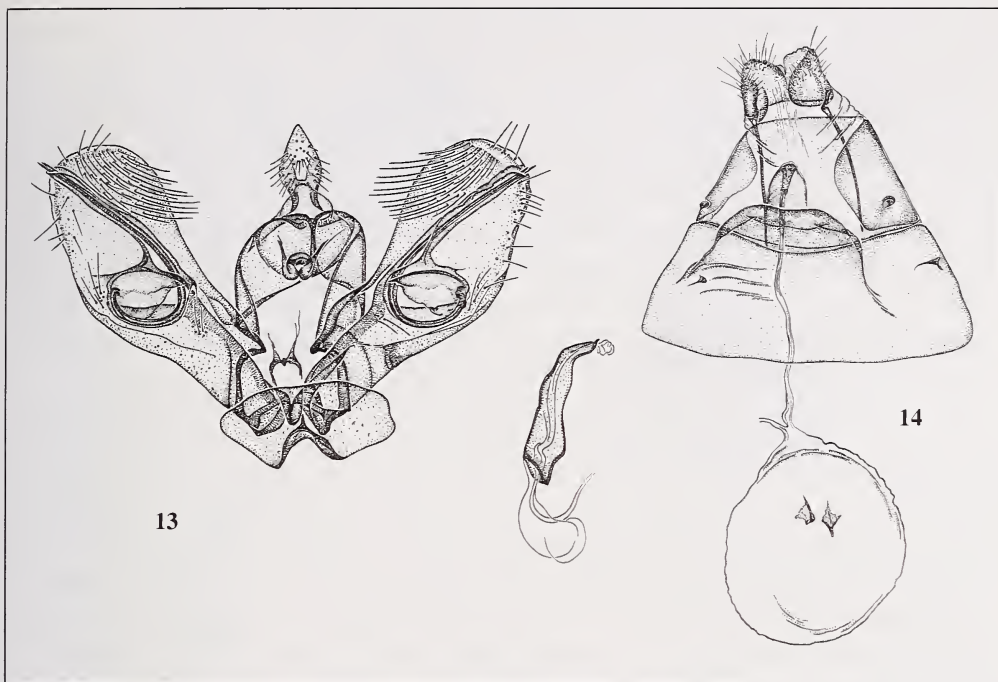


Fig. 13. *Marasmarcha aibasovi* sp. n., paratype, male genitalia (ventral view). **Fig. 14.** *Marasmarcha aibasovi* sp. n., paratype, female genitalia.

Antennae thin, light-brown. Thorax and tegulae yellowish-brown. Wing span 24–26 mm (26 mm in holotype). Fore wings light-brown, at cleft base and in central part of fore lobe there are whitish bands (not in all specimens of the type series they are distinct, probably due to insufficient preservation of specimens). Outer fringe of both lobes light, only beneath second lobe it is brown. Hind wings evenly light-brown, somewhat darker than fore wing. Fringe light-brown on all the three lobes. Legs yellowish-brown.

Male genitalia. – Valvae symmetrical, in middle part of valva there are needle-like processes wound into a ring, their free ends reaching valva apex. Valva outer margin slightly rounded apically; middle part of valva, which bears the processes, noticeably widened. There is a dense brush of long hairs on valva apex directed to its inner margin and reaching middle of valva. Uncus generally triangular but with a deep wrist. Saccus with a pointed apex. Gnathos horseshoe-shaped. Tegumen, as viewed from behind, looks like composed of two hemispheres. Aedeagus twice as short as valva, in distal part sharply bent and narrowed just before apex.

Female genitalia. – Antrum narrow, tube-shaped, somewhat wider than ductus bursae at its confluence. Antevaginal plate, on which antrum resides, rather wide, smoothly tapering to a flat and wide apex. Apophyses posteriores flattened, narrow, almost reach VIII tergite fore margin. Papillae anales with straight outer margin and convex inner margin. Bursa copulatrix oval-shaped with two signa which resemble triangular hoods with skewed apices and dentate outer margin. Ductus seminalis emerges from bursa base.

Diagnosis. – By the general wing colouration the new species resembles *Marasmarcha samarcandica* Gerasimov, 1930 but differs from it by the absence of the whitish lightened area in the central part of both lobes of the fore wing. In the male genitalia, by the shape of needle-like processes it resembles *M. ehrenbergiana* (Zeller, 1841) but differs in the valva apex; in the new species it is rounded, without projections, while in *M. ehrenbergiana* projections are present; besides, in the new species the uncus has a triangular apex while in *M. ehrenbergiana* the apex is skewed. There are also differences in aedeagus structure: in *M. ehrenbergiana* it is relatively straight while in the new species it is curved. In the female genitalia, by a narrow ductus and the shape of papillae anales the new species is close to *Marasmarcha pulchra* (Christoph, 1885), but differs from it well by the shape of antrum and signa.

By the male genitalia structure, especially by the shape of the aedeagus and the needle-like processes on the valvae wound into a ring, the new species somewhat resembles *M. asiatica* (Rebel, 1906), however it well differs from it by the absence of an incision on the uncus apex and the shape of the valvae. In *M. asiatica* the upper margin of the valva is strongly convex, in the new species it is only slightly rounded. Besides, in *M. asiatica* the valva apex is pointed while in *M. aibasovi* **sp. n.** it is smoothly rounded.

In the male genitalia structure there is also a proximity to *M. cinnamomea* (Staudinger, 1870), in which the uncus is of a similar shape and the needle-like processes on the valvae wound into a ring are also present. But in the latter species these processes protrude behind the valva margins, while in the new species they do not reach them. These species well differ also in the shape of the valvae. In *M. aibasovi* **sp. n.** the valva apex is bluntly rounded while in *M. cinnamomea* it is distinctly stretched out. Besides, in the new species the aedeagus is sharply bent in the distal part while in *M. cinnamomea* it is straight, without bents. In the new species in the female genitalia the antrum is long, narrow, tube-like while in *M. cinnamomea* it is short, of a ring-like shape.

Range. – West Kazakhstan.

Habitat. – The moths were collected at daytime in open semidesert-steppe habitats.

Etymology. – The new species is named in honour of the Kazakh lepidopterist Kh. A. Aibasov.

Porritia herzi sp.n.

(Figs. 5, 15–17)

Material. – Holotype: ♂, SW Kazakhstan, Karatau Mt. Range, 7 km N of v. Kentau, 21.V.1992 A. Zhdanko leg. Paratypes: 1 ♂, Uzbekistan, Samarkand, 12.IV.1892, O. Herz leg.; 7 specimens, SW Kazakhstan, Karatau Mt. Range, 7 km N of v. Kentau, 7-9.V.1994, V. Zolotuhin leg.; 1 ♀, S Uzbekistan, Ghissar Mts., 40 km SE of town Shakhrisabe, Kyzyl-darya River valley, 21.V.1994, V. Zolotuhin leg.; 1 ♂, Turkmenistan, Kuhitangh Mts., Kara-Belent mt. at settl. Bazar-Depe, 1650 m, 10.V.1991, V.V. Dubatolov leg.

External characters. – Head covered with adpressed greyish-brown scales. Labial palpi straight, short, hardly exceeding eye diameter, they, as well as thorax and tegulae, of the same colour. Wing span 16-18 mm. Fore wings light-grey with somewhat lighter first lobe but with a suffusion of brown scales along costal margin. There are four brown spots: two at fore lobe costal margin, one at cleft apex, and one between wing base and cleft base. Fringe checkered, with alternating brown and white areas.

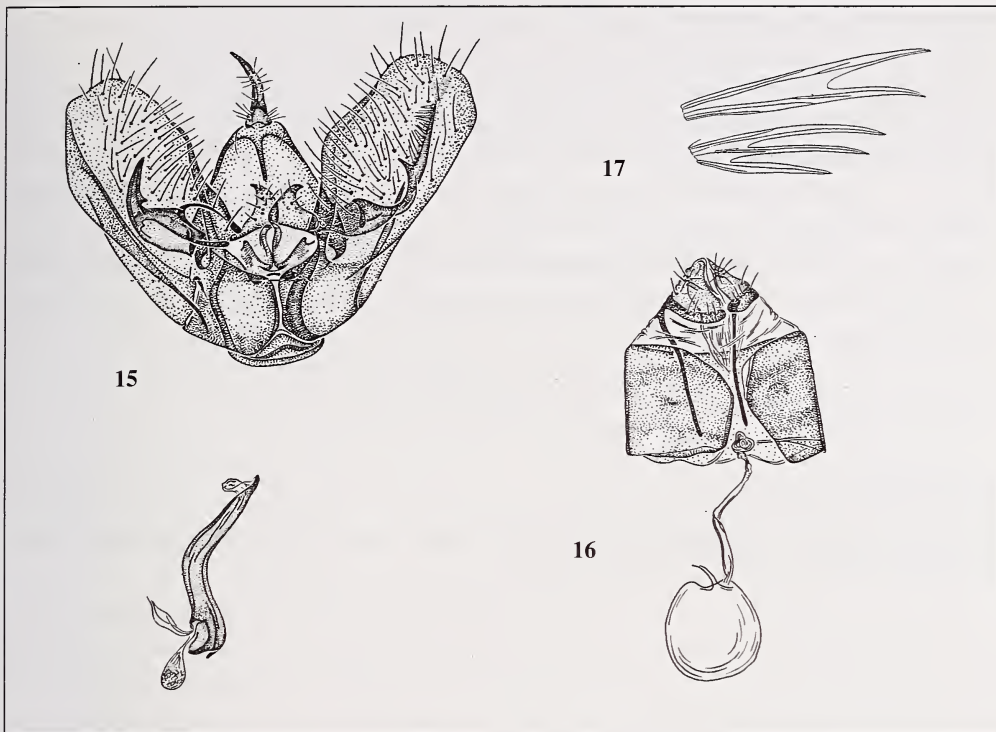


Fig. 15. *Porrittia herzi* sp. n., holotype, male genitalia (ventral view). **Fig. 16.** *Porrittia herzi* sp. n., paratype, female genitalia. **Fig. 17.** *Porrittia herzi* sp. n., paratype, wing venation.

Hind wings light-brown with admixture of light scales, fringe evenly light-grey. Legs whitish, with sparse brown specks.

Male genitalia. – Valvae asymmetrical: harpe on left valva looks like a hook bent at right angle, that on right valva resembles a deer horn. Uncus crescent-shaped, pointed apically. Arms of anellus short and wide, their apices rounded smoothly but end with pointed hooks. Aedeagus arch-like curved in its middle part, pointed at apex, it is 1.5 times shorter than valva.

Female genitalia. – Ostium broadened, almost rectangular, beneath with a small projection in central part, which is more sclerotized than ductus bursae. Ductus bursae thin, membranous. Apophyses posteriores rather short. Papillae anales of a triangular shape. Apophyses anteriores absent. Bursa copulatrix without signa.

Diagnosis. – The venation of this species suggests that it belongs to the genus *Porrittia* Tutt, 1905. This genus so far embraced two species, a widely distributed *Porrittia galactodactyla* (Denis & Schiffermüller, 1775) and a very peculiar and restricted Arabian *Porrittia imbecilla*. The new species has a certain similarity to *P. galactodactyla* by a mottled colouration but has a darker ground colour and differing disposition of spots. In the male genitalia the shape of the left harpe resembles that of *P. galactodactyla* but in the new species the harpe bears internally a tooth-like projection while in *P. galactodactyla* it lacks this projection. The female genitalia structures are also some-

what similar in these species but differ substantially by the shape of antrum. From the other species, *Porritia imbecilla* Meyrick, 1925, the new species differs both externally and by the genitalia structure. The mentioned species has a wing span of 8-11 mm while in *Porritia herzi* **sp. n.** it is 16-18 mm. In the male genitalia the left harpe is straight, awl-like in *P. imbecilla* and hook-like in the new species.

R a n g e . – SE Turkmenistan (the Kuhitangh Mts.), S Uzbekistan, SW Kazakhstan (the Karatau Mts.).

H a b i t a t . – The moths are met with at altitudes of 900-1600 m, in the Kuhitangh Mts. in Turkmenistan they were collected in the almond altitudinal belt; they fly from the middle of April to May.

E t y m o l o g y : The species is named in honour of O. F. Herz (1852-1905) who collected this species during his journey to Bukhara in April 1892.

***Merrifieldia nivella* sp. n.**

(Fig. 18)

Material. – Holotype: ♂, Tajikistan, the Pamirs, 15 km NE of the terminus of Fedchenko Glacier, Kaindy River, about 3500 m, 18.VIII.1958, Gorodkov leg.

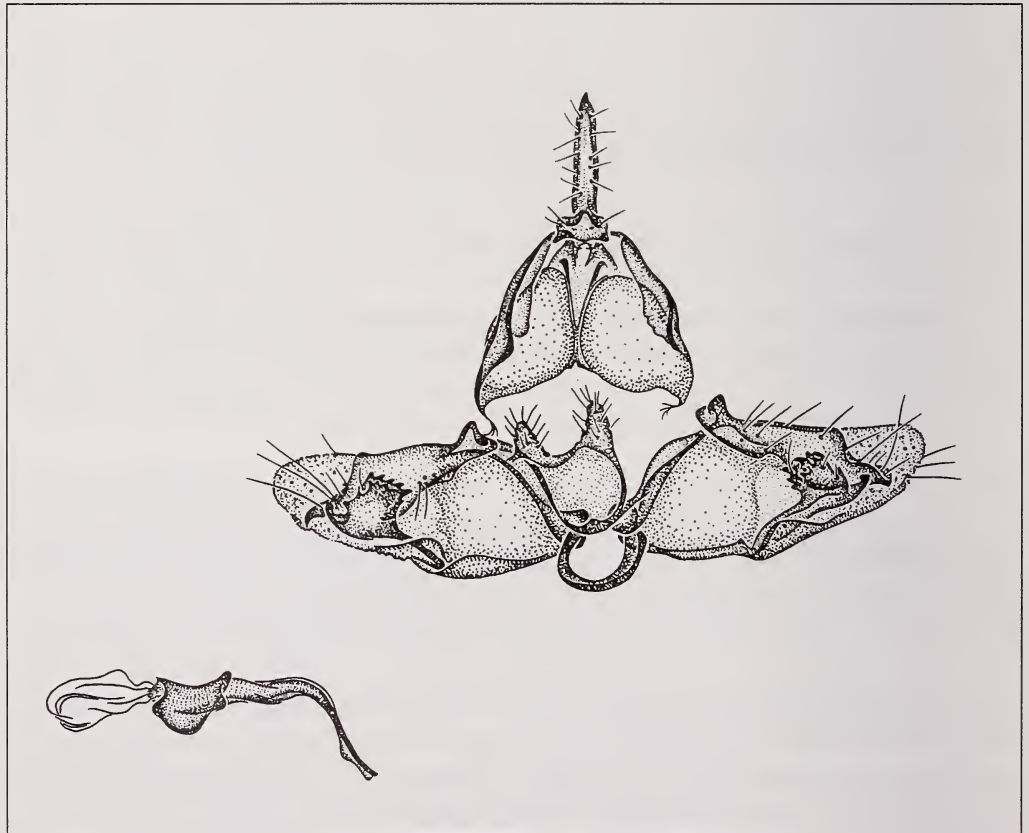


Fig. 18. *Merrifieldia nivella* **sp. n.**, holotype, male genitalia (ventral view).

External characters. – Head covered with appressed dark-grey scales. Labial palpi very short, equal eye diameter, set rather widely apart. Antennae dark-grey, smooth. Fore wings cleaft almost to a half of their length. Wing span 19 mm. Fore wings covered with brown and white scales that makes them ash-grey, without any pattern. Fringe mostly grey, only with a patch of white hairs at cleft base. Hind wings and their fringe evenly grey. Hind legs grey.

Male genitalia: Valvae symmetrical, at base with a harpe of a complicated structure, which look like a crest with erected processes and a narrow convex blade protruding behind inner margin of valva. Valva apex membranous, weakly sclerotized. Arms of anellus narrowed to apex. Uncus slightly curved, pointed apically, aedeagus wavy, bent with a pointed apex, its basal part noticeably widened.

Diagnosis. – By the wing shape this species resembles representatives of the genus *Merrifieldia* Tutt, 1905, while the genitalia structure is quite different from any other species of the subfamily Pterophorinae known from the Palaearctic. It might deserve segregation into a new genus, but such a step should only be taken once females and more males are known for closer study. Affiliation with the genus *Merrifieldia* was suggested by Dr. C. Gielis (pers. comm.). Unfortunately, the area where the holotype was collected is nowadays practically inaccessible.

Range. – Pamir.

Habitat. – Single known moth was collected at 3500 m.

II. New synonymies and distribution records of Palaearctic plume moths

Agdistis sissia Arenberger, 1987

Material. – Azerbaijan: 1♂, Nakhichevan. 19.VI.1977 (collector unknown). Armenia: 2♂. Vedi environs, Horovan desert, 9.VI.1997 (A. Dantchenko leg.).

Described from Turkey (Arenberger 1987); for the first time found in Armenia and Azerbaijan.

Agdistis asthenes Bigot, 1970

Material. – 3♂, 2♀, SE Kazakhstan, Uigurskii District, 15 km NW of v. Chundzha, Yasenevaya Roshcha cordone, attracted by light, 22-28.V.1991 (P. Ustjuzhanin leg.).

Described from Mongolia (Bigot 1970); for the first time found in Kazakhstan.

Agdistis falkovitchi Zagulajev, 1986

Material. – Kazakhstan: 1♀, SE Kazakhstan, Uigurskii District, 15 km NW of v. Chundzha, Yasenevaya Roshcha [Ash Grove] cordone, attracted by light, 24.VI.1990 (I. Kostjuk leg.). Mongolia: 1♀, Kobdo Aimak, Elkhon, 20 km SE of v. Altai, attracted by light, 26.VII.1970 (leg. Kerzhner & Chogsomzhav).

Described from Uzbekistan, reported also for Turkmenia (Zagulajev 1986). Here reported for Kazakhstan and Mongolia.

Agdistis gerasimovi Zagulajev & Blumental, 1994

Agdistis detruncatum Zagulajev & Blumental, 1994. Entomologicheskoe obozrenie, LXXIII, 1, 133-135. Holotypus, ♀, "Bukhara, Chargush, 27.V.1928, A. Gerasimov", "Coll. Zool. Inst., St. Petersburg, gen.praep. N.13072 ♀, det. Zagulajev & Blumental". **Syn. n.**

Material. – Tajikistan: 18 specimens, 180 km S of Dushanbe, Tigrovaya Balka Nature Reserve, 6-9.VIII.1991 (V. Zolotukhin leg.). Turkmenistan: 2♂, env. of town Bairam-Ali, attracted by light, 9 and 13.VIII.1991 (A. Mironov leg.).

Described from Uzbekistan (Zagulajev & Blumental 1994). Here reported for Turkmenistan and Tajikistan.

***Agdistis mevlaniella* Arenberger, 1972**

Material. – 1♂, SE Kazakhstan, Uigurskii District, 15 km NW of v. Chundzha, Yasenevaya Roshcha cordone, attracted by light, 22.V.1991 (P. Ustjuzhanin leg.); 1♂, SE Kazakhstan, Taldy-Kurgan Province, Sarkand District, environs of v. Topolevka, attracted by light, 31.VII.1957, (V. Kuznetsov leg.); 1 specimen, W Kazakhstan, Aktyubinsk Province, Uil River, 12.VI.1970 (Aibasov leg.).

Described from Turkey (Arenberger 1972), reported also for the Caucasus (Arenberger 1995) and Tajikistan (Zagulajev 1986). Now found in Kazakhstan.

***Agdistis turkestanica* Zagulajev, 1990**

Material. – 1♀, Turkmenistan, Chardzhou Province, settlement Teze-Durmush, 24.VI.1973 (M. Daricheva leg.).

Described from Kazakhstan (Zagulajev 1990), now found in Turkmenistan.

***Agdistis paralia* (Zeller, 1847)**

Material. – 2♀, Turkmenistan, Geok-Tepe, 9-10.VI.1981 (G. Krasilnikova leg.).

Described from Sicily (Zeller 1847), reported for N Africa (Caradja, 1920), S Europe (Arenberger 1995), Israel (Amsel, 1935), Malta (Prola & Racheli 1984), Greece (Staudinger 1870). Here reported for Turkmenistan.

***Agdistis flavissima* Caradja, 1920**

Material. – 1♂, Turkmenistan, environs of town Bairam-Ali, attracted by light, 13.VIII.1991 (A. Mironov leg.).

Described from NW China (Caradja 1920). Here reported for Turkmenistan.

***Platypylia ardua* McDunnough, 1927**

Material. – 1♂, Chukotka, Chaplinskii sources, 14.VII.1960 (collector unknown).

The species was described from Canada (McDunnough 1927). Here it is for the first time reported for Eurasia as it was found in Chukotka.

***Platypylia euridactyla* Zagulajev & Filippova, 1976**

Material. – 1♂, Chita Province, environs of v. Kyra, attracted by light, 6.VII.1990; 1♀, the same label, 14.VII.1997 (A. Bidzilya, I. Kostyuk).

Described from the Amur region (Zagulajev & Filippova 1976), known also from NE China (Manchuria) as *Platypylia manshurica* (Buszko 1977). First record from Transbaikalia.

***Platyptilia tesseradactyla* (Linnaeus, 1761)**

Material. – 4 specimens, E Kazakhstan, Markakol' District, a pass through Matobai Mt. Range at the southern bank of Lake Markakol', 5.VII.1996 (V. Zinchenko leg.).

This species is widely distributed in the Palaearctic but was not so far recorded from Kazakhstan.

***Buszkoiana capnodactylus* (Zeller, 1841)**

Platyptilia diversicilia Filipjev, 1931, Lepidopterologische Notizen. XI.- Comptes Rendues de l'Acad. Sci. U.R.S.S. 10: 337–342, 5 figs. **Syn. n.**

Material. – Holotype: ♂, «Krym, Sochinskii r-n, Golovinskaya dacha, na svet» [Crimea, Sochi District, Golovinskaya dacha, attracted by lights], collector and date unknown. (prep. genit. No 10889). Note: The original label is somewhat confusing since Sochi is not in Crimea but on the Black Sea coast of the Caucasus (the Krasnodarskii Krai Province).

Platyptilia diversicilia was described from the North Caucasus (Filipjev 1931). Examination of the holotype of this species, preserved in the Zoological Institute, Sankt Petersburg, showed their identity to *Buszkoiana capnodactylus* Zeller.

***Gillmeria armeniaca* (Zagulajev, 1984)**

Material. – 1♂ - Armenia, Erevan, 12-16.VI.1934 (M. Ryabov); 1♂ - Russia, Saratov Province, Engels District, 7 km S of town Engels, steppe, attracted by the light, 8.V.1998 (V. Anikin); 1♂ - NW Kazakhstan, the road Ural'sk-Aktyubinsk, 40 km SE of v. Novoalekseevka, 27.V.1998 (A. Danchenko); 5 specimens - NW Kazakhstan, Turgai Province, the Kaindy River floodland, steppe, 8-13.VI.1973 (Ch. A. Aibasov).

Gillmeria uralSKIensis Gibeaux, 1995, Phegea 23 (2) (1.VI.1995):91-92, figs. 1, 9-13. **Syn. n.**

G. uralSKIensis was described from NW Kazakhstan. Comparison of figures at the original description (Gibeaux 1995) and the specimens collected in NW Kazakhstan closely to its type locality with a specimen of *Gillmeria armeniaca* (Zagulajev 1984) from Armenia have shown undoubtedly that the former is identical to the latter.

***Oxyptilus chrysodactyla* ([Denis & Schiffermüller], 1775)**

Oxyptilus perunovi Ustjuzhanin, 1996, Atalanta (May 1996) 27 (1/2): 385-386, fig. 2 a, b. **Syn. n.**

It was an abnormal specimen with reduced brachioli in the male genitalia which was erroneously described as a new species (Ustjuzhanin 1996). This synonymy was indicated to me by Dr. C. Gielis (pers. comm.).

***Procapperia orientalis* Arenberger, 1988**

Material. – Tajikistan: 1 specimen, Ghissar Mts., 30 km N of Dushanbe, settlement Kondora, 1500 m, attracted by light, 19.IX.1991, 2♂, the same label, 26.IX.1991 (P. Ustjuzhanin leg.); 1♀, 18.VII.1987 (R. Sherniyazova leg.). Turkmenistan: 1♀, West Kopet-Dag Mts., town Kara-Kala, attracted by light, 19.IV.1982 (P. Ustjuzhanin leg.).

Described from Kashmir, India (Arenberger 1988 b), reported for Uzbekistan and Kirghizia (Gibeaux 1996). We have found this species also in Tajikistan and Turkmenia.

***Procapperia kuldshaensis* (Rebel, 1914)**

asiatica Zagulajev, 1986, Trudy zool. Inst., Leningrad 67: 87–90, figs. 8–10. (Arenberger, 1988 a).

Material. – 22 specimens, Kemerovo Province, Novokuznetsk District, 5 km NEE of v. Kuzedeevo, at railway station Ushchelye, Kondoma River right bank. a rocky cliff foot, 25.VII.1996 (O. E. Kosterin, O. G. Berezina).

The moths were very abundant but only on *Dracocephalum nutans* Linnaeus, 1758 plants (probably a larval foodplant), which at that time had finished flowering.

Ranges in Anterior and Central Asia, Altai and Tuva (Ustjuzhanin 1996). Here is reported for the Gornaya Shoriya Mts. (a northern extension of the Altai Mts.) in Kemerovo Province.

***Paracapperia anatolicus* (Caradja, 1920)**

Material. – Armenia: 3♂ 2♀, Khosrov Nature Reserve, 2500–3000 m, 7.VIII.1996 (A. Dantchenko leg.); 1♂, Lake Sevan, 23.VII.1997 (K. Efetov leg.). Tajikistan: 1♀, the Ghissar Mts., 30 km N of Dushanbe, settlement Kondora, 1500 m, attracted by light, 2.VII.1985 (R. Sherniyazova leg.). Turkmenistan: 1♀, West Kopet-Dag Mts., 50 km E of town Kara-Kala, settlement Ai-Dere, attracted by light, 26.IV.1982 (P. Ustjuzhanin leg.).

Described from Turkey (Caradja 1920), known also from Spain (Bigot & Picard 1986). Here I report it for Armenia, Tajikistan, and Turkmenistan.

***Amblyptilia grisea* Gibeaux, 1996**

Material. – Tajikistan: 1♂, the western Zaalaiskii [Transalai] Mts., 10–15 km E of settlement Lyakhsh, 4000 m, 27.VII.1987 (A. Lastukhin leg.). Kazakhstan: the Western Altai Mts., Ivanovskii Mt. Range, 20 km SE of town Leninogorsk, 1500–1700 m, 3.VI.1996 (R. Dudko, A. Vorontzov leg.). Russia: 1♀, SE Altai, 7 km NE of Zhumaly River mouth, a right tributary of Dzhazator River 2600 m, 9.VI.1998 (leg. V. Zinchenko).

Described from Alma-Ata, Kazakhstan (Gibeaux 1996), here reported from Tajikistan and the Altai Mts. (E Kazakhstan and Siberia, Russia).

***Stenoptilia pterodactyla* (Linnaeus, 1761)**

Material. – 1♂, Primorie, the Usuriiskii Bay coast, Bol'shoi Kamen', 23.VII.1974 (V. Zhierikhin leg.)

This species is widely distributed throughout the Palearctic but for the Far East of Russia is reported now for the first time.

***Stenoptilia islandica* (Staudinger, 1857)**

Material. – 1♂1♀, Yakutia, Tiksi, spotty tundra, 2.VIII.1957; 1♀, Apuka River upper flow, 600 m, 12.VII.1959 (K. Gorodkov leg.); 2♂ 3♀, Chukotka, 40 km NE of settlement Provideniya, 21.VII.1991 (Y. Tchistjakov leg.); 1♂, SE Altai Mts., Ukok Plateau, 2200 m, 3.VII.1995 (A. Bidzilya leg.).

Described from Iceland (Staudinger 1857), known also for Scotland, Norway and Sweden (Gielis 1996), here for the first time reported for Asia: SE Altai Mts. and Transpolar Siberia.

***Stenoptilia veronicae* Karvonen, 1932**

agutsana Ustjuzhanin, 1996, *Atalanta* 27: 374–376, Plate 3, fig. 4 a-c (Ustjuzhanin, 1999)

Material. – 2 specimens, Polar Ural, environs of town Labytnangi, 23.VII.1995; 11 specimens, Polar Ural, 141 km on railroad Seida-Labytnangi, Sob' River floodland, 27-30.VII.1995 (I. Lyubechanskii); 1 ♂, 1 ♀, Ust'-Ordynsk Buryat Autonomous Region, 20 km S of v. Ust'-Ordynskoe, attracted by light, 2.VIII.1984 (S. Sinev leg.); 1 ♂, Yakutia, Indigirka River basin, 300 km NNE of settlement Khandyga, Suntar River lower reaches at hydrology station, 5.VII.1995 (V. V. Dubatolov leg.); 1 ♀, Central Yakutia, Aldan River basin, village Megino-Aldan, 20 km downstream of Amga River mouth, 30.VI.1982 (E. L. Kaimuk); 1 ♂, Amur Province, environs of Blagoveshchensk, 4.VIII.1995 (A. N. Streltsov leg.); 1 ♀, Southern Primorye, Pogranichnyi District, v. Barabash-Levada, 3.VIII.1989 (E. Belyaev leg.).

The species was earlier known from North Europe (Gielis 1996). It is also found in the Altai Mts. (Ustjuzhanin, Gielis in litt.) and in E Siberia, from where it was described as *S. agutsana* Ustjuzhanin 1996 (for synonymy see Ustjuzhanin 1999). Now recorded from further regions of Siberia, the Polar Ural and the Russian Far East.

***Stenoptilia parnasia* Arenberger, 1986**

Material. – Armenia: 1 ♀, Armenia, Aragatz, valley Ambert, 2500-3400 m, 17. -24.VII.1996; 1 ♀, Aiotzorskii Mt. Range, settlement Gnishek, 2000-2400 m, 20. -25.VII.1998 (A. Dantchenko leg.).

Described from Greece (Arenberger 1986), here reported for Armenia.

***Stenoptilia alai* Gibeaux, 1995**

Material. – 1 ♂, 3 ♀, Kazakhstan, Zailiiskii Alatau Mts., Maloe Almaatinskoe gorge, 2500 m, 26.VII.1957 (A. Danilevskii, V. Kuznetsov leg.)

Described from Tajikistan (Gibeaux 1995), here reported for Kazakhstan.

***Stenoptilia inexpectata* Gibeaux, 1995**

Material. – 11 specimens, Turkmenistan, Central Kopet-Dagh Mts, 15 km W of Firyuza, Dushak Mountain, 3-11.VII.1990 (leg. V. Dubatolov).

The species was described based on its holotype from Kirghizia (the Terskei Alatau Mts.) and a paratype from the Russian Far East: Ussuri, Chabarowka (Gibeaux, 1995). Their conspecificity seems very dubious, taking into account the distance of 7000 km and principally different habitats. By comparison with the holotype, here I report *S. inexpectata* for Turkmenistan.

***Stenoptilia caradjai* Gibeaux, 1995**

Material. – Kazakhstan: 1 ♀, Malaya Almaatinka River, 1450 m, 26.VII.1937 (collector unknown); 1 ♂, Tyshkantau Mts., 8.VII.1992 (A. Zhdanko leg.).

Described from Tajikistan: Alai (Gibeaux 1995), now also found in Kazakhstan.

***Stenoptilia aktashiensis* Gibeaux, 1996**

Material. – Tajikistan: 1 ♀, Ghissar Mts. Anzob Pass, 3600 m, 14.VIII.1946 (Gusakovskii leg.); 1 ♀, 30 km N of Dushanbe, Kondara Gorge, 1100 m, 21.VI.1984; 5 specimens, the same label, 20.VII - 3.VIII.1985 (R. Sherniyazova leg.); 1 ♀, 26.VII.1991 (P. Ustjuzhanin leg.). Uzbekistan: 7 specimens, 60 km SEE of Tashkent, Chatkal'skii Nature Reserve, 7-20.X.1992 (V. Zolotuhin leg.). Turkmenistan: 9 specimens, 5 km

of Bazar-Depe, office of the Kuhitangh Nature Reserve, 1700 m, 10.V.1991; 8 specimens, Kuhitangs Mts., Dzheilyau Plateau, 2200 m, 13.VII.1991; 9 specimens, the Airi-Baba Mt., 14.VII.1991; 1 ♀, Central Kopet-Dag Mts, settlement Firyuza, 25.V.1991 (V. Dubatolov leg.). SW Kazakhstan: 1 ♂, 15 km N of Kentau, Karatau Mt. Range, 900 m, 6.V.1994 (V. Zolotuhin leg.).

Described from Kirghizia: the Terskei Alatau Mts (Gibeaux 1996). Found also in Tajikistan, Uzbekistan, Kazakhstan, and Turkmenistan.

***Merrifieldia caspia* (Lederer, 1870)**

Material. – 1 ♀, Tajikistan, Iskander-Datya River gorge, 1700 m, attracted by light, 25.VI.1965 (M. Falkovich leg.).

Described from Iran (Lederer, 1870), known also from India, Turkey, China, Turkmenia, Uzbekistan, Kirghizia (Arenberger 1995), now found in Tajikistan.

***Merrifieldia malacodactyla* (Zeller, 1847)**

Material. – 1 ♀, SE Kazakhstan, Taldy-Kurgan Province, Sarkand District, 8 km E of settlement Topolevka, attracted by light, 2.VII.1957 (V. Kuznetsov leg.).

A species widely ranging throughout the Palaeartic which, however, is here for the first time reported for Kazakhstan.

***Wheeleria elbursi* (Arenberger, 1981)**

Material. – Armenia: 3 specimens, surroundings of Erevan, v. Migry, 7.V.1937 (M. Ryabov leg.); 1 ♀, Khosrov Nature Reserve, 2500-3000 m, 7.VII.1996; 8 specimens, Vedi environs, Horovan desert, 9.VI.1996 (A. Dantchenko leg.).

Described from Iran (Arenberger 1981), known also from Turkey (Arenberger 1995), here for the first time reported from Armenia.

***Wheeleria kabuli* (Arenberger, 1981)**

Material. – 2 ♀, Azerbaijan, Nakhichevan', 19.VI.1977 (collector unknown).

Described from Afghanistan (Arenberger 1981). Here for the first time reported for Azerbaijan.

***Tabulaeophorus ussuriensis* (Caradja, 1920)**

Material. – 2 ♂, Chita Province, left bank of the Budyumkan River 5 km upstream of its mouth, open Mongolian oak/Dahurian birch/larch/pine mixed forest on a ridge crest, I.VIII.1997 (V. Dubatolov leg.).

Described from Primorye (Caradja 1920), found in Transbaikalia.

***Tabulaeophorus marptys* (Christoph, 1872)**

Material. – Russia: 2 ♂, Chita Province, 50 km N of Chita, v. Burgen', attracted by light, 18-19.VI.1995 (I. Kostjuk, O. Kostjuk, M. Golovushkin). Kazakhstan: 1 ♂, Zailiiskii Alatau Mts., Maloe Almaatinskoe Gorge, 2500 m, 27.VII.1957 (V. Kuznetsov, A. Danilevskii leg.); 1 ♂, Turgai Province, Kaindy River, 5.VI.1973; 2 specimens, Aktyubinsk Province, Kush River, sands, June 1971 (Aibasov leg.); 2 specimens, NW Kazakhstan, road Ural'sk-Aktyubinsk, 40 km SE of v. Novoalekseevka, 27.V.1998 (A. Dantchenko leg.).

Described from the southern Volga Basin (Christoph 1872), reported also for Mongolia (Zagulajev & Pentschukovskaja 1972), Altai and Tuva (Ustjuzhanin 1996, as *Wheeleria kaszabi* Bigot); now found in Transbaikalia and Kazakhstan.

***Tabulaeophorus decipiens* (Lederer, 1870)**

Material. – 1 ♀, Tajikistan, Ghissar Mts., 30 km N of v. Dushanbe, Kondara Gorge, attracted by light, 15.IX.1991 (P. Ustjuzhanin leg.).

Described from Iran (Lederer 1870), known also from Armenia and Kirghizia. Here I report it for Tajikistan.

***Tabulaeophorus parthicus* (Lederer, 1870)**

Material. – Turkmenistan: 2 ♂, Central Kopet-Dag, 15 km W of Firyuza, Dushak Mt., 9.VII.1990 (V. Dubatolov leg.). Armenia: 1 ♂, environs of Vedi, Horovan Desert, 9.VI.1997 (A. Dantchenko leg.).

Described from Iran (Lederer 1870); known also from Turkey, Syria, Israel, Jordan, Afghanistan, Azerbaijan (Arenberger 1995). Here reported for Turkmenistan and Armenia.

***Tabulaeophorus sesamitis* (Meyrick, 1905)**

Material. – Turkmenia, Bakharden District, Ipai-Kala Gorge, attracted by light 23.VII.1973 (G. Krasilnikova).

Described from Burma (Meyrick 1905), known also from India and Afghanistan (Arenberger 1995), here for the first time reported for Turkmenistan.

***Tabulaeophorus hissaricus* (Zagulajev, 1986)**

Material. – 1 ♂, Uzbekistan, 60 km SEE of Tashkent, Chatkal Nature Reserve, 1-2.VIII.1991 (V. Zolotuhin leg.).

Described from the Ghissar Mts. in Tajikistan (Zagulajev, 1986), here for the first time reported for Uzbekistan.

***Calyciphora nephelodactyla* (Eversmann, 1844)**

Material. – 1 ♂, NW Kazakhstan, Akshata Mts., northern environs of settlement Uil, 3-4.VI.1998 (A. Dantchenko leg.).

Described from the southern Volga Basin (Eversmann, 1844), known also from South Europe, Turkey, Syria, Georgia (Arenberger 1995), here for the first time reported for Kazakhstan.

***Calyciphora xerodactyla* (Zeller, 1841)**

Material. – 3 specimens, Kemerovo Province, Novokuznetskii District, 8 km E of v. Kuzedeevo, 440 m, 23-24th July 1995; 3 specimens, same locality, 17.VII.1996 (leg. O. E. Kosterin & O. G. Berezina).

Ranges in Europe and Turkey, reported for Irkutsk (Arenberger 1995).

A female specimen reported by me for Taishet (Central Siberia) as *C. nephelodactyla* (Eversmann, 1844) (Ustjuzhanin 1996) in fact belongs to this species. Now found at the foothills of the Gornaya Shoriya Mts., Kemerovo Province, in relic lime (*Tilia sibirica* Fischer) forests which are very moist and are characterized by tall herbaceous undergrowth.

Calyciphora marashella Zagulajev, 1986

Material. – 1 ♀, Armenia, Aragatz, valley Ambert, 2800-3400 m, 24-30.VIII.1996 (A. Dantchenko leg.).

Known from the first description from Turkey (Zagulajev 1986). I report it for the first time from Armenia.

Hellinsia nigridactylus (Yano, 1961)

Material. – Chita Province: 1 specimen, 12 km SW of v. Gazimurskii Zavod, 2 km SW of v. Dogye, a forb meadow at birch forest, at dusk, 23.VII.1997; 1 ♂, Budyumkan River left bank 5 km upstream of its mouth, open Mongolian oak/Dahurian birch/larch/pine mixed forest on a ridge crest, 26.VII.1997 (leg V. Dubatolov, O.Kosterin & O.Berezina).

Described from Japan (Yano, 1961), known also from Manchuria (Buszko 1977), the Russian Far East: Primorye, Sakhalin (Ustjuzhanin 1996); here reported for SE Transbaikalia.

Hellinsia chrysocomae (Ragonot, 1875)

Material. – Uzbekistan: 2 specimens, 60 km SEE of Tashkent, Chatkal Nature Reserve, 5 and 29.V.1992; 2 ♀, the same label, 13-14.VI.1992. Russia: 1 ♂, Primorye, v. Yakovlevka, 12.VIII.1926 (leg. Djakonov & Filipjev).

Widely distributed over Europe, the Caucasus and Central Asia (Kirghizia, Afghanistan, Mongolia) (Arenberger, 1995), in Siberia known from Irkutsk (Ustjuzhanin 1996). I report it here for Uzbekistan and the southern Far East of Russia.

Finally, some taxa which I described earlier (Ustjuzhanin 1996) turned out to be junior synonyms. This synonymy was recently published in Russian (Ustjuzhanin 1999) and is listed here again to make these taxonomic changes more widely known in the international literature:

Platyptilia johnstoni Lange, 1940 = *P. tschukotka* Ustjuzhanin, 1996.

Platyptilia melanoschista Fletcher, 1940 = *P. alexandri* Ustjuzhanin, 1996.

Fuscoptilia Arenberger, 1991 = *Snellenia* Ustjuzhanin, 1996.

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References

- Amsel, H. G. 1935. Neue palaestinensische Lepidopteren. – Mitt. zool. Mus. Berlin **20**: 271–319, 10 pl.
- Arenberger, E. 1972. Eine neue *Agdistis*-Art aus Kleinasien. – Beitr. naturkd. Forsch. Südwest-Dtl. **31**: 151–152.
- Arenberger, E. 1981. Die *Pterophorus*-Arten West- und Zentralasiens. 2. Beitrag. – Z. Arbeitsgem. öster. Ent. **33**: 17–29.
- Arenberger, E. 1986. Ergänzende Bemerkungen zur Familie Pterophoridae. – Z. Arbeitsgem. öster. Ent. **37**: 76–80.
- Arenberger, E. 1987. Pterophoridae aus dem Östlichen Mittelmeerraum. – Z. Arbeitsgem. öster. Ent. **38**: 103–106.
- Arenberger, E. 1988 a. Weitere palaearktische Pterophoridae (Lepidoptera). – Z. Arbeitsgem. öster. Ent. **39**: 65–70.
- Arenberger, E. 1988 b. Pterophoridae aus Kaschmir. – Z. Arbeitsgem. öster. Ent. **40**: 23–32.
- Arenberger, E. 1995. Microlepidoptera Palaeartctica, vol. **9**: Pterophoridae. I–XXV, 1–258 pp.: pls. 1–153. Braun, Karlsruhe.
- Bigot, L. 1970. Ergebnisse der zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei. 192. Pterophoridae. – Reichenbachia **12**: 281–286.
- Bigot, L. & J. Picard 1986. Notes sur les especes europeennes du genre *Capperia* et creation de deux nouveaux sous-genres. – Alexanor **14** Suppl.: [21]–[24].
- Buszko, J. 1977. Manchurian Pterophoridae from the collection of the institute of systematic and experimental zoology, Polish academy of sciences, Cracov. – Polskie Pismo ent. **44**: 333–337.
- Caradja, A. 1920. Beitrag zur Kenntnis der geographischen Verbreitung der Mikrolepidopteren des palaearktischen Faunengebietes, nebst Beschreibungen neuer Formen. III. Teil. – Dt. ent. Z. Iris **34**: 75–179.
- Christoph, H. 1872. Neue Lepidoptera des europäischen Faunengebietes. – Hor. Soc. Ent. Ross. **9**: 38–39, plate 2.
- Gibeaux, C. 1995. Etude des Pterophoridae (37e note). Sur quelques especes de Pterophoridae d'Asie Centrale. – Phegea **23**: 91–104.
- Gibeaux, C. 1996. Etude des Pterophoridae (40e note). Elements pour une faune des Pterophoridae d'Asie centrale. – Alexanor. **19** (7): 415–448.
- Gielis, C. 1996. Pterophoridae. – In: P. Huemer, O. Karsholt and L. Lyneborg (eds): Microlepidoptera of Europe **1**: 1–222 pp., 16 pls. Apollo Books, Stenstrup.
- Filipjev, N. 1931. Lepidopterologische Notizen. XI. – Comptes Rendues de l'Acad. Sci. U.R.S.S. **10**: 337–342, 5 figs.
- Lederer, J. 1870. Nachtrag zum Verzeichnis der von Herrn J. Haberhauer bei Astrabad in Persien gesammelten Schmetterlinge. – Hor. Soc. Ent. Ross. **8**: 3–28, 3 plates.
- McDunnough, J. 1927. Contribution toward a knowledge of our Canadian plume-moths. – Trans. R. Soc. Can. **21** (sect. V): 175–190.
- Meyrick, E. 1905. Description of Indian microlepidoptera. – J. Bombay Nat. Hist. Soc. **16**: 580–619.
- Prola, C. & T. Racheli 1984. An annotated list of Italian Pterophoridae. – Atalanta **15**: 305–337.
- Staudinger, O. 1857. Reise nach Island. – Stettin. ent. Z. **18**: 280–281.
- Staudinger, O. 1870. Beitrag zur Lepidopteren Fauna Griechenlands. – Hor. Soc. ent. Ross. **7**: 279–283, Plate 3.
- Ustjuzhanin, P. Ya. 1996. Plume moths of Siberia and the Russian Far East. – Atalanta **27**: 345–409.
- Ustjuzhanin P. Ya. 1999. 53. Semeistvo Pterophoridae – Pal'tsekrylki [Familia Pterophoridae – Plume Moths]. – In: Key to the insects of Russian Far East, Vol. **V**. Trichoptera and Lepidoptera, Part. 2. – Dal'nauka, Vladivostok, pp. 519–571 (in Russian).
- Yano, K. 1961. Descriptions of two new species of Pterophoridae from Japan. – Kontyu **29** (3): 151–156.
- Zagulajev, A. K. 1984. A new species of the plume moths from the Armenian SSR – Doklady Akad. Nauk Armenyan SSR. **79**: 46–48 (in Russian).

- Zagulajev, A. K. 1986 a. Pterophoridae of Central Asia. – Trudy zool.Inst. Leningrad **67**: 76–94 (in Russian).
- Zagulajev, A. K. 1986 b. [The family Pterophoridae – the plume moths] – Opređitel' Nasekomykh Evropeyskoy Chasti SSSR. Vol. **4**. Cheshuekrylye, Part. 3, Leningrad. pp. 26–215 (in Russian).
- Zagulajev, A. K. 1990. New species of moths of the fauna of the USSR. IV. – Entom. Obozr. **69** (1): 102–117, figs. 1–9. (in Russian).
- Zagulajev, A. K. & Blumental, N.A., 1994. New species of Pterophorid moths of the genus *Agdistis* Hbn. From Middle Asia. – Ent. Obozr. **73**: 128–135. (in Russian).
- Zagulajev, A. K. & V. V. Filippova 1976. New and little known species of plume-moths of the fauna of the USSR. – Zool. Fauna Akad. Nauk USSR. **64**: 36–43. (in Russian).
- Zagulajev, A. K. & T. A. Pentschukovskaya 1972. Plume moths from the Mongolian People's Republic. – Insects of Mongolia **1**: 687–692. (in Russian).

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