

<http://dx.doi.org/10.11646/zootaxa.4000.2.1>
<http://zoobank.org/urn:lsid:zoobank.org:pub:B3EAB2EE-8DC2-4FB3-956E-36604B91EA18>

A review of the genus *Drymeia* Meigen, 1826 (Diptera: Muscidae) in Russia

VERA S. SOROKINA^{1,3} & ADRIAN C. PONT²

¹Siberian Zoological Museum, Institute of Systematics and Ecology of Animals, Russian Academy of Sciences, Siberian Branch, Frunze Street 11, Novosibirsk 630091, Russia. E-mail: sorokinavs@mail.ru

²Hope Entomological Collections, Oxford University Museum of Natural History, Parks Road, Oxford OX1 3PW, United Kingdom. E-mail: pont.muscidae@btinternet.com

³Corresponding author. E-mail: sorokinavs@mail.ru

Table of contents

Abstract	152
Introduction	152
Material and methods	153
Results	153
The genus <i>Drymeia</i> Meigen, 1826	153
Key to the Russian species of <i>Drymeia</i> Meigen	154
<i>Drymeia acrostichalis</i> sp. nov.	157
<i>Drymeia alpicola</i> (Rondani, 1871)	160
<i>Drymeia aristata</i> sp. nov.	161
<i>Drymeia brumalis</i> (Rondani, 1866)	164
<i>Drymeia cantabrigensis</i> (Huckett, 1965)	164
<i>Drymeia chillcotti</i> (Huckett, 1965)	164
<i>Drymeia cilitarsis</i> sp. nov.	165
<i>Drymeia cristata</i> sp. nov.	167
<i>Drymeia fasciculata</i> (Stein, 1916)	169
<i>Drymeia firthiana</i> (Huckett, 1965)	169
<i>Drymeia glabra</i> sp. nov.	171
<i>Drymeia grandis</i> sp. nov.	173
<i>Drymeia grisea</i> sp. nov.	177
<i>Drymeia groenlandica</i> (Lundbeck, 1901)	179
<i>Drymeia gymnopthalma</i> (Hennig, 1963)	181
<i>Drymeia hamata</i> (Fallén, 1823)	181
<i>Drymeia longiseta</i> sp. nov.	181
<i>Drymeia neoborealis</i> (Snyder, 1949)	183
<i>Drymeia phaonina</i> sp. nov.	185
<i>Drymeia pribilofensis</i> (Malloch, 1921)	187
<i>Drymeia puchokana</i> sp. nov.	188
<i>Drymeia quadrisetosa</i> (Malloch, 1919)	190
<i>Drymeia segnis</i> (Holmgren, 1883)	192
<i>Drymeia setibasis</i> (Huckett, 1965)	192
<i>Drymeia sibirica</i> (Hennig, 1962)	195
<i>Drymeia similis</i> (Malloch, 1918)	196
<i>Drymeia taymirensis</i> sp. nov.	196
<i>Drymeia tetra</i> (Meigen, 1826)	199
<i>Drymeia triseta</i> sp. nov.	200
<i>Drymeia vicana</i> (Harris, 1780)	203
Acknowledgements	204
References	205

Abstract

A key is provided to the 26 species of the genus *Drymeia* Meigen, 1826 known from Russia and four additional species that may be found in Russia (*D. brumalis* (Rondani, 1866), *D. cantabrigensis* (Huckett, 1965), *D. gymnophthalma* (Hennig, 1963), *D. similis* (Malloch, 1918)). The key includes the 10 new species here described from the mountains of South Siberia (*D. acrostichalis* sp. nov., *D. aristata* sp. nov., *D. cilitarsis* sp. nov., *D. glabra* sp. nov., *D. grandis* sp. nov., *D. grisea* sp. nov., *D. longiseta* sp. nov., *D. phaonina* sp. nov., *D. puchokana* sp. nov., *D. trisetata* sp. nov.) and other two new species from the Russian Arctic (*D. cristata* sp. nov., *D. taymyrensis* sp. nov.). Five species (*D. fasciculata* (Stein, 1916), *D. firthiana* (Huckett, 1965), *D. groenlandica* (Lundbeck, 1901), *D. quadrisetosa* (Malloch, 1919), *D. neoborealis* (Snyder, 1949)) are newly recorded from Russia. Three new synonymies are proposed: *D. pribilofensis* (Malloch, 1921) (syn: *D. inaequalis* (Malloch, 1922)), *D. setibasis* (Huckett, 1965) (syn: *D. gymnophthalma sibirica* (Lavčiev, 1971, unavailable junior secondary homonym) and *D. quadrisetosa* (Malloch, 1919) (syn: *D. amurensis* (Lavčiev, 1971)). The male terminalia and the female ovipositors of the new species are illustrated. New faunistic data are given for some previously described species of Russian *Drymeia*.

Key words: Palaearctic, Asian mountains, high altitudes, Altai Mountains, Taymyr Peninsula

Introduction

Flies of the genus *Drymeia* Meigen, 1826 are known from four biogeographic regions but it is a mainly Holarctic genus. Including the new species described in this paper, some 130 *Drymeia* species are known in the world fauna, (Huckett 1965a, b, 1966; Pont 1986; Fan 2008; Xue *et al.* 2008, 2009; unpubl. data). The greatest numbers of species are found in the Palaearctic (88 species: Pont 1986; Fan 2008; Xue *et al.* 2008, 2009) and Oriental (34 species, mostly Sichuan and Yunnan: Fan 2008; Xue *et al.* 2008, 2009) Regions. In the Nearctic Region 21 species are known (Huckett 1965a, b, 1966) and only one species (*D. aterrima* (Wulp, 1896)) in the Neotropical Region.

The greatest diversity of the genus is in the Asian mountains, especially at high altitudes (Xue *et al.* 2007, 2009; Michelsen 2011; Sorokina 2012), where the adults feed on both nectar and pollen and play a substantial role as pollinators of flowering plants (pers. obs.). Unfortunately there is little information about the *Drymeia* fauna of many different mountain systems because of difficulties of access to many of these localities. At present the greatest numbers of species (56) are found in the Qinghai-Xizang (Tibetan) Plateau (Xue *et al.* 2008, 2009); 12 species are found in the Himalaya-Karakorum Mts (Pont 1981; Shinonaga & Singh 1994; Shinonaga 2007), 8 species in the European Alps (Michelsen 2011), and 6 species in the Caucasus Mts (Pont, unpublished). Only individual species are known from other mountain systems. In addition to their upland distribution, *Drymeia* species occur abundantly in arctic landscapes where several species are very abundant (Sorokina & Khruleva 2012). Ten species are known from arctic North America, from Northern Canada, Alaska and Greenland (Huckett 1965 a, b; Danks 1981)

Knowledge of the *Drymeia* fauna and the distribution patterns of this genus in Russia could be significantly enhanced through field research in the Arctic and in the far north. Unfortunately, these Russian territories have scarcely been studied since Becker *et al.* (1915). Prior to the present work, only 12 species of *Drymeia* had been recorded from Russia (Hennig 1962 a, b; Pont 1986; Sorokina 2012): *D. alpicola* (Rondani, 1871), *D. amurensis* (Lavčiev, 1971), *D. chillcotti* (Huckett, 1965), *D. gymnophthalma* ssp. *sibirica* (Lavčiev, 1971), *D. hamata* (Fallén, 1823), *D. inaequalis* (Malloch, 1922), *D. pribilofensis* (Malloch, 1921), *D. segnis* (Holmgren, 1883), *D. setibasis* (Huckett, 1965), *D. sibirica* (Hennig, 1962), *D. tetra* (Meigen, 1826) and *D. vicana* (Harris, 1780). Expeditions since 2005 to different areas of Siberia by members of the Institute of Systematics and Ecology of Animals, Novosibirsk, have collected a large quantity of Diptera, and considerable numbers of *Drymeia* have been found in this material from the mountains (Altai-Sayan region) and from the Russian Arctic (Wrangel Island, Taymyr Peninsula, Chukotka Autonomous Okrug). *Drymeia chillcotti* (Huckett, 1965), *D. pribilofensis* (Malloch, 1921) and *D. setibasis* (Huckett, 1965) were recorded as new for Russia (Sorokina 2012).

The present paper records 26 species from Russia, of which five species are new records for Russia and 12 species are new for science. A key to males of the *Drymeia* species currently known from Russia, and also to females where known, is given below.

Material and methods

Drymeia material used in this study is deposited in the Institute of Systematics and Ecology of Animals, Russian Academy of Sciences, Siberian Branch, Novosibirsk, Russia (SZMN), the Zoological Museum of the Moscow State University, Moscow, Russia (ZMUM), the Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia (ZIN), the Oxford University Museum of Natural History, Oxford, England (OUMNH), the Natural History Museum, London, England (BMNH), and the Bishop's University Insect Collection, Sherbrooke, Québec, Canada (BUIC). Unless otherwise stated in the lists of specimens given below, all material is in the SZNM.

Morphological terms follow McAlpine (1981), but “postpedicel” is used for the “first flagellomere” of McAlpine (Stuckenberg 1999).

Specimens were examined using an Altami PSO745-T microscope for external morphological features. Illustrations were made with the camera Canon EOS 600D and processed using Adobe Photoshop CS.

Body length was measured in millimetres (mm) from the anterior margin of the head without antenna to the apex of the abdomen.

Results

The genus *Drymeia* Meigen, 1826

Drymeia Meigen, 1826: 204. Type-species: *D. obscura* Meigen, 1826 [= *Musca hamata* Fallén, 1823], by monotypy. Gender: feminine.

For a full list of generic synonyms, see Savage & Wheeler (2004).

Drymeia is a well-defined and monophyletic genus of the tribe Azeliini, subfamily Azeliinae. Cladistic morphological analysis has shown that its sister-group is the small Central Asian montane genus *Xestomyia* Stein, 1907, and that *Drymeia*+*Xestomyia* is the sister-group of *Azelia*+*Thricops* (Savage & Wheeler 2004). A more recent molecular analysis (Kutty *et al.* 2014), however, suggested that *Drymeia* is the sister-group of *Hydrotaea* Robineau-Desvoidy, and that *Drymeia*+*Hydrotaea* is the sister-group of *Thricops*+*Huckettomyia* (maximum likelihood tree); *Azelia* and *Xestomyia* were not included in this analysis.

Drymeia as currently recognised includes species of Azeliini with 3 or more posterodorsal setae on the hind tibia. Further diagnostic characters are (partly from Savage & Wheeler 2004): gena usually relatively broad with a patch of numerous but fine upcurved genal setae; genal dilation often extending anteriorly, convex and prominent; posterodorsal surface of hind coxa bare; hind tarsomere 1 often with a strong ventral seta near base; fore and mid tibiae with 1 or more setae on the ventral surfaces; haltere black; female frons with a pair of crossed setae on frontal vitta (except in *tetra* (Meigen)) and with the lower orbital seta proclinate and, usually, exclinate.

Species of *Drymeia* are invariably black in colour, with varying amounts of grey or brownish-grey dusting. Males have striking collections of setae and hair-like setae on the mid femur, hind femur and hind tibia, and this armature is highly species-specific. The male hind tibia often has an apical ventral prong that may be short and inconspicuous or long and almost as long as the apical tibial width. Xue *et al.* (2009) have given an interesting discussion of several morphological modifications of *Drymeia* species which they suggest may be adaptations to the harsh environmental conditions at high altitude. These include the slender elongated mouthparts which facilitate the search for nectar and pollen whilst the flies are creeping among the sheltering petals of flowering plants, the streamlined body form, the specialised setae and setulae including the apical ventral projection on the hind tibia, the pointed and inwardly-directed projection on the inner surface of the male surstylus, and the fusion of the paired rods of tergite 8 in the female oviscape which increases the rigidity and tension of this organ during copulation and oviposition.

The plasticity in characters which are striking, autapomorphic developments or which have in the past been considered to be of generic value has led to the erection of a number of genera which were eventually all synonymised with *Drymeia*, the oldest name in this group of genera (Pont 1986; Hockett & Vockeroth 1987). These include:

Drymeia itself, which until 1986 contained only one species with a highly modified proboscis in which the labella are long, slender, strongly sclerotized and normally doubled back.

Bebryx Gistel, 1848, with fine setulae on the anepimeron and males with the tip of the abdomen enlarged and bearing a dense brush of slender black setae and setulae, caudally directed.

Pogonomyia Rondani, 1871, with facial edge projecting forward beyond the level of profrons.

Eupogonomyia Malloch, 1921, with a short prealar seta.

Pogomyioides Malloch, 1919, with fine setulae present on katepimeron and apex of male fore coxa prolonged into a knob-like structure.

Trichopticoidea Ringdahl, 1931, with facial edge not projecting forward beyond the level of profrons and eye in male densely haired.

Neoeriphia Schnabl & Dziedzicki, 1911 and *Neopogonomyia* Schnabl & Dziedzicki, 1911 have not been accepted since their original descriptions.

Key to the Russian species of *Drymeia* Meigen

To facilitate comparison, the following species have been included in the key although they are not actually known from Russia: *D. brumalis* (Rondani, 1866), *D. cantabrigensis* (Huckett, 1965), *D. gymnophthalma* (Hennig, 1963), *D. similis* (Malloch, 1918).

Males

1. Prealar seta present and strong 2
- Prealar seta absent or weak and short, shorter than 2nd notopleural seta 19
2. 4 postsutural dorsocentral setae 3
- 3 postsutural dorsocentral setae 12
3. Eyes densely haired. Proboscis short. Parafacial a little narrower than postpedicel *vicana* (Harris) (part)
- Eyes bare. Proboscis slender and elongate. Parafacial broader than or equal to width of postpedicel 4
4. Parafacial much broader than width of postpedicel, almost twice as wide as width of postpedicel. Larger species, at least 6.5 mm long. Figs. 3E, D, 16F 5
- Parafacial equal to or only slightly broader than width of postpedicel. Smaller species, less than 6 mm long. Figs. 2A, 19A 7
5. Frons with a broad black frontal vitta, eyes separated by more than width of postpedicel. Fore metatarsus without an apical ventral spur. Mid metatarsus with the ventral spinules longer than tarsal depth. Apical posteroventral seta on hind tibia absent. Fore and mid coxae with long wavy setae. Fig. 12 *longiseta* sp. nov. (part)
- Frons without a broad frontal vitta, fronto-orbital plates touching or rarely separated by a very narrow frontal vitta. Fore metatarsus with an apical ventral spur (Fig. 16E). Mid metatarsus with the ventral spinules shorter than tarsal depth. Fore and mid coxae without such setae 6
6. Mid femur with a row of strong anteroventral setae and with 2–3 long and strong ventral setae at apex. Mid tibia without anterior setae or with very weak short setae on apical half. Hind tibia with a small apical prong. Hind femur without a row of posteroventrals, with only a few short posteroventrals on apical half. Figs. 16 A–F *quadrisetosa* (Malloch)
- Mid femur with only a row of strong anteroventral setae, without strong ventral setae at apex. Mid tibia with rows of strong anterodorsal and anteroventral setae. Hind tibia without an apical prong. Hind femur with a full row of long posteroventrals. Figs. 3 A–C *alpicola* (Rondani) (part)
7. Mid femur without any long setae *similis* (Malloch)
- Mid femur with long antero- and posteroventral setae 8
8. Mid femur with anteroventral setae restricted to a group of 5–6 setae on apical fifth, with a row of long posterior setae on apical 1/2 and with long posteroventral setae on basal 2/3. Hind femur without posteroventrals, only with fine posterior setae at base. Figs. 6 A–C *fasciculata* (Stein)
- Mid femur with rows of fine anteroventral and posteroventral setae, without long posterior setae. Hind femur with a dense row of posteroventrals 9
9. Body shining black, without dusted markings. Mid femur with a row of fine and relatively short anteroventral setae and 4–5 stronger setae on apical 1/3; with long posteroventral setae only on basal half. Figs. 7 A–F *glabra* sp. nov.
- Abdomen and scutum black with grey dusted markings. Mid femur with rows of equally long, dense, antero-, postero- and ventral setae, without strong setae on apical part; with long posteroventral setae on basal 3/4 10
10. Arista appearing almost bare, the longest hairs shorter than its basal diameter. Facial edge little projecting forward beyond the level of profrons. Fore tibia with 4–5 fine posteroventrals and sometimes 1–4 fine posterodorsals. Mid tibia with 4 anterodorsal setae. Figs. 19 A–H *taymirensis* sp.n.
- Arista pubescent, the longest hairs longer than its basal diameter. Facial edge not projecting forward beyond the level of profrons. Fore tibia with 2 strong posteroventrals and without posterodorsals. Mid tibia with 1 anterodorsal seta on apical third 11
11. Longest arisal hairs slightly longer than basal diameter of arista. Viewed from behind, tergites 3–5 with a narrow undusted median vitta, and the dusted areas with brownish dust. Fronto-orbital plates touching. Fig. 2 *aristata* sp. nov. (part)
- Longest arisal hairs twice as long as basal diameter of arista. Viewed from behind, tergites 3–5 with an indistinct, broad

- median vitta, and the narrow dusted areas with grey dust. Fronto-orbital plates separated by a very narrow frontal vitta. Middle Asia. Figs. 6 G–I *gymnophthalma* (Hennig)
12. Labella of proboscis rather long, slender, strongly sclerotized and normally doubled back *hamata* (Fallén)
- Proboscis normal, labella stout and cushion-like, not sclerotised. 13
13. Parafacial much broader than width of postpedicel, almost twice as wide as width of postpedicel. Larger species, at least 6.5 mm long. 14
- Parafacial equal to or slightly broader than width of postpedicel. Smaller species, less than 6.3 mm long. 15
14. Frons with a broad black frontal vitta, eyes separated by more than width of postpedicel. Fore metatarsus with or without a very small apical ventral spur. Mid metatarsus with the ventral spinules longer than tarsal depth. Apical posteroventral seta on hind tibia absent. Fore and mid coxae with long wavy setae. Figs. 12 *longiseta* sp. nov. (part)
- Frons without a broad frontal vitta, fronto-orbital plates touching or rarely separated by a very narrow frontal vitta. Fore metatarsus with a distinct apical ventral spur. Mid metatarsus with the ventral spinules shorter than tarsal depth. Apical posteroventral seta on hind tibia present, long. Fore and mid coxae without long wavy setae *alpicola* (Rondani) (part)
15. Frons with a broad black frontal vitta (Fig. 18E). Hind tibia with a long apical posteroventral seta. Hind femur with a row of short weak posteroventral setae. Figs. F–H. *tetra* (Meigen)
- Frons without a broad frontal vitta, fronto-orbital plates touching. Hind tibia with or without a very short apical posteroventral seta. 16
16. Hind femur without posteroventral setae, at most with a few weak setae on apical 1/4; mid femur with separated rows of antero- and posteroventral setae, without dense ventral setae. Viewed from behind, tergite 3 with a broad undusted trapezoidal patch, tergite 4 with smaller triangular undusted patch, and tergite 5 with an undusted median vitta 17
- Hind and mid femora with rows of long, dense, fine posteroventral and ventral setae. Abdomen without undusted triangular or trapezoidal patches, at most with an undusted median vitta 18
17. Mid femur with a row of equal anteroventral setae; with very long posteroventrals on basal 2/3, 2–2.5 times as long as depth of femur. Mid tibia with 1–2 anterodorsals. Hind tibia with a small apical prong and a short apical posteroventral seta. Hind femur at most with a few weak posteroventral setae on apical 1/4 and weak posterior setae at base. Figs. 20 *triseta* sp. nov.
- Mid femur with a row of unequal anteroventral setae, with 4–5 longer stronger setae on apical 2/3 which are situated below other fine anteroventral setae; with a row of relatively short posteroventrals, 1–1.5 times as long as depth of femur. Mid tibia without anterodorsals, rarely with 1 short seta on apical 1/3. Hind tibia without an apical prong or apical posteroventral seta. Hind femur without posteroventral setae but with weak posterior setae at base. Figs. 6 D–F *firthiana* (Huckett)
18. Viewed from behind, tergites 3–5 with a narrow undusted median vitta, and the dusted areas with brownish dust. Facial edge not projecting forward beyond the level of profrons. Wings dark brown. Siberia. Figs. 2 *aristata* sp. nov. (part)
- Abdomen subshining black. Facial edge little projecting forward beyond the level of profrons. Wings pale brown. Europe. *brumalis* (Rondani)
19. Eyes densely haired. 20
- Eyes bare or with very short fine hairs 21
20. All tarsomeres brownish-yellow, and mid tarsomeres 2–3 dilated. Tip of abdomen with a brush of slender black setulae and setae, caudally directed. Larger species, at least 9 mm long. *sibirica* (Hennig)
- All tarsomeres black, and mid tarsomeres 2–3 not dilated. Tip of abdomen without such a brush of setulae and setae. Smaller species, less than 8 mm long. *vicana* (Harris) (part)
21. Arista plumose. Notopleuron bare. Small grey flies, 4.1–4.4 mm long. Figs. 14 *phaonina* sp. nov.
- Arista bare or short pubescent. Notopleuron haired. Larger flies, at least 4.6 mm long 22
22. Anepimeron setulose. 23
- Anepimeron bare 26
23. Fore coxa prolonged into a knob-like structure at apex. Figs. G–K *segnis* (Holmgren)
- Fore coxa not prolonged at apex 24
24. Tip of abdomen with a dense brush of slender black setae and setulae, caudally directed. Mid tibia without anterodorsals . . 25
- Tip of abdomen without such brush of setae and setulae, at most with several caudally directed setulae on hypopygium. Mid tibia with 1–2 anterodorsals. Figs. 8 *grandis* sp. nov.
25. Mid femur with a group of 6–8 long curved anteroventral setae on apical third, several of them twice as long as femoral depth. Eye bare. Fronto-orbital plates separated by a conspicuous frontal vitta, the frons at narrowest point as broad as width of postpedicel (in frontal view). Hind tibia with an apical posteroventral seta. Figs. 3 F–K *chillcotti* (Huckett)
- Mid femur with only a few short anteroventral setae on apical third, none as long as femoral depth. Eye very short haired. Fronto-orbital plates touching. Hind tibia without an apical posteroventral seta. Figs. 4 *cilitarsis* sp. nov.
26. Outer claw of fore tarsus broadly flattened, leaf-like and twisted. Facial edge long projecting forward beyond the level of profrons. Mid femur with a complete series of dense anteroventral setae, commencing at base. Figs. 11 F–K. *pribilofensis* (Malloch)
- Outer claw of fore tarsus not modified in shape. Facial edge little projecting forward beyond the level of profrons. Mid femur without a continuous series of equally long anteroventral setae (except in *unica*). 27
27. Scutum with two pairs of long strong presutural acrostichal setae. Mid femur straight, with a row of fine dense anteroventral setae. Hind femur with long, dense but weak posteroventrals on basal 3/4. Hind tibia with a short apical posteroventral seta. Figs. 1 A–F *acrostichalis* sp. nov.
- Presutural acrostichals setulose, dense and all hair-like. Mid femur a little curved ventrally, without a row of fine dense anteroventral setae. Hind femur without posteroventrals, with only weak posterior setae on basal half. Hind tibia without an apical posteroventral seta 28

28. Mid femur with the anteroventral setae restricted a tuft of long apical wavy setae on apical 1/4. Hind tibia without an apical prong. Eye with very short sparse hairs. Figs. 15 *puchokana* sp. nov.
 - Mid femur without such a tuft of setae on apical 1/4. Hind tibia with an apical prong. Eye bare 29
29. Hind tibia with an enlarged and elongated apical ventral prong which, at widest diameter, is about equal to the width of hind tibia at middle. Mid femur with restricted series of rather long setae on distal third of anteroventral surface and with several long posterior setae on basal 1/4. Figs. 11 A–E *groenlandica* (Lundbeck)
 - Hind tibia with the maximum width of the apical ventral prong less than width of tibia at middle. Mid femur without anteroventral setae on apical part, or if present no longer than depth of femur 30
30. Fronto-orbital plates separated by a black frontal vitta. Fore tarsomere 1 without long posteroventral setulae at apex. Hind femur with rows of short weak posteroventral and posterior setae on basal half *neoborealis* (Snyder)
 - Fronto-orbital plates touching. Fore tarsomere 1 with 2–6 relatively long posteroventral setulae at apex. Hind femur without posteroventral setae but with fine posterior setae near base 31
31. Mid femur without a group or comb of setae, only with series of long curled setae on proximal third of anteroventral surface; with 1 or 2 erect ventral spines at middle which are about half as long as diameter of femur. North Canada *cantabrigensis* (Huckett)
 - Mid femur with a group or comb of long strong setae on basal half; without or with 2–4 very short ventral spinules which are much less than diameter of femur. Siberia 32
32. Mid femur with a group of slender curved setae at extreme base of anteroventral surface. Facial edge not or little projecting forward beyond the level of profrons 33
 - Mid femur without setae at extreme base of anteroventral surface, only with a comb of strong long setae on middle part. Facial edge little projecting forward beyond the level of profrons. Figs. 5 *cristata* sp. nov.
33. Abdomen darker: syntergite 1+2 entirely dark, tergites 3–5 with a dark middle stripe that sometimes extends laterally along margins of tergites. Scutum black, almost without dust. Hind tibia on basal third with anterodorsal setae that are as long as or longer than tibial depth. Mid femur with 1–2 short ventral spinules on basal third. Figs. 17 *setibasis* (Huckett)
 - Abdomen lighter: tergite 1+2 entirely or with one half dusted like the other tergites, tergites 3–5 each with a narrow dark middle stripe that does not extend laterally along margins of tergites. Scutum with an elongated-triangular mark of pale dust in front of scutellum and with pale dust along lateral margins of scutum (viewed from behind). Hind tibia on basal third with anterodorsal setae shorter than tibial depth. Mid femur with 3–4 short ventral spinules at middle. Figs. 10. *grisea* sp. nov.

Females

The following species are not included in the key as their females are not known: *D. cilitarsis* sp. nov., *D. phaonina* sp. nov., *D. puchokana* sp. nov., or have not been recognized: *D. gymnophthalma* (Hennig, 1963).

1. Prealar seta present and strong 2
 - Prealar seta absent or weak, short, shorter than 2nd notopleural seta. 15
2. 4 postsutural dorsocentral setae. 3
 - 3 postsutural dorsocentral setae. 9
3. Grey species, scutum with 4 brown vittae. Eye with very short thin hairs. Proboscis short. Parafacial a little narrower than postpedicel *vicana* (Harris)
 - Black species. Eye bare. Proboscis slender and elongate. Parafacial as broad as or broader than width of postpedicel 4
4. Parafacial much broader than width of postpedicel, almost twice as wide as width of postpedicel. Hind tibia with a long strong apical posteroventral seta. Larger species, 6.2–9.5 mm 5
 - Parafacial equal to or slightly broader than width of postpedicel. Hind tibia without a long strong apical posteroventral seta. Smaller species, less than 6.4 mm long. 7
5. Viewed in profile, height of head greater than its length (fig. 3E). Mid tarsomere 1 with the ventral spinules as long as or at least half as long as tarsal depth. Cross-vein dm-cu sinuous, S-shaped, rarely almost straight. Fig. 13A . . . *longiseta* sp. nov. (part)
 - Viewed in profile, height of head as long as or shorter than its length (fig. 3D). Mid tarsomere 1 with the ventral spinules less than half of tarsal depth. Cross-vein dm-cu straight 6
6. Veins of basal region of wing except costa yellowish to pale brown *quadrisetosa* (Malloch)
 - Veins of basal region of wing dark brown to blackish *alpicola* (Rondani) (part)
7. Mid femur with rows of equal hair-like antero-, postero- and ventral setae, hind femur with a row of weak posteroventrals *taymirensis* sp.n.
 - Mid femur without rows of long hair-like setae, only with 1–2 strong setae on basal quarter and 3–4 strong setae on apical third; posteroventral surface with 1–3 setae on basal quarter 8
8. Notopleuron with several short setulae. Wing yellowish, pale at base, with yellow veins. Abdomen and scutum black with grey-dusted marks *fasciculata* (Stein)
 - Notopleuron bare or with isolated hairs around posterior notopleural. Wing brownish, dark at base, with black veins. Body shining black, without dusted marks. *glabra* sp. nov.
9. Labella of proboscis rather long, slender, strongly sclerotized and normally doubled back *hamata* (Fallén)
 - Proboscis normal, labella stout and cushion-like, not sclerotised. 10
10. Parafacial much broader than width of postpedicel, almost twice as wide as width of postpedicel. Hind tibia with a long strong apical posteroventral seta. Larger species, 6.2–9.5 mm 11

- Parafacial equal to or slightly broader than width of postpedicel. Hind tibia without a long strong apical posteroventral seta (except in *similis*). Smaller species, less than 6.2 mm long 12
- 11. Viewed in profile, height of head greater than its length (fig. 3E). Mid tarsomere 1 with the ventral spinules as long as tarsal depth or half of this. Cross-vein dm-cu sinuous, S-shaped, rarely almost straight *longiseta* sp. nov. (part)
- Viewed in profile, height of head equal to or less than its length (fig. 3D). Mid tarsomere 1 with the ventral spinules less than half as long as tarsal depth. Cross-vein dm-cu straight *alpicola* (Rondani) (part)
- 12. Frontal vitta without setae *tetra* (Meigen)
- Frontal vitta with a pair of crossed setae 13
- 13. Hind tibia with a long strong apical posteroventral seta *similis* (Malloch)
- Hind tibia without a long strong apical posteroventral seta 14
- 14. Body subshining black. Facial edge not projecting forward beyond the level of profrons. Wings brown at base. Europe *brumalis* (Rondani)
- Body brownish dusted, sometimes with an olive tinge (figs. 21A, B). Facial edge projecting forward on slightly beyond the level of profrons. Wings yellow at base *aristata* sp. nov., *triseta* sp. nov., *firthiana* (Huckett)
- 15. Anepimeron setulose 16
- Anepimeron bare 19
- 16. Mid femur with a strong anteroventral seta on apical half, as strong as or stronger than anteroventrals at base *chillcotti* (Huckett)
- Mid femur without or with only a short weak anteroventral seta on apical half 17
- 17. Brownish-grey dusted species; scutum with 4 black vittae. Facial edge projecting slightly forward beyond the level of profrons. Mid femur with rows of long antero- and posteroventrals. Veins in basal region of wing dark brown to blackish, wing light brownish *segnis* (Holmgren)
- Light grey dusted species, scutum with 3 brown vittae, sometimes indistinct. Facial edge not projecting forward beyond the level of profrons, sometimes behind this level. Mid femur without numerous long antero- and posteroventrals, with 1–3 strong anteroventrals and 1–3 long hair-like setae at base. Veins in basal region of wings yellow to brownish, wing yellow tinged 18
- 18. All tarsomeres black. Parafacial at level of insertion of arista slightly broader than width of postpedicel. Smaller species, 5.0–7.8 mm. Fig. 9A *grandis* sp. nov.
- All legs with tarsomeres 1–2 brownish-yellow, and all tarsomeres brownish laterally. Parafacial at level of insertion of arista 1.7 times as wide as width of postpedicel. Larger species, 7.2–8.5 mm. Fig. 18D *sibirica* (Hennig)
- 19. Scutum with strong presutural and postsutural acrostichal setae, which are clearly distinct from ground-setulae *acrostichalis* sp. nov.
- Strong presutural acrostichals absent 20
- 20. Prealar present, short and weak 21
- Prealar entirely absent 22
- 21. Mid femur with the longer anteroventrals on apical third as long as diameter of femur. Abdomen subshining. *groenlandica* (Lundbeck)
- Mid femur with the longer anteroventrals on apical third shorter than diameter of femur. Abdomen with grey dust. *neoborealis* (Snyder)
- 22. Facial edge projecting forward far beyond the level of profrons. Mid femur with rows of long anteroventrals and posteroventrals on basal half. Mid tibia with posterodorsal setae shorter than the preapical mid dorsal seta. Proboscis long, labella small. Larger species, at least 6.5 mm long *pribilofensis* (Malloch)
- Facial edge not or slightly projecting forward beyond the level of profrons (fig. 18A). Mid femur with only 1–3 long setae on anterior and posterior surfaces. Mid tibia with posterodorsal setae which are as long as or longer than the preapical mid dorsal seta. Proboscis short, labella large. Smaller species, less than 6.2 mm long *cristata* sp. nov., *grisea* sp. nov., *setibasis* (Huckett), *cantabrigensis* (Huckett)

***Drymeia acrostichalis* sp. nov.**

Figs. 1 A–H

Diagnosis. The species is very similar to *D. vicana* (Harris, 1780). Males of the new species can be distinguished as follows: prealar absent; anepimeron and katepimeron bare; proboscis thickened, short; eye bare; scutum with two pairs of long strong presutural acrostichal setae; mid femur straight, with rows of fine dense anteroventral and posteroventral setae; hind femur with dense, long, weak posteroventrals on basal $\frac{3}{4}$; hind tibia with a short apical posteroventral seta.

Etymology. The species name refers to the strong and long presutural acrostichal setae on the scutum.

Type material examined. Holotype male, RUSSIA: Altai Republic, Kosh-Agachskii raion, Ukok plateau, environs of Muzdy-Bulak lake, 2400 m, 49.28°N 87.65°E, 2.vii.2005, V. Sorokina (SZMN).

Paratypes: 12 males, same data as holotype (1 male each in ZMUM, ZIN, OUMNH, BMNH, BUIC rest in SZMN); *Altai Republic, Kosh-Agachskii raion*: Ukok plateau: 1 male, environs of Muzdy-Bulak lake, 2400–2600

m, 49.28°N 87.65°E, 26.vi.2005, A. Barkalov (SZMN); 1 male and 2 females, 8 km NE Maitobe mountain, 2420 m, 49°34'N 87°43'E, 6.vii.2006, T. Novgorodova (SZMN); 15 females, valley of Ak-Allacha River, 2160 m, 49°25'N 87°37'E, 12–14.vii.2006, V. Sorokina & T. Novgorodova; 30 females, 10–18 km SE Dzhazator, 1790–2115 m, 49°39'N 87°39'E, 5.vii.2006, V. Sorokina (2 females each in ZMUM, ZIN, OUMNH, BMNH, BUIC rest in SZMN); 5 females, upper part of Zhumaly River, Rodonovi spring, 2410 m, 49°27'N 88°03'E, 23.vii.2006, T. Novgorodova; 4 females, south slope of Yuzhno-Chuyskii range, valley of Tara River, 2200 m, 49°39'N 88°13'E, 11.vii.2009, V. Sorokina; 3 females, 7 km NW Kuray, 2251–2588 m, 50°18'N 87°51'E, 17.vii.2013, V. Sorokina & T. Novgorodova; 2 females, 1 km NW Kuray, 1546 m, 50°15'N 87°53'E, 20.vii.2013, T. Novgorodova; 7 females, north slope of Severo-Chuyskii range, valley of Akturu River, 1865–2064 m, 50°08'N 87°48'E, 21.vii.2013, V. Sorokina; *Altai Republic, Ulaganskii raion*: 8 females, 3 km S Aktash, 1360 m, 50°28'N 88°67'E, 21.vi.2005, V. Sorokina; 1 female, environs of Dzhulukul' lake, 2200 m, 50.47°N 89.77°E, 21.vii.2007, V. Sorokina; *Altai Republic, Ust'-Koksinskii raion*: 2 females, environs of Mul'ta, 915 m, 50°09'N 86°00'E, 11.vii.2013, V. Sorokina; 1 female, 15 km S Mul'ta, 1557 m, 50°03'N 86°51'E, 12.vii.2013, T. Novgorodova. *Khakasiya*: 1 female, *Shirinskii raion*, environs Shira salt lake, 350–355 m, 54.48°N 90.17°E, 21–24.vi.2011, K. Tomkovich (ZMUM); 3 females, *Shirinskii raion*, Shira-Itkul' lake env., 54.45°N 90.18°E, tophill Betuletum, 25–28.vi.2011, K. Tomkovich (ZMUM). *Tyva Republic: Morgun-Tayginskii kozhuun*, 4 males, 2 females, environs of Mugur-Aksy, 2000–2100 m, ~ 50°22'N 90°25'E, 22.vii.1993, A. Barkalov; *Ovyurskii kozhuun*, 6 females, 14 km N Khandagaity, 1600 m, ~ 50°43'N 92°04'E, 25.vii.1993, A. Barkalov; *Tes-Khemskii kozhuun*, 1 male, 2 females, 1.5 km, W Samagaltay, ~ 50°36'N 95°00'E, 13–14.vii.1993, A. Barkalov (SZMN). *Republic of Buryatia: Selenginskii raion*, 1 female, Tazhny village, Temnik River, 51°12'N 103°43'E, 4.vii.1984, B. Zakharov; *Kyakhtinskii raion*, 1 female, Chikoy River, Dureny village, 10.vii.1986, B. Zakharov. *Zabaykalsky Krai*: 4 females, Nature Reserve "Sokhondinskii", Verkhniy Bukukun cordon, ~ 49°36'N 111°06'E, 1540 m, 20.vi.1991, B. Zakharov, 4 female, 16 km NW Bukukun village, confluence of the Ernisty [=Ernichnyi] Klyuch stream and Bukukun River, 1200–1300 m, ~ 49°34'N 111°00'E, 22.vi., 10.vii.1991, B. Zakharov (SZMN). *Sakha Republic: Tomponskii ulus*, 1 female, 232 km NE from Khandyga, ~ 63°20'N 140°00'E, 10.vii.1985, A. Barkalov.

Description. MALE. Length of body, 4.5–6.5 mm. Length of wing, 4.0–5.2 mm.

Head: Ground-colour black. Eye bare. Fronto-orbital plate and parafacial silver pruinose; face grey, gena and lower occiput light grey pruinose. Fronto-orbital plates touching. Frons at narrowest point as broad as diameter of anterior ocellus. Ocellar setae short. 13–15 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel circa 1.3 times as long as wide. Arista swollen in basal sixth, appearing almost bare, the longest hairs shorter than basal diameter of arista. Parafacial at level of insertion of arista slightly narrower than width of postpedicel, hardly narrowing below. Upper part of face without a distinct carina between antennal bases. In lateral view, facial edge not projecting forward beyond the level of profrons, sometimes behind profrons. Gena broad, depth below lowest eye-margin equal to or slightly broader than length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis thickened, short. Prementum of proboscis dusted, as long as palpus.

Thorax: Ground-colour black. Scutum matt, black with brown dust, viewed from in front without distinct longitudinal vittae, but with narrow undusted lines along the postsutural dorsocentrals and acrostichals and sometimes with two grey presutural vittae; postpronotal lobe, notopleuron and postalar callus brown dusted. Ground-setulae short. Pleura light brownish-grey dusted, with a shining patch anteriorly on katapisternum and medially on meron. Anepimeron and katapisternum bare. Notopleuron densely setulose. Prosternum bare. Acrostichals 2(4)+1, strong, long (but often first two presutural pairs shorter and weak). Dorsocentrals 2+4. Prealar absent. Katapisternal setae 1+1. Scutellum black and light dusted in posterior view.

Legs: Black. Fore tibia with 2–3 posteroventral setae on apical half. Fore tarsomeres 1–4 each with a short fine anteroventral and posteroventral hair at tip, fore tarsomere 1 without posteroventrals at apex. Fore claws as long as length of tarsomere 5, thin and pointed, but often short, blunt and obviously broken, shorter than length of tarsomere 5. Pulvilli as long as tarsomere 5. Mid femur straight, slightly flattened, with rows of fine dense anteroventral and posteroventral setae, the posteroventrals longer than anteroventrals; anterior surface with a row of long strong setae on basal half; 0 anterior and 1–2 posterodorsal to posterior preapical setae. Mid tibia with 1–2 anterodorsal setae and without anteroventrals; 3–4 posterodorsals, 1–2 posteroventrals. Hind femur with long dense setae on anteroventral, posteroventral and ventral surfaces on basal 2/3; with 7–9 strong anteroventral setae on apical half. Hind tibia with 3–4 long posterodorsals at middle and some short setae between them; with a row of

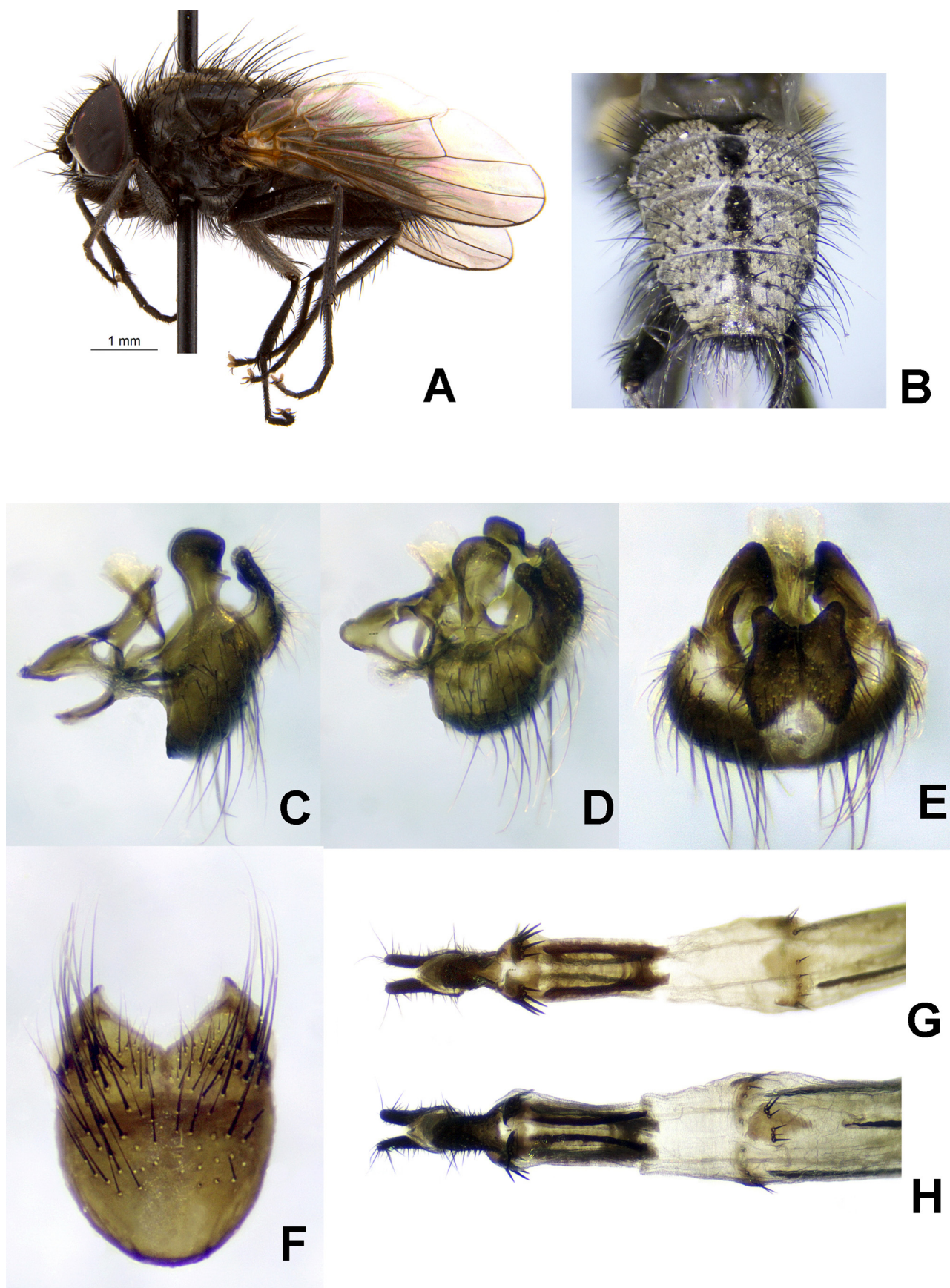


FIGURE 1. *Drymeia acrostichalis* (paratypes). **A.** Male habitus, lateral view. **B.** Male abdomen, dorsal view. **C–E.** Male terminalia. **C.** Lateral view. **D.** Postero-lateral view. **E.** Posterior view. **F.** Sternite 5. **G, H.** Female, apical portion of ovipositor. **G.** Dorsal view. **H.** Ventral view.

5–7 uneven anterodorsals; 3–4 anteroventrals on middle part; without posterior and posteroventrals; without a ventral apical prong, with a dorsal and an anterodorsal preapical; with an anterior and anteroventral apical seta but without a posteroventral apical. Hind tarsomere 1 with 2 short ventral setae at base.

Wing: Light brownish, darker at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu oblique, sinuous. Calypters and margins yellow. Knob of haltere black.

Abdomen: Conical, ground-colour black. Densely yellow-grey dusted with a black median line that becomes narrower towards the tip of abdomen. Sternite 1 bare. Sternite 5 (Fig. 1F).

Terminalia: Figs 1 C–E.

FEMALE: Length of body, 5.0–6.2 mm. Length of wing, 4.0–5.2 mm.

Differs from the male as follows:

Head: Dichoptic. Frons at middle 0.42 of head-width at this point, and at this point each fronto-orbital plate 0.3 of frontal vitta. Head grey dusted, frontal vitta brown dusted. Frontal triangle inconspicuous, hardly reaching the crossed setae on frontal vitta. Ocellar setae strong. 5–6 pairs of inclinate frontal setae, including several interstitials; 3 pairs of orbital setae, the upper two pairs reclinate and excline, the lower pair procline and excline. Frontal vitta with a pair of strong crossed setae.

Thorax: Scutum with whitish-grey dust, viewed from in front with brown diffused marks along the postsutural dorsocentrals and between them; postpronotal lobe, notopleuron and postalar lobe grey dusted (sometimes scutum and pleura wholly brown dusted). Acrostichals 2(3)+2, strong, long, often in uneven rows. Prealar absent or very short and weak. Scutellum whitish-grey dust with brown lateral marks.

Legs: Mid femur with 1–2 strong anteroventrals and with 2 long hair-like setae at base. Hind femur with a row of strong anteroventral setae, long on apical half and short on basal half, with weak posteroventrals on basal half. Hind tibia with 2–3 posterodorsals, 2–3 anterodorsals, 3 anteroventrals.

Wing: Yellowish, lighter at base.

Abdomen: Densely yellow-grey dusted with an indistinct dark median line.

Ovipositor: Figs 1G, H.

Remark. Females are abundant sweat flies.

Distribution. Russia: Altai Mts, Khakasiya, Tyva, Buryatia, Zabaykalsky Krai, Sakha (Yakutia).

***Drymeia alpicola* (Rondani, 1871)**

Figs. 3 A–D

Pogonomyia alpicola Rondani, 1871: 337.

Pogonomyia alpicola var. *tundrica* Schnabl in Becker et al., 1915: 48.

Pogonomyia alpicola; Hennig, 1962b: 677.

Drymeia alpicola; Pont, 1986: 70.

Drymeia alpicola; Sorokina & Pont, 2010: 10.

Material examined: Lectotype, male (of var. *tundrica* Schnabl): “Karskaja Tundra” [Russia, Yamalo-Nenetskiy AO, east slope of Polar Urals.], 17.vii.1909, F. Zaytsev (ZIN) [seen by us]. RUSSIA: *Altai Republic, Kosh-Agachskii raion, Ukok plateau*: 12 males and 5 females, upper part of Zhumaly River, Rodonovyi spring, 2410–2900 m, 49.27°N 88.5°E, 24.vi.2005, 4.vii.2005, 5,13.vii.2008, V. Sorokina, T. Novgorodova & A. Barkalov; 4 males and 3 females, environs of Zerlukol’-Nur lake, 2400 m, 49.56°N 88.21°E, 23.vi.2005, V. Sorokina; 10 males, environs of Muzdy-Bulak lake, 2600–2900 m, 49.28°N 87.65°E, 26.vi.2005, 1.07.2005, Sorokina, T. Novgorodova & A. Barkalov; 1 male, environs of Tarkhatinskoe lake, 2300 m, 5.vii.2006, T. Novgorodova; 14 males and 4 females, 8 km NE Maitobe Mt., 2420–2800 m, 49°34’N 87°43’E, 6–10.vii.2006, V. Sorokina & T. Novgorodova (4 males OUMNH, 3 males BMNH); 1 male and 3 females, valley of Ak-Allacha River 2160 m, 49°25’N 87°37’E, 14.vii.2006, V. Sorokina & T. Novgorodova; 2 males and 1 female, south slope of Yuzhno-Chuyskii range, valley of Tara River, 2175 m, 49°39’N 88°13’E, 30.vi.2006, V. Sorokina, 2800–3300 m, 49.65°N 88.22°E, 19.vii.2009, A. Barkalov; 18 males and 6 females, environs of Kal’dzhin-Kul’-Bas lake, 2400–2800 m, 49°19’N 87°26’E, 17–20.vii.2006, V. Sorokina (3 males OUMNH); 7 males and 3 females, south slope of Kurayskiy range, 7 km NW Kuray, 2369–2588 m, 50°18’N 87°51’E, 17,19.vii.2013, V. Sorokina; *Altai Republic, Ust’-Koksinskii raion*: 1 male

and 4 females, north slope of Katunskiy range, 2272 m, 13 km S Mul'ta, 50°04'N 85°57'E, 14.vii.2013, V. Sorokina (1 male and 1 female in ZMUM); 1 male, Katunskiy range, Kamdyt, 49°58'N 86°33'E, 2150–2514 m, 28.vi.–4.vii.2007, O. Kosterin (ZMUM); *Altai Republic, Ulaganskii raion*: 2 males, environs of Dzhulukul' lake, 2200–2300 m, 50.47°N 89.77°E, 21–26.vii.2007, V. Sorokina & A. Barkalov; 3 males, Shapshalskii range, 2878 m, 50.53°N 89.8°E, 24.vii.2007, V. Sorokina; 7 males and 1 female, Kurayskiy range, 2500–2800 m, 50.33°N 87.75°E, 29–30.vi.2008, 3.vii.2008, A. Barkalov; *Altai Republic, Ongudayskii raion*: 2 males, Terektinskiy range, upper part of B. Yaloman River, 2200–2300 m, 3.viii.2007, V. Sorokina; *Altai Republic, Shebalinskii raion*: 1 male, Pass Seminskii, 51.05°N 85.60°E, 1748 m, 30.vi.2009, V. Sorokina; 3 males, 3 km W Pass Seminskii, 1780 m, 51.05°N 85.63°E, 30.vi.2009, A.C. Pont (2 in OUMNH, 1 male in BMNH). *Khakasiya*: 2 males, Pass Sayanskii, 2055 m, 51.7°N 89.9°E, 28.vi.2004, A. Barkalov. *Tyva Republic: Tes-Khemskii kozhuun*, 1 male and 1 female, 15 km NW Khol'-Oozhu, 1800–1900 m, ~ 50°44'N 94°25'E, 16.vii.1993, A. Barkalov; *Mongun-Tayginskii kozhuun*, 1 male, east bank of Khindikig-Khol' lake, 2334 m, 50.4°N 89.9°E, 28.vii.2007, A. Barkalov, 7 males and 1 female, Shapshalskii mountain range, upper part of Shui River, 2550–2900 m, 25.vii.2007, V. Sorokina.

Remarks. This species can be recognized by the characters given in the key. A full description of both sexes is given by Hennig (1962b: 677–679). Adults of this species are found on flowering plants.

Distribution. In the high mountains of Europe, where it occurs up to 2800 m, eastwards to the Far East of Russia, and in North America (Rocky Mts from Alberta to New Mexico, also Labrador).

Drymeia aristata sp. nov.

Figs. 2 A–G

Diagnosis. The species is similar to *D. brumalis* (Rondani, 1866). Males of the new species can be distinguished as follows: anepimeron and katopimeron bare; proboscis thin, elongate; eye bare; fronto-orbital plates touching; facial edge not projecting forward beyond the level of profrons; arista pubescent, the longest hairs slightly longer than basal diameter of arista; abdomen with brownish dust, tergites 3–5 each with a narrow undusted median vitta; mid and hind femora with rows of long, dense, fine posteroventral and ventral setae.

Etymology. The species name refers to the pubescent arista.

Type material examined. Holotype male, RUSSIA: Khakasiya, Shirinskii raion, environs of Shira-Itkul' lake, 54.45°N 90.18°E, tophill Betuletum, 25–28.vi.2011, K. Tomkovich (ZMUM).

Paratypes: 3 males, same data as holotype (ZMUM & SZMN); 1 male, Khakasiya, Shirinskii raion, environs Shira salt lake, 350–355 m, 54.48°N 90.17°E, 21–24.vi.2011, K. Tomkovich (ZMUM).

Description. MALE. Length of body, 5.1 mm. Length of wing, 4.3 mm.

Head: Ground-colour black. Eye bare. Fronto-orbital plate brownish-grey pruinose, parafacial grey-silver pruinose; face grey, gena and lower occiput brownish-grey pruinose. Fronto-orbital plates touching. Frons at narrowest point 1.5 times as wide as diameter of anterior ocellus. Ocellar setae short. 10–14 pairs of frontal setae, including interstitials, reaching to anterior ocellus. Antenna black, postpedicel circa 1.5 times as long as wide. Arista swollen in basal sixth, pubescent, the longest hairs slightly longer than basal diameter of arista. Parafacial at level of insertion of arista as wide as width of postpedicel, narrowing below. Upper part of face with a small carina between antennal bases. In lateral view, facial edge not projecting forward beyond the level of profrons. Gena broad, depth below lowest eye-margin equal to length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis thin, elongate. Prementum of proboscis dusted, as long as palpus.

Thorax: Ground-colour black. Scutum matt, black, subshining, viewed from in front uniformly brown dusted, with only a small triangular undusted spot in front of scutellum, viewed from behind blackish; postpronotal lobe, notopleuron and postalar callus dusted as scutum. Ground-setulae short. Pleura brown dusted, slightly shining, without a distinct shining patch anteriorly on katopisternum and medially on meron. Anepimeron and katopimeron bare. Notopleuron setulose. Prosternum bare. Acrostichals 0+1. Dorsocentrals 2+3(4). Prealar long and strong. Katopisternal setae 1+1. Scutellum black, shining in posterior view, with small dusted spots on lateral margins and at tip.

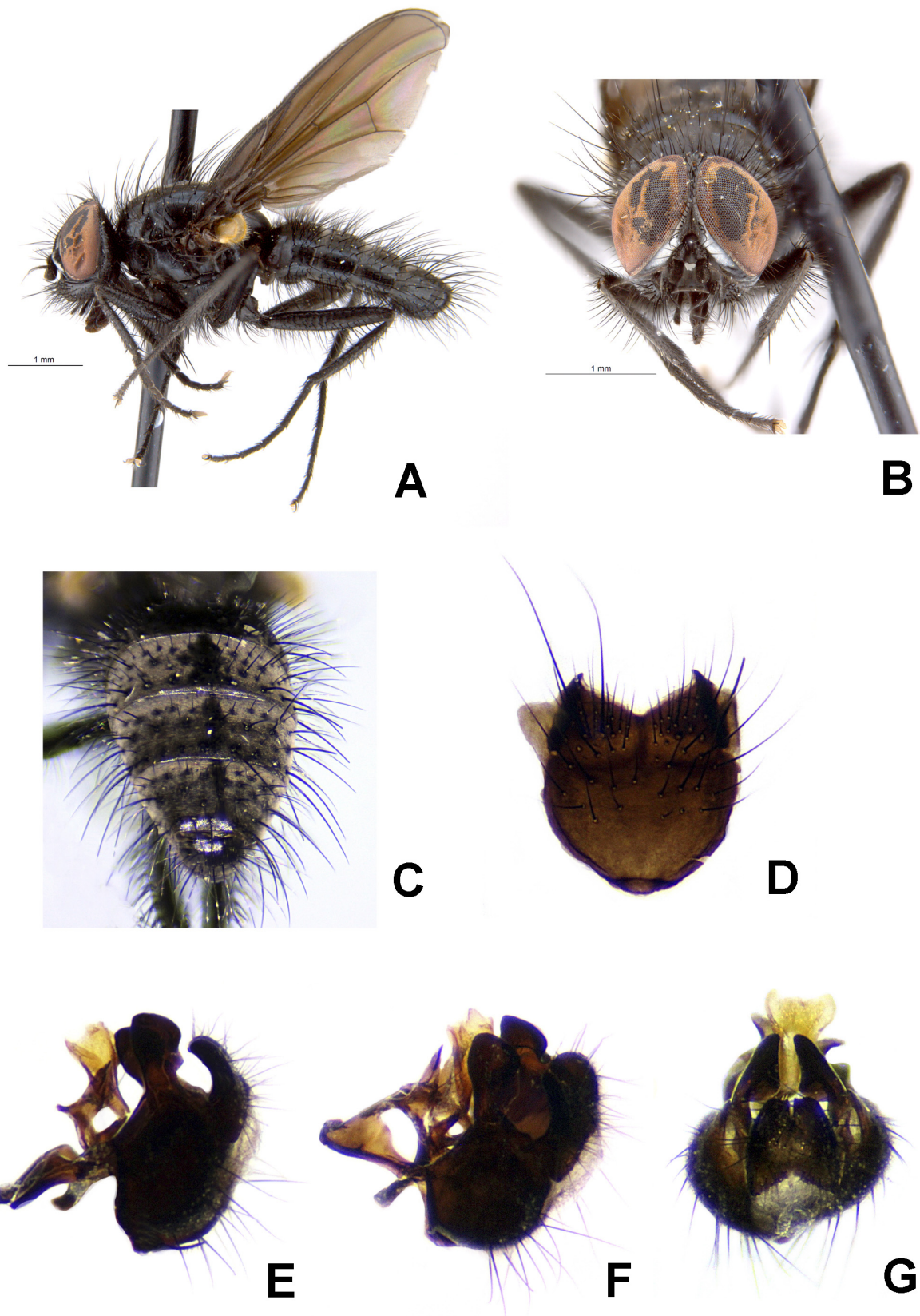


FIGURE 2. *Drymeia aristata* (paratypes), male. **A.** Habitus, lateral view. **B.** Head, anterior view. **C.** Abdomen, dorsal view. **D.** Sternite 5. **E–G.** Terminalia. **E.** Lateral view. **F.** Postero-lateral view. **G.** Posterior view.

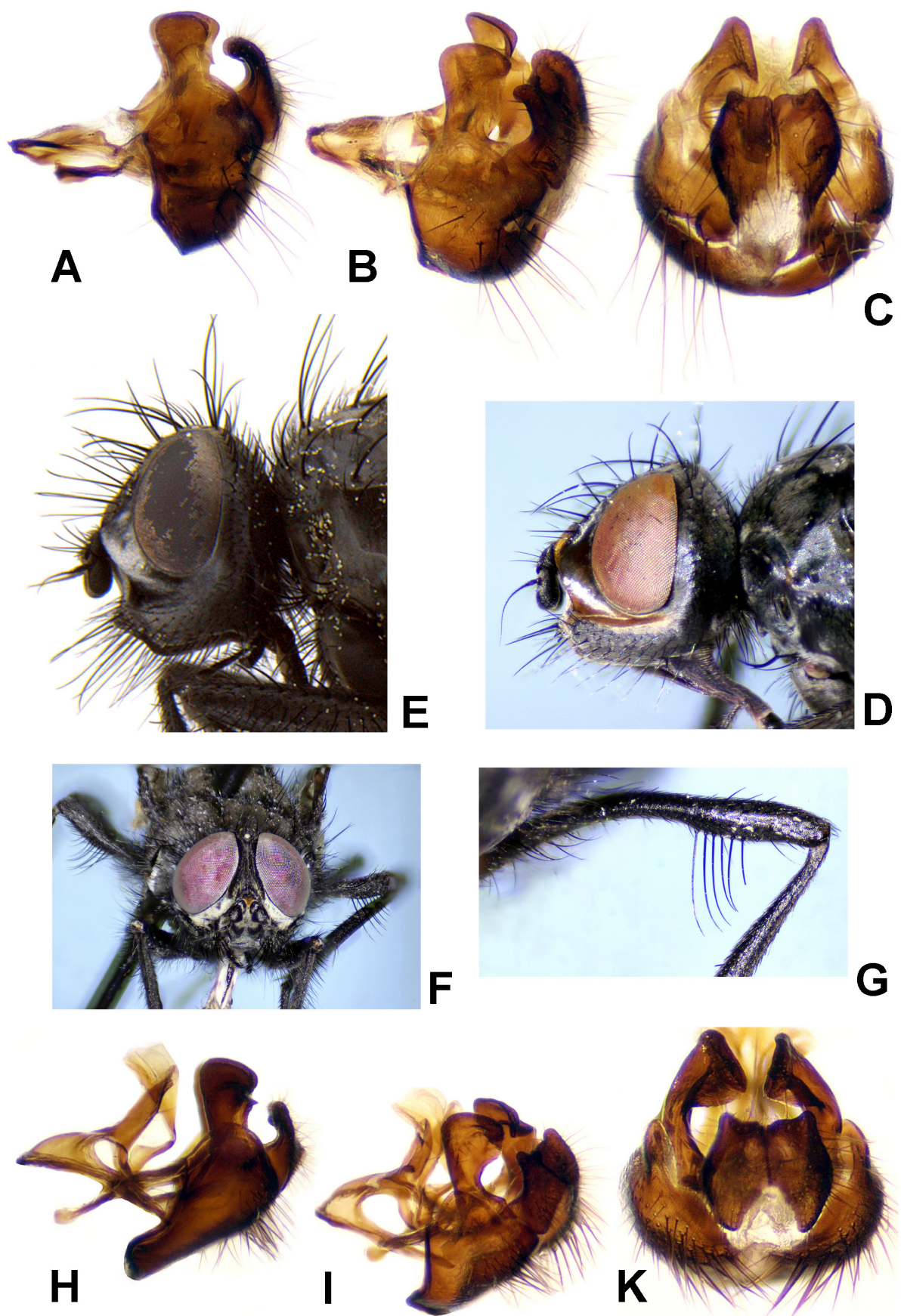


FIGURE 3. *Drymeia* spp. **A–D.** *Drymeia alpicola*. **A–C.** Male terminalia. **A.** Lateral view. **B.** Postero-lateral view. **C.** Posterior view. **D.** Female head, lateral view. **E.** *Drymeia longiseta* (paratypes), Female head, lateral view. **F–K.** *Drymeia chillcotti*. **F.** Male head, anterior view. **G.** Mid femur. **H–K.** Male terminalia. **H.** Lateral view. **I.** Postero-lateral view. **K.** Posterior view.

Legs: Black. Fore tibia with 2 posteroventral setae on apical half. Fore tarsomeres 1–4 each without fine anteroventral and posteroventral hairs at tip, fore tarsomere 1 without posteroventrals at apex. Fore claws of all males blunt and much shorter than length of tarsomere 5, probably broken. Pulvilli as long as tarsomere 5. Mid femur straight, with rows of long, dense, fine anteroventral, ventral and posteroventral setae; with 0 anterior and 2(3) posterodorsal to posterior preapical setae. Mid tibia with 1–2 anterodorsals on apical half, without anteroventrals; 4 posterodorsals, 2–3 posteroventrals. Hind femur with rows of long, dense, fine ventral and posteroventral setae and with a row of longer and stronger anteroventral setae. Hind tibia with rows of long anterodorsals and posterodorsals, with numerous setae on anterior surface, with 4–5 short hair-like anteroventrals and posteroventrals; with a small ventral apical prong, without posteroventral apical seta but with 1 anteroventral at the tip. Hind tarsomere 1 with 2 short ventral setae at base.

Wing: Brown, darker at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu upright, almost straight, forming a right-angle with vein M. Calypters and margins yellow. Knob of haltere black.

Abdomen: Conical; ground-colour black. Densely brownish dusted, viewed from behind tergites 3–5 with a narrow undusted median vitta. Sternite 1 bare or with several setulae. Sternite 5 (Fig. 2D).

Terminalia: Figs 2 E–G.

FEMALE: Not known, but probably similar to *D. firthiana* (Huckett) and *D. triseta* **sp. nov.**

Distribution. Russia: Khakasiya.

***Drymeia brumalis* (Rondani, 1866)**

Aspilota brumalis Rondani, 1866: 88.

This European species (Pont 1986) has been recorded from Qinghai, Hebei and Gansu provinces in northern China by Fan (2008), but is so far not known from Russia. It is recorded from Austria, Czech Republic, France, Germany, Great Britain, Italy, Poland, Slovakia, Spain, Switzerland. It is included in the key for completeness and to facilitate comparison with *D. aristata* **sp. nov.** A full description of both sexes is given by Hennig (1962b: 679–680).

***Drymeia cantabrigensis* (Huckett, 1965)**

Eupogonomyia cantabrigensis Huckett, 1965a: 300.

This Nearctic species is closely similar to the species *D. cristata* **sp. nov.**, *D. setibasis* (Huckett) and *D. grisea* **sp. nov.**, for which reason we have included it in the key. It is known only from the Northwest Territories of Canada, and a full description of both sexes is given by Huckett (1965a: 300–301). We have studied paratypes in the BMNH and in the ZIN.

***Drymeia chillcotti* (Huckett, 1965)**

Figs. 3 F–K

Bebryx chillcotti Huckett, 1965a: 302.

Drymeia chillcotti; Sorokina, 2012a: 329.

Material examined. RUSSIA: *Krasnoyarsky Krai, Taymyr Peninsula*: 7 males and 1 female, 90 km NW Khatanga, valley of Zakharova-Rasokha River (left tributary of Novaya River), 72.7°N 101.08°E, 2–16.vii.2011, A. Barkalov & V. Zinchenko; 2 males, Ary-Mas cordon, 72.5°N 101.94°E, 10–20.vii.2010, A. Barkalov.

Remarks. A description of both sexes was given by Huckett (1965a: 302–303). Adults of this species are found on flowering plants.

Distribution. This species was described from the Northwest Territories of Canada and from Alaska, and has recently been recorded from Russia (Sorokina 2012a).

***Drymeia cilitarsis* sp. nov.**

Figs. 4 A–G

Diagnosis. The species is close to species of the *D. cinerea* group (the former genus *Bebryx* Gistel), which all have the anepimeron setulose (*D. cinerea* (Meigen, 1826), *D. caucasica* (Schnabl & Dziedzicki, 1911), *D. sibirica* (Hennig, 1962) and *D. chillcotti* (Huckett, 1965)). Males of the new species can be distinguished as follows: prealar absent; anepimeron haired, katepimeron bare or with few hairs; proboscis thin, elongate; eye with very short sparse hairs; fronto-orbital plates touching; tip of abdomen with a dense brush of slender black setulae and bristles, caudally directed; mid femur weakly curved and flattened ventrally, with only a few short anteroventral setae on apical third; hind femur without posteroventral setae; hind tibia with a small ventral apical prong, without posteroventral apical seta.

Etymology. The species name is based on the Latin words “cilium” and “tarsus” on account of the short fine anteroventral and posteroventral hairs at the tips of fore tarsomeres 1–4.

Type material examined. Holotype male, RUSSIA: Altai Republic, Kosh-Agachskii raion, north slope of Severo-Chuyskii range, valley of Akturu River, 2014 m, 50°06'N 87°48'E, 21.vii.2013, V. Sorokina (SZMN).

Paratypes: 1 male, same data as holotype (SZMN); 2 males, *Tyva Republic*, *Morgun-Taiginskii kozhuun*, environs of Mugur-Aksy, 2000–2100 m, ~ 50°22'N 90°25'E, 22.vii.1993, A. Barkalov (SZMN).

Description. MALE. Length of body, 7.8–8.5 mm. Length of wing, 5.2–6.0 mm.

Head: Ground-colour black. Eye with very short sparse hairs. Fronto-orbital plate and parafacial silvery-white pruinose; face grey, gena and lower occiput light grey pruinose. Fronto-orbital plates touching. Frons at narrowest point as wide as diameter of anterior ocellus. Ocellar setae quite short. 17–18 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel 1.5 times as long as wide. Arista swollen in basal sixth, appearing almost bare, the longest hairs shorter than its basal diameter. Parafacial at level of insertion of arista slightly narrower than or equal to width of postpedicel, hardly narrowing below. Upper part of face with a small knob or carina between antennal bases. In lateral view, facial edge not projecting forward beyond the level of profrons. Gena broad, depth below lowest eye-margin equal to or slightly broader than length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis thin, elongate, prementum dusted.

Thorax: Ground-colour black. Scutum matt, black, viewed from in front with two green-grey vittae running inside the line of the dorsocentrals but not reaching scutellum, postpronotal lobe and notopleuron light grey dusted. Ground-setulae long and dense. Pleura grey dusted, with a shining patch anteriorly on katepisternum and medially on meron. Acrostichals 0+1, the presutural setulae in 4–5 irregular rows. Dorsocentrals 2+4. Prealar absent. Notopleuron densely setulose. Prosternum bare. Anepimeron haired. Katepimeral setae 1+1, otherwise without or with a few hairs. Scutellum black and dusted in posterior view.

Legs: Black. Fore tibia with 2–4 posteroventral setae on apical half. Fore tarsomeres 1–4 each with a short fine anteroventral and posteroventral hair at tip, and tarsomere 1 with rows of such hairs, without posteroventrals at apex. Fore claws as long as length of tarsomere 5, thin and pointed, but often short, blunt and obviously broken, shorter than length of tarsomere 5. Pulvilli as long as tarsomere 5. Mid femur curved and flattened ventrally, with only a few short anteroventral setae on apical third, none as long as femoral depth; anterior surface with a row of long setae on basal half and some strong but short setae near to anterodorsal surface; posteroventral surface with row of very short fine setae that become longer on basal half, but shorter than anteroventrals; 0 anterior and 3 posterodorsal to posterior preapical setae. Mid tibia without anterior setae; 10–12 posterodorsals, including 2 short ones at base, 4 posteroventrals and 3–4 posterior setae. Hind femur without posteroventrals but with some fine setae on basal half of posterior surface; with 7 strong anteroventral setae on apical half. Hind tibia with a row of 8 posterodorsals that become shorter on apical half; with a row of anterodorsals; 5–7 anteroventrals; 2–3 uneven rows of posterior and posteroventrals on middle; with a small ventral apical prong, without a dorsal and with an anterodorsal preapical; with 1–2 anteroventral but 0 posteroventral apical seta. Hind tarsomere 1 with 2 short ventral setae at base.

Wing: Brown, darker at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m behind the point where subcosta enters costa. Cross-vein dm-cu oblique, sinuous. Calypters and margins yellow. Knob of haltere black.

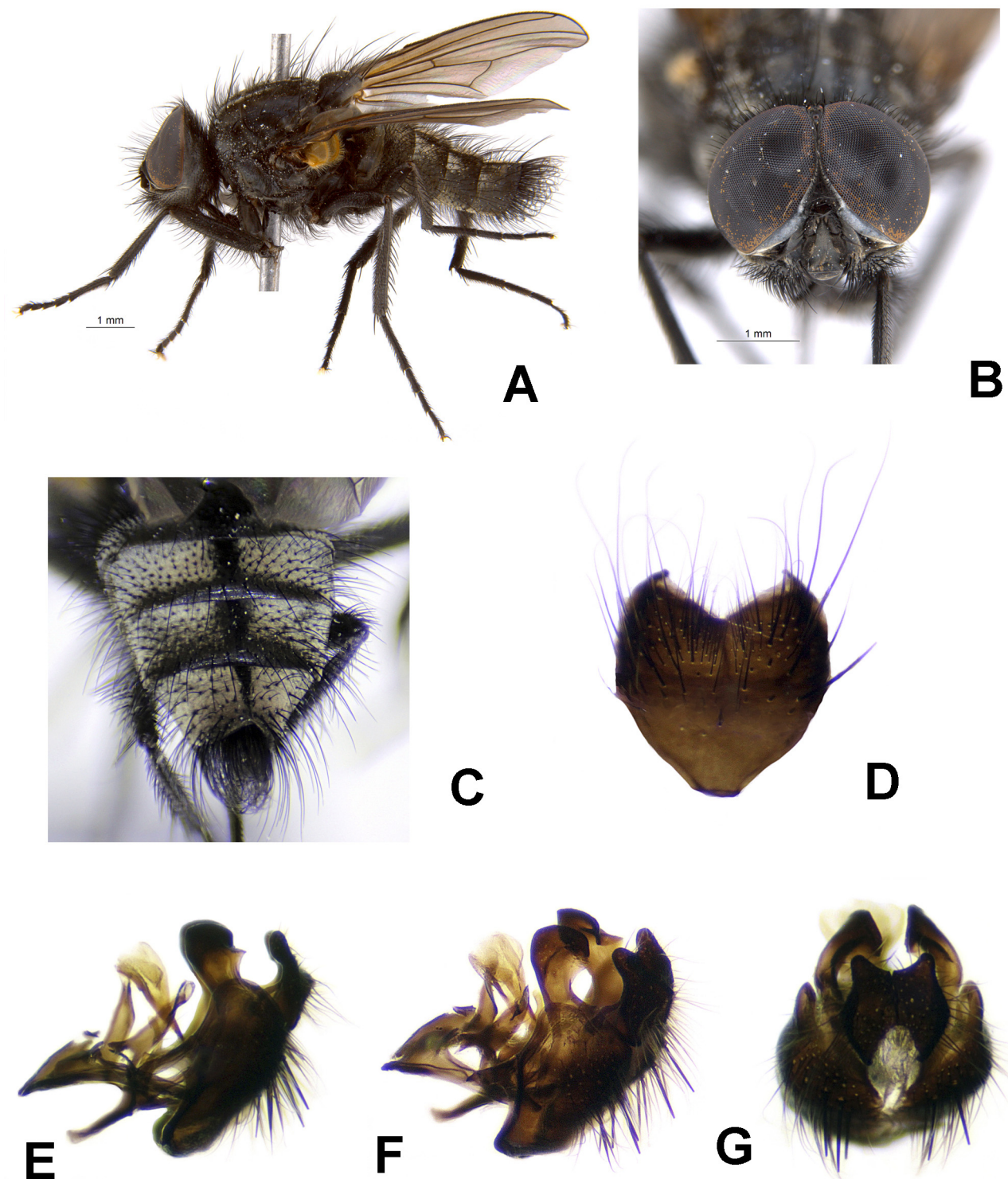


FIGURE 4. *Drymeia cilitarsis* (paratypes), male. **A.** Habitus, lateral view. **B.** Head, anterior view. **C.** Abdomen, dorsal view. **D.** Sternite 5. **E–G.** Terminalia. **E.** Lateral view. **F.** Postero-lateral view. **G.** Posterior view.

Abdomen: Ground-colour black. Densely yellow-grey dusted. When viewed from behind with black markings as follows: syntergite 1+2 with an inverted triangular undusted mark, tergites 3–5 each with an undusted median line that broadens out towards hind-margins. Tergite 5 compressed and raised, at apex with a “basket” of dense, fine, long, curled, caudally-directed setae and setulae. Sternite 1 bare. Sternite 5 swollen (Fig. 4D).

Terminalia: Figs 4 E–G.

FEMALE: Not known.

Remark. Adults of this species are found on flowering plants.

Distribution. Russia: Altai Mts.

***Drymeia cristata* sp. nov.**

Figs. 5 A–H

Diagnosis. The species is similar to *D. cantabrigensis* (Huckett, 1965) and *D. setibasis* (Huckett, 1965). Males of the new species can be distinguished as follows: anepimeron and katepimeron bare; eye bare; facial edge projecting forward beyond the level of profrons; arista swollen in basal third; proboscis elongated; anteroventral surface of mid femur with a comb of long, strong, inclined setae on middle part; hind femur without posteroventrals; hind tibia without a ventral apical prong and with only a strong anteroventral preapical seta.

Etymology. The species name is based on the Latin adjective “cristatus” what means “with a comb”.

Type material examined. Holotype male, RUSSIA: Krasnoyarsky Krai, Taymyr Peninsula, 90 km NW Khatanga, valley of Zakharova-Rasokha River (left tributary of Novaya River), 72.7°N 101.08°E, 3.vii.2011, A. Barkalov (SZMN). Paratypes: 30 males, same data as holotype, 2–16.vii.2011, A. Barkalov & V. Zinchenko (2 males each in ZIN, ZMUM, OUMNH, BMNH, BUIC). 1 male, Chukotka Autonomous Okrug, Wrangel Island, environs of Tundrovaya Mt., 18.vii.1972, K. Gorodkov (ZIN).

Description. MALE. Length of body, 4.6–6.3 mm. Length of wing, 4.0–4.6 mm.

Head: Ground-colour black. Eye bare. Fronto-orbital plate and parafacial silvery-grey pruinose; face grey, gena and lower occiput grey pruinose. Fronto-orbital plates touching. Frons at narrowest point 1.5 times as wide as diameter of anterior ocellus. Ocellar setae very short. 11–13 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel about as long as wide. Arista bare, swollen in basal third. Parafacial at level of insertion of arista equal to or slightly narrower than width of postpedicel, hardly narrowing below. Upper part of face without a small knob or carina between antennal bases. In lateral view, facial edge projecting forward beyond the level of profrons. Gena broad, depth below lowest eye-margin equal to length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis elongated, prementum dusted.

Thorax: Ground-colour black. Scutum matt, black, viewed from in front with very indistinct dark brown vittae running inside and outside the line of the dorsocentrals; viewed from behind scutum and scutellum black, without dust. Ground-setulae short, but dense. Pleura subshining, anteriorly on katepisternum and medially on meron with a shining patch. Acrostichals 0, the presutural setulae in 4–5 irregular rows. Dorsocentrals 2+4. Prealar absent. Anepimeron and katepimeron bare. Notopleuron densely setulose. Prosternum bare. Katepisternal setae 1+1.

Legs: Black. Fore tibia with 2–3 submedian posteroventral setae. Fore tarsomeres 1–4 each with a short fine anteroventral and posteroventral hair at tip, and tarsomere 1 with 3–4 posteroventrals at apex. Fore claws as long as length of tarsomere 5 or slight longer, thin and pointed. Mid femur slight curved, with a comb of long, strong, inclined anteroventral setae on middle part, these becoming shorter distally; anterior surface with a row of setae on basal half; posteroventral surface with several fine short setae on apical half, not as long as femoral depth; 0 anterior and 1–2 posterodorsal to posterior preapical setae. Mid tibia without anterodorsals and anteroventrals; 7–8 short and long posterodorsals and 3–4 posteroventrals. Mid tarsomeres 1–2 on posteroventral surface with a row of apically curved or straight hairs, as long as tarsal depth. Hind femur without posteroventrals but with some fine setae on basal half of posterior surface; with a row of anteroventrals on apical third. Hind tibia with 5–7 posterodorsals on basal half; with a row of anterodorsals, long on basal third and becoming shorter and more setulose towards apex of tibia; 3–4 short anteroventrals on basal half and 3–4 posteroventrals on apical half; without a ventral apical prong, without strong preapical setae, except anteroventral seta. Hind tarsomere 1 with 2 short ventral setae at base.

Wing: Light yellowish, darker at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu upright, almost straight, forming a right-angle with vein M. Calypters and margins yellow. Knob of haltere black.

Abdomen: Ground-colour black. Syntergite 1+2 black, tergites 3–5 yellowish-grey dusted, with a narrow dark middle stripe that does not expand laterad along margins of tergites. Sternite 1 bare. Sternite 5 (Fig. 5E).

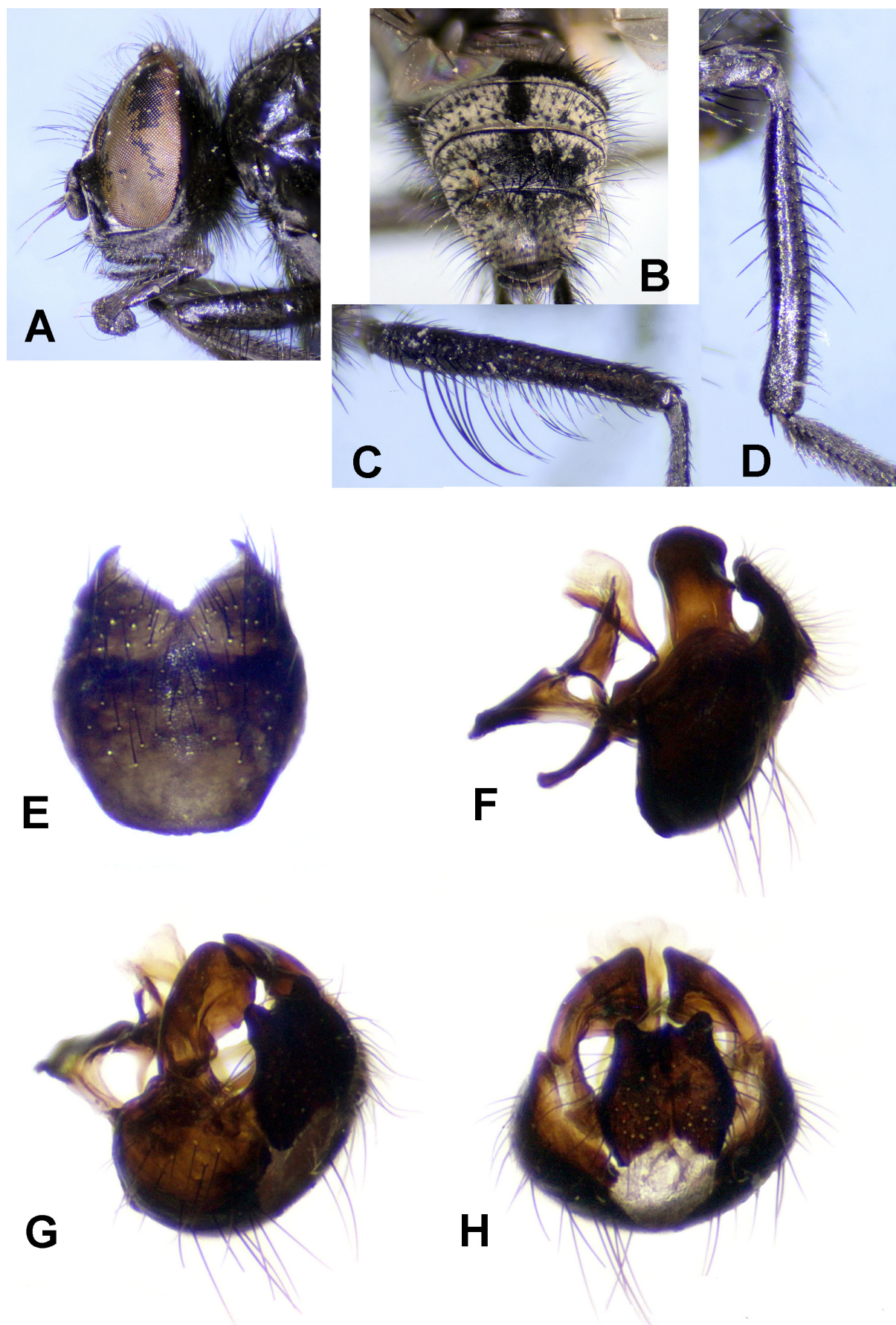


FIGURE 5. *Drymeia cristata* (paratypes), male. **A.** Head, lateral view. **B.** Abdomen, dorsal view. **C.** Mid femur. **D.** Hind tibia. **E.** Sternite 5. **F–H.** Terminalia. **F.** Lateral view. **G.** Postero-lateral view. **H.** Posterior view.

Terminalia: Figs 4 F–H.

FEMALE: Not known, but probably similar to *D. cantabrigensis* (Huckett, 1965) and *D. setibasis* (Huckett, 1965).

Distribution. Russia: Taymyr Peninsula, Wrangel Island.

***Drymeia fasciculata* (Stein, 1916)**

Fig. 6 A–C

Pogonomyia fasciculata Stein, 1916: 46.

Material examined. RUSSIA: *Altai Republic, Kosh-Agachskii raion*: 11 males, upper part of Zhumaly River, Rodonovyi spring, 2300 m, 49.46°N 88.05°E, on flowers of *Potentilla* sp., 24.vi.2005, V. Sorokina; 3 males, Ukok plateau, environs of Zerlukol'-Nur lake, 2400 m, 49.56°N 88.21°E, 23.vi.2005, V. Sorokina & A. Barkalov; 1 male, Ukok plateau, environs of Tarkhatinskoe lake, 2300 m, 5.vii.2005, T. Novgorodova; *Altai Republic, Ulaganskii raion*: 1 female, Kurayskiy range, 2500–2800 m, 50.33°N 87.57°E, 29–30.vi.2008, A. Barkalov. *Tyva Republic, Mongun-Tayginskii kozhuun*: 1 female, Shapshalskii mountain range, upper part of Shui River, 2550–2900 m, 25.vii.2007, V. Sorokina.

Remarks. This species can be recognized by the characters given in the key. A brief description of the male was given by Hennig (1962b: 680). Adults of this species are found on flowering plants.

Distribution. This little-known species is recorded only from Armenia, ?Austria, Bulgaria, China (Shanxi province), France, Georgia, Italy, Turkey and Russia (Altai Mts).

***Drymeia firthiana* (Huckett, 1965)**

Fig. 6 D–F

Pogonomyia firthiana Huckett, 1965a: 298.

Material examined. RUSSIA: *Altai Republic, Kosh-Agachskii raion*: 40 males and 6 females, 10–18 km SE Dzhazator, 1700–2115 m, 49°39'N 87°39'E, 5.vii.2006, V. Sorokina; 6 males, upper part of Zhumaly River, Rodonovyi spring, 2300 m, 49.46°N 88.05°E, on flowers of *Potentilla* sp., 24.vi.2005, 4.vii.2005, V. Sorokina, 2400 m, 23,24.vii.2007, V. Sorokina & T. Novgorodova, 2412 m, 5.vii.2008, A. Barkalov; 33 males and 3 females, Ukok plateau, environs of Muzdy-Bulak lake, 2400–2900 m, 49.28°N 87.65°E, 27,28.vi.2005, 1,2.vii.2005, 12.vii.2008, V. Sorokina & A. Barkalov; 91 males and 13 females, Ukok plateau, 8 km NE Maitobe Mt., 2420–2800 m, 49°34'N 87°43'E, 6,8,10.vii.2006, V. Sorokina & T. Novgorodova (10 males and 2 females in OUMNH, 7 males and 2 females in BMNH); 69 males and 9 females, Ukok plateau, valley of Ak-Allacha River, 2160 m, 49°25'N 87°37'E, 12–14.vii.2006, V. Sorokina & T. Novgorodova (3 males in BMNH, 4 males and 1 female in OUMNH); 60 males and 2 females, Ukok plateau, environs of Kal'dzhin-Kul'-Bas lake, 2400–2450 m, 49°19'N 87°26'E, 17,20,21.vii.2006, V. Sorokina & T. Novgorodova (6 males and 1 female in OUMNH, 4 males and 1 female in BMNH); 12 males, south slope of Yuzhno-Chuyskii range, valley of Tara River, 2175–2200m, 49°39'N 88°13'E, 1–4.vii.2006, 11,13.vii.2009, V. Sorokina & T. Novgorodova (1 male in OUMNH), 2800–3000 m, 49.65°N 88.22°E, 19.vii.2009, A. Barkalov; 1 male, valley of Akbul River, 2075 m, 49°39'N 88°1'E, 12.vii.2009, T. Novgorodova; 2 males, upper part of Naryn-Gol River, 2520 m, 49°49'N 88°13'E, 16–19.vii.2009, V. Sorokina; 24 males and 4 females, south slope of Kurayskii range, 5.5–7 km NW Kuray village, 2111–2588 m, 50°17'N 87°51'E, 17,19.vii.2013, V. Sorokina; 9 males and 13 females, 1 km NW Kuray village, 1576 m, 50°15'N 87°53'E, 20.vii.2013, V. Sorokina; 6 males and 1 female, north slope of Severo-Chuyskii range, valley of Akturu River, 1865–2064 m, 50°08'N 87°48'E, 21.vii.2013, V. Sorokina; 2 males, upper part of Akturu River, 50.09°N 87.78°E, 2110 m, 3.vii.2006, A. Barkalov & V. Zinchenko; *Altai Republic, Shebalinskii raion*: 1 male, environs of Topuchaya, 972 m, 51.1°N 85.6°E, 10.vii.2006, A. Barkalov; 1 male, Diektiek village, Gorduba River, 957 m, 51.28°N 85.61°E, 27.vi.2009, V. Sorokina; *Altai Republic, Ulaganskii raion*: 11 males, environs of Dzhulukul' lake, 2200 m, 50.47°N 89.77°E, 21.vii.2007, V. Sorokina; 1 male, Shapshalskii range, 2878 m, 50.53°N 89.8°E, 24.vii.2007, V. Sorokina; 2 males, Kurayskii range, 2119 m, 50.19°N 87.42°E, 4.vii.2008, A. Barkalov; *Altai*



FIGURE 6. *Drymeia* spp., male terminalia. A–C. *Drymeia fasciculata*. D–F. *Drymeia firthiana*. G–I. *Drymeia gymnophthalma*. A, D, G. Lateral view. B, E, H. Postero-lateral view. C, F, I. Posterior view.

Republic, Ongudayskii raion: 3 males, Terektinskiy range, upper part of B. Yaloman River, 955 m, 50.47°N 86.32°E, 2–4.viii.2007, A. Barkalov; *Altai Republic, Ust'-Koksinskii raion*: 9 males, environs of Mul'ta, 915–962 m, 50°09'N 86°00'E, 11.vii.2013, V. Sorokina; 8 males, 6.5 km SE Mul'ta, 1026–1153 m, 50°07'N 86°00'E, 15.vii.2013, V. Sorokina; 2 males and 1 female, Nizhne-Mul'tinskoe lake, 1633 m, 50°01'N 85°49'E, 13.vii.2013, V. Sorokina. *Khakasiya: Tashtypskii raion*, 4 males, Imek River, 474 m, 52.9°N 89.9°E, 29.vi.2004, A. Barkalov, 2 males, ~ 9 km NNW Tashtyp village, Kyzyl-Bash strim, valley of Tashtyp River, 451–474 m, 52.9°N 89.9°E, 29.vi.2004, A. Barkalov; *Shirinskii raion*, 3 males and 3 females, environs of Shira-Itkul' lake, 54.45°N 90.18°E, tophill Betuletum, 25–28.vi.2011, K. Tomkovich (ZMUM). *Tyva Republic: Morgun-Taiginskii kozhuun*: 36 males and 1 female, environs of Mugur-Aksy, 2000–2100 m, ~ 50°22'N 90°25'E, 22.vii.1993, A. Barkalov, 3 males, Shapshalskii mountain range, upper part of Shui River, 2550–2900 m, 25.vii.2007, V. Sorokina, 1 male, east bank of Khindikhtig-Khol' lake, 2334 m, 50.4°N 89.9°E, 28.vii.2007, A. Barkalov; *Tes-Khemskii kozhuun*, 3 males, 15 km ENE Oo-Shynaa, ~ 50°34'N 94°21'E, 17.vii.1993, A. Barkalov.

Remarks. A full description of both sexes is given by Hockett (1965a: 300). Adults of this species are found on flowering plants.

Distribution. Previously known only from the type-series from the Yukon Territory (Canada).

Drymeia glabra sp. nov.

Figs. 7 A–H

Diagnosis. The species is very similar to *D. fasciculata* (Stein, 1916). The new species can be distinguished as follows: prealar seta long and strong; anepimeron and katepimeron bare; proboscis thin, elongate; eye bare; body shining black, without dusted markings; facial edge projecting forward beyond the level of profrons; notopleuron bare or with individual setulae around posterior notopleural seta; mid femur in male with a row of fine relatively short anteroventral setae and 4–5 stronger setae on apical 1/3, long posteroventral setae only on basal half; hind tibia in male with a small ventral apical prong, without any strong apical setae.

Etymology. The species name is based on the Latin adjective “glaber” what means “smooth”.

Type material examined. Holotype male, RUSSIA: Altai Republic, Ulaganskii raion, Shapshalskii mountain range, 2878 m, 50.53°N 89.8°E, 23.vii.2007, V. Sorokina (SZMN).

Paratypes: 2 males and 4 females, same data as holotype (SZMN); 1 male 1 female, the same but 24.vii.2006, V. Sorokina (OUMNH); *Altai Republic, Kosh-Agachskii raion*: 3 males and 3 females, Ukok plateau, environs of Muzdy-Bulak lake, 2400–2600 m, 49.28°N 87.65°E, 26.vi.2005, A. Barkalov, 2600–2800 m, 1.vii.2005, V. Sorokina (1 female each ZIN & ZMUM, rest in SZMN); 1 male, Ukok plateau, 5–6 km NE Maitobe mountain, Pass Bugymuyz, 2800 m, 49°34'N 87°43'E, 11.vii.2006, V. Sorokina & T. Novgorodova (SZMN); 1 male, Ukok Plateau, 6 km NE Maitobe mountain, 2400–2700 m, 49°34'N 87°43'E, 08.vii.2006, T. Novgorodova (OUMNH); 4 males, south slope of Yuzhno-Chuyskii range, 2600–2800 m, 49°39'N 88°13'E, 1.vii.2006, V. Sorokina (1 male each in ZIN & ZMUM, rest in SZMN). *Altai Mts*: 4 males and 4 females, Shapshalskii mountain range, upper part of Shui River, 2550–2900 m, 50.53°N 89.8°E, 25.vii.2007, V. Sorokina (SZMN).

Description. MALE. Length of body, 5.2–5.8 mm. Length of wing, 4.3 mm.

Head: Ground-colour black. Eye bare. Parafacial brownish-grey, light silver pruinose; fronto-orbital plate and gena dark brown pruinose; face and lower occiput dark brown pruinose; gena and lower occiput light, shining. Fronto-orbital plates touching, sometimes with a very narrow frontal vitta. Frons at narrowest point 1.5 times as wide as diameter of anterior ocellus. Ocellar setae short. 12–14 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel circa 1.2 times as long as wide. Arista swollen in basal sixth, appearing almost bare, the longest hairs much shorter than basal diameter of arista. Parafacial at level of insertion of arista as wide as or slightly broader than width of postpedicel, hardly narrowing below. Upper part of face with a carina between antennal bases. In lateral view, facial edge projecting forward beyond the level of profrons. Gena broad, depth below lowest eye-margin equal to or slightly broader than length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis thin, elongate. Prementum of proboscis dusted, as long as palpus.

Thorax: Ground-colour black. Scutum shining, black but when viewed from in front with light brown dust, without vittae; postpronotal lobe, notopleuron and postalar callus shining, and pleura light brown dusted. Ground-setulae short. Pleura with an undusted patch anteriorly on katepisternum and medially on meron. Anepimeron and

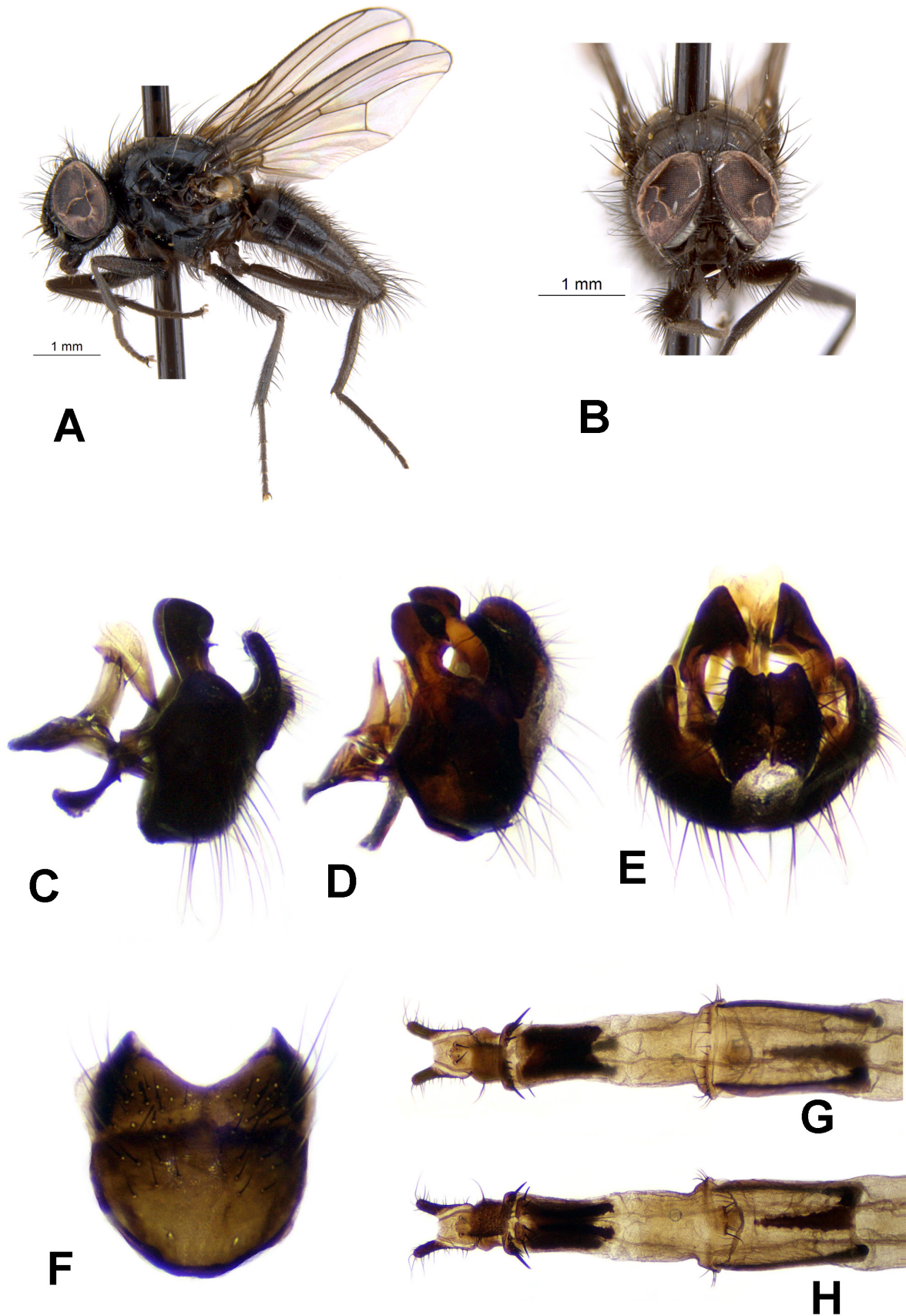


FIGURE 7. *Drymeia glabra* (paratypes). **A.** Male habitus, lateral view. **B.** Male head, anterior view. **C–E.** Male terminalia. **C.** Lateral view. **D.** Postero-lateral view. **E.** Posterior view. **F.** Sternite 5. **G, H.** Female, apical portion of ovipositor. **G.** Dorsal view. **H.** Ventral view.

katepimeron bare. Notopleuron bare or with individual setulae around posterior notopleural seta. Prosternum bare. Acrostichals 0+1. Dorsocentrals 2+4. Prealar long and strong. Katepisternal setae 1+1. Scutellum black and light shining.

Legs: Black. Fore tibia with 2–3 weak posteroventral setae on apical half. Fore tarsomere 1 without posteroventrals at apex. Fore claws as long as length of tarsomere 5, thin and pointed. Pulvilli as long as tarsomere 5. Mid femur straight, slightly flattened, with a row of fine anterior and anteroventral setae and 4–5 stronger setae on apical 1/3; with a row of fine posteroventral setae which are longer on basal half; 0 anterior and 2–3 posterodorsal to posterior preapical setae. Mid tibia with 2–3 anterodorsal setae and without anteroventrals; 4–6 posterodorsals, 3–4 short posteroventrals and 3–4 weak ventrals. Hind femur with long dense setae on anteroventral, posteroventral and ventral surfaces on basal 2/3; with 6–7 strong anteroventral setae on apical half. Hind tibia with 3–4 long posterodorsals on basal half and some short setae between them; with 5–6 fine short anteroventrals and posteroventrals on middle part; with 4–5 erect setae at middle on posterior surface and numerous short erect setae on anterior surface; with a ventral apical prong and without any strong apical setae except for a short anteroventral seta on the prong. Hind tarsomere 1 with 2 short ventral setae at base.

Wing: Brownish, very dark at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu upright, almost straight, forming a right-angle with vein M. Calypters dark yellow (lower one sometimes brown), margins brown. Knob of haltere black.

Abdomen: Conical, shining black. In posterior view with light brown dust on lateral margins of tergites 3–5. Sternite 1 bare. Sternite 5 (Fig. 7F).

Terminalia: Figs 7 C–E.

FEMALE. Length of body, 5.3–6.2 mm. Length of wing, 4.2–5.0 mm.

Differs from the male as follows:

Head: Dichoptic. Frons at middle 0.43 of head-width at this point, and at this point each fronto-orbital plate 0.5 times width of frontal vitta. Head brown dusted. Frontal triangle inconspicuous, hardly reaching the crossed setae on frontal vitta. Ocellar setae strong. 5–6 pairs of inclinate frontal setae, including several interstitials; 3–4 pairs of orbital setae, the upper two pairs reclinate and excline, the lower pair(s) procline and excline. Frontal vitta with a pair of strong crossed setae.

Thorax: As in male, but notopleuron bare.

Legs: Black. Fore tibia with 2 posteroventral setae on apical half. All claws and pulvilli much shorter. Mid femur straight, anteroventral surface with 2 strong setae on basal quarter and 4 strong setae on apical third; posteroventral surface with 2–3 fine setae on basal quarter. Mid tibia with 2–3 anterodorsal setae and with one anteroventral on apical half; 4–5 posterodorsals and 1–2 short posteroventrals. Hind femur with some fine posteroventral setae on basal half; anteroventral surface with 6–7 strong setae on apical half and with short fine setae on basal half. Hind tibia with 3–4 long posterodorsals on middle part; with 4 short anteroventrals and 2–4 anterodorsals; with strong apical setae on anterior and ventral surfaces.

Wing: Yellowish-brown tinged, dark yellow at base.

Abdomen: As in male.

Ovipositor: Figs 7G, H.

Remark. Adults of this species are found on flowering plants.

Distribution. Russia: Altai Mts.

***Drymeia grandis* sp. nov.**

Figs. 8 A–H, 9 A–C

Diagnosis. The species is similar to *D. vicana* (Harris, 1780). The new species can be distinguished as follows: prealar absent, sometimes present in female; anepimeron haired, katepimeron bare or with a few hairs; eye with very short sparse hairs; proboscis thickened, short; mid femur straight, in male with a few short anteroventral setae on apical third, with a row of short spinules near base, in female with 2 strong setae on basal quarter; posteroventral surface with row of short fine setae; hind femur without posteroventrals; hind tibia in male with a small ventral apical prong, without posteroventral apical seta; tip of abdomen in male with several caudally directed setulae on hypopygium.

Etymology. The species name is the Latin adjective “grandis” which means “great” or “grand”.

Type material examined: Holotype male, RUSSIA: Altai Republic, Kosh-Agachskii raion, upper part of Naryn-Gol River, 2520 m, 49°49'N 88°32'E, 16–19.vii.2009, V. Sorokina (SZMN).

Paratypes: 18 males 5 females, same data as holotype (1 male and 1 female OUMNH); *Altai Republic, Kosh-Agachskii raion*: 2 males and 1 female, south slope of Kurayskii range, 7 km NW Kuray village, 2251 m, 50°17'N 87°51'E, 17.vii.2013, V. Sorokina (1 male in OUMNH); 1 male, Ukok plateau, environs of Muzdy-Bulak lake, 2400 m, 49.28°N 87.65°E, 2.vii.2005, V. Sorokina; 1 female, Ukok plateau, valley of Ak-Allacha River, 2160 m, 49°25'N 87°37'E, 12.14.vii.2006, V. Sorokina & T. Novgorodova; 11 females, south slope of Yuzhno-Chuyskii range, valley of Tara River, 2175 m, 49°39'N 88°13'E, 30.vi.2006, V. Sorokina, 1–4.vii.2006, V. Sorokina & T. Novgorodova, 2200 m, 11.vii.2009, V. Sorokina; 9 females, 10–18 km SE Dzhazator, 1700–2115 m, 49°37'N 87°39'E, 5.vii.2006, V. Sorokina; 2 males, upper part of Zhumaly River, Rodonovyi spring, 2412 m, 49°27'N 88°03'E, 24.vii.2005, V. Sorokina & A. Barkalov; 3 females, north slope of Severo-Chuyskii range, valley of Akturu River, 1865–2065 m, 50°06'N 87°48'E, 21.vii.2013, V. Sorokina & T. Novgorodova (1 female in OUMNH); *Altai Republic, Ulaganskii raion*: 1 female, environs of Kara-Kudyur, 50.71°N 87.81°E, 24.vii.2003, A. Barkalov; 5 females, 3 km S Aktash, 1360 m, 50.28°N 88.67°E, 16.vii.2003, V. Sorokina; *Altai Republic, Shebalinskii raion*: 1 female, environs of Ulus-Cherga, 27.vii.2008, O. Kosterin (ZMUM). *Ust'-Koksinskii raion*: 2 females, 6.5 km SE Mul'ta, 1026 m, 50°07'N 86°01'E, 12–15.vii.2013, V. Sorokina. *Altai Krai, Krasnoshekovskii raion*: 2 males and 3 females, 6 km NW Kharlovo, valley of Berezovka River, 1.vi.2004, V. Sorokina; 1 male, 1 km S Suetka, 26.v.2004, V. Sorokina. *Khakasiya: Shirinskii raion*, 5 females, environs of Shira salt lake, 350–355 m, 54.48°N 90.17°E, 21–24.vi.2011, K. Tomkovich (ZMUM). *Tyva Republic: Morgun-Taiginskii kozhuun*, 1 female, environs of Mugur-Aksy, 2000–2100 m, ~ 50°22'N 90°25'E, 22.vii.1993, A. Barkalov; *Ovyurskii kozhuun*, 1 female, 14 km N Khandagaity, 1600 m, ~ 50°43'N 92°04'E, 25.vii.1993, A. Barkalov; *Tes-Khemskii kozhuun*, 1 female, 1.5 km, W Samagaltay, ~ 50°36'N 95°00'E, 13–14.vii.1993, A. Barkalov (SZMN).

All the above paratypes collected by the author are located in the SZMN except for 2 pairs from Altai Republic deposited in each of the following: ZIN, ZMUM, OUMNH, BMNH and BUIC.

Description. MALE. Length of body, 6.5–7.7 mm. Length of wing, 4.8–6.0 mm.

Head: Ground-colour black. Eye with very short sparse hairs. Fronto-orbital plate and parafacial silvery-white pruinose; face grey, gena and lower occiput light grey pruinose. Fronto-orbital plates touching. Frons at narrowest point 1.5 times as wide as width of anterior ocellus. Ocellar setae short. 17–18 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel circa 2 times as long as wide. Arista swollen in basal sixth, appearing almost bare, the longest hairs shorter than basal diameter of arista. Parafacial at level of insertion of arista slightly broader than postpedicel, hardly narrowing below. Upper part of face with a low carina between antennal bases. In lateral view, facial edge not projecting forward beyond the level of profrons, sometimes behind profrons. Gena broad, depth below lowest eye-margin equal to or slightly broader than length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis thickened, short. Prementum of proboscis dusted, as long as palpus.

Thorax: Ground-colour black. Scutum matt, black, viewed from in front with two grey vittae running inside, not reaching scutellum, and two indistinct vittae running outside the line of the dorsocentrals, reaching scutellum; postpronotal lobe, notopleuron and postalar callus light grey dusted. Ground-setulae short. Pleura light grey dusted, with a shining patch anteriorly on katapisternum and medially on meron. Anepimeron haired. Katapisternum bare or with few hairs. Acrostichals 0+1, the presutural setulae in 6 irregular rows. Dorsocentrals 2+4. Prealar absent. Notopleuron densely setulose. Prosternum bare. Katapisternal setae 1+1. Scutellum black and dusted in posterior view.

Legs: Black. Fore tibia with 3 posteroventral setae on apical half. Fore tarsomeres 1–4 each with a short fine anteroventral and posteroventral hair at tip, fore tarsomere 1 without posteroventrals at apex. Fore claws as long as length of tarsomere 5, thin and pointed, but often short, blunt and obviously broken, shorter than length of tarsomere 5. Pulvilli as long as tarsomere 5. Mid femur straight, slightly flattened, with a few short anteroventral setae on apical third, none as long as femoral depth, and with a row of short spinules near base; anterior surface with a row of long setae on basal half; posteroventral surface with a row of short fine setae and with a group of longer fine curved setae at base; 0 anterior and 1–2 posterodorsal to posterior preapical setae. Mid tibia with 1–2 anterodorsal setae and without anteroventrals; 6–7 posterodorsals, 3–4 posteroventrals. Hind femur without posteroventrals, but with a group of fine setae on anterior to posterior surfaces near base; with 6–8 strong

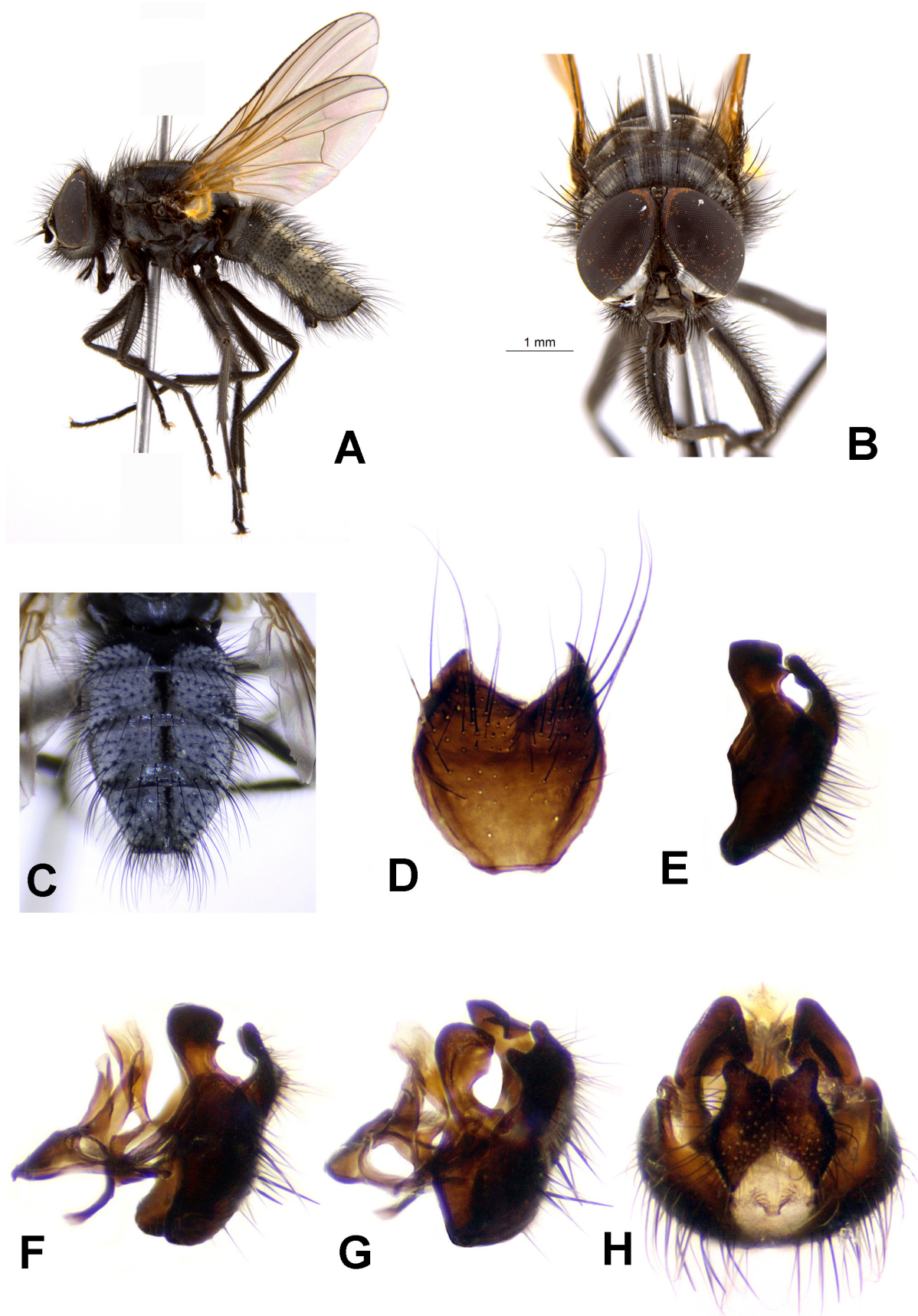


FIGURE 8. *Drymeia grandis* (paratypes), male. **A.** Habitus, lateral view. **B.** Head, anterior view. **C.** Abdomen, dorsal view. **D.** Sternite 5. **E–H.** Terminalia. **E, F.** Lateral view (variation of the shape of the surstyli). **G.** Postero-lateral view. **H.** Posterior view.



FIGURE 9. *Drymeia grandis* (paratype), female. **A.** Habitus, lateral view. **B, C.** Female, apical portion of ovipositor. **B.** Dorsal view. **C.** Ventral view.

anteroventral setae on apical half and a few fine setae on basal half. Hind tibia with 5–8 posterodorsals on basal half that become shorter at base; with a row of 9–11 uneven anterodorsals that are longer around middle; 3–4 anteroventrals on middle part; 2 uneven rows of weak short posterior and posteroventrals on middle part; with a small ventral apical prong; without a dorsal but with an anterodorsal preapical; with an anterior and short anteroventral apical seta but 0 posteroventral apical. Hind tarsomere 1 with 1 short ventral seta at base.

Wing: Faintly yellow, conspicuously so at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu oblique, sinuous. Calypters and margins yellow. Knob of haltere black.

Abdomen: Conical, ground-colour black. Densely white-grey or yellow-grey dusted. Viewed from behind, syntergite 1+2 with an inverted triangular undusted mark; tergites 3–5 each with a black median line that becomes narrower towards the tip of abdomen. Sternite 1 bare. Sternite 5 swollen (Fig. 8D).

Terminalia: Figs 8 E–H.

FEMALE. Length of body, 5.0–7.8 mm. Length of wing, 4.2–5.5 mm.

Differs from the male as follows:

Head: Dichoptic. Frons at middle 0.42 of head-width at this point, and at this point each fronto-orbital plate 0.26 of frontal vitta. Head yellow-grey or light grey dusted. Frontal triangle inconspicuous, not reaching the crossed setae on frontal vitta. Ocellar setae strong. 6–7 pairs of inclinate frontal setae, including several interstitials; 3–4 pairs of orbital setae, the upper two pairs reclinate and exclinate, the lower pair(s) proclinate and exclinate. Frontal vitta with a pair of strong crossed setae.

Thorax: Scutum densely grey or yellow-grey dusted, with two indistinct brown vittae running along dorsocentrals and sometimes with vittae running between them, all vittae more distinct after suture. Pleura and scutellum dusted as scutum. Ground-setulae very short. Dorsocentrals 2(3)+4. Prealar absent or present, but shorter than 2nd notopleural. Katepisternal setae 1+1, sometimes with 2–3 stronger setulae below posterior seta.

Legs: Fore tibia with 1–2 posteroventral setae on apical half. Mid femur straight; anteroventral surface with 2 strong setae on basal quarter; posteroventral surface with 4–5 setae on basal quarter, followed by a series of rather longer setulae that become finer towards base, and with a few fine setae on posterior to posteroventral surface at base. Mid tibia with 3–4 anterodorsals, also without anteroventrals; 5–7 posterodorsals, 2–3 posteroventrals. Hind

femur without posteroventrals, but with a few fine setae on ventral to posterior surfaces near base; with 6 strong anveroventral setae on apical half and a row of sorter setae on basal half. Hind tibia with 4–5 posterodorsals that become shorter at base; with a row of 4–5 anterodorsals; 4–5 anteroventrals on middle part. Dorsal preapical seta strong, and anterodorsal preapical half its length; 1 anteroventral but 0 posteroventral apical setae.

Wing: Yellowish tinged, especially at base.

Abdomen: Grey dusted, tinged with yellow. Viewed from behind, tergites 3–5 each with a dark indistinct narrow vitta, more distinct on tergite 5. Without strong setae.

Ovipositor: Figs 9B, C.

Remark. Females are abundant sweat flies.

Distribution. Russia: Altai Krai, Altai Mts and Khakasiya.

***Drymeia grisea* sp. nov.**

Figs. 10 A–G

Diagnosis. The species is very similar to *D. setibasis* (Huckett, 1965). Males of the new species can be distinguished as follows: prealar absent; eye bare; proboscis short; scutum with an elongated-triangular mark of light dust in front of scutellum and with light dust along lateral margins of scutum (viewed from behind); mid femur with a row of strong curved setae on ventral surface and another row on anteroventral surface at base; anterior surface with a row of setae on basal half that become setulose in apical half; with 3–4 short ventral spinules at middle; hind femur without posteroventrals; hind tibia on basal third with anterodorsal setae shorter than tibial depth; abdomen with dense grey dust, syntergite 1+2 wholly or half dusted like the other tergites, tergites 3–5 each with a narrow dark middle stripe that does not expand laterad along the hind-margins of the tergites.

Etymology. The species name refers to thick grey dust on abdomen and scutum.

Type material examined. Holotype male, RUSSIA: Altai Republic, Kosh-Agachskii raion, 8 km NE Maitobe Mt., 2420 m, 49°34'N 87°43'E, 6.vii.2006, V. Sorokina (SZMN).

Paratypes: RUSSIA: 11 males, same data as holotype (1 male in OUMNH); 1 male, same data but 2450 m, 10.vii.2006 (OUMNH); *Altai Republic, Kosh-Agachskii raion*: 1 male, 18 km SE Dzhazator, 2115 m, 49°37'N 87°39'E, m 5.vii.2006, V. Sorokina; 3 males, upper part of Zhumaly River, Rodonovyi spring, 2412 m, 49°27'N 88°03'E, 23,24.vii.2005, V. Sorokina & T. Novgorodova, 3 males, 5.vii.2008, A. Barkalov (1 male in OUMNH); 1 male, Ukok plateau, environs of Muzdy-Bulak lake, 2800–3000 m, 49.3°N 87.7°E, 2.vii.2005, A. Barkalov; 2 males, south slope of Kurayskii range, 7 km NW Kuray village, 2251 m, 50°17'N 87°51'E, 17.vii.2013, V. Sorokina. *Tyva Republic: Morgun-Taiginskii kozhuun*, 222 males and 25 females, environs of Mugur-Aksy, ~ 50°22'N 90°25'E, 2000–2100 m, 22.vii.1993, A. Barkalov; *Tes-Khemsii kozhuun*, 3 males, 15 km ENE Oo-Shynaa, ~ 500 m, 50°34'N 94°21'E, 17.vii.1993, A. Barkalov. MONGOLIA: *Khubsugulskii aimak*, 1 male, 17 km N Shine-Idera, 21–22.vii.1975, E. Narchuk (ZIN).

All the above paratypes are located in the SZMN except for 2 pairs from Altai Republic deposited in each of the following: ZIN, ZMUM, OUMNH, BMNH and BUIC.

Description. MALE. Length of body, 4.8–6.2 mm. Length of wing, 4.2–5.0 mm.

Head: Ground-colour black. Eye bare. Fronto-orbital plate and parafacial silvery-white pruinose; face grey, gena light grey and lower occiput greenish-grey pruinose. Fronto-orbital plates touching. Frons at narrowest point as wide as diameter of anterior ocellus. Ocellar setae very short. 15–18 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel 1.5 times as long as wide. Arista swollen in basal sixth, appearing bare, the longest hairs much shorter than basal diameter of arista. Parafacial at level of insertion of arista slightly narrower than width of postpedicel, hardly narrowing below. Upper part of face without a small knob or carina between antennal bases. In lateral view, facial edge below level of profrons. Gena broad, depth below lowest eye-margin equal to length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis short, prementum dusted.

Thorax: Ground-colour black. Scutum matt, black, viewed from in front with very indistinct dark brown vittae running inside and outside the line of the dorsocentrals; viewed from behind, scutum with an elongated-triangular mark of light dust in front of scutellum and with light dust along lateral margins of scutum. Ground-setulae short.



FIGURE 10. *Drymeia grisea* (paratypes), male. **A.** Habitus, lateral view. **B.** Abdomen and scutum, dorsal view. **C.** Hind tibia. **D.** Mid femur. **E–G.** Terminalia. **E.** Lateral view. **F.** Postero-lateral view. **G.** Posterior view.

Pleura thinly dusted, with a shining patch anteriorly on katapisternum and medially on meron. Acrostichals 0+1, the presutural setulae in 4-5 irregular rows. Dorsocentrals 2+4. Prealar absent. Anepimeron and katepimeron bare. Notopleuron densely setulose. Prosternum bare. Katapisternal setae 1+1, with 2-3 stronger setulae below posterior seta. Scutellum black and dusted on margins in posterior view.

Legs: Black. Fore tibia with 2 submedian posteroventral seta. Fore tarsomeres 1-4 each with a short fine anteroventral and posteroventral hair at tip, and tarsomere 1 with 3-4 such hairs on shaft. Fore claws as long as length of tarsomere 5 or slight longer, thin and pointed. Mid femur slightly curved, with a row of strong curved setae on ventral surface and another row on anteroventral surface at base; anterior surface with a row of setae on basal half that become setulose on apical half; posteroventral surface with a row of fine short setae on apical half, not as long as femoral depth; with 3-4 short ventral spinules at middle; 0 anterior and 2 posterodorsal to posterior preapical setae. Mid tibia without anterodorsals and anteroventrals; 9-12 short and long posterodorsals and 3 posteroventrals. Mid tarsomeres 1-2 on posteroventral surface with a row of apically curved or straight hairs that are longer than tarsal depth. Hind femur without posteroventrals but with some fine setae on basal half of posterior surface; a full row of anteroventrals, those on apical half longer than femoral depth. Hind tibia with 5-9 posterodorsals on basal half; with a row of anterodorsals, those on basal third stronger but becoming shorter and more setulose towards apex of tibia; 2-4 anteroventrals; with a ventral apical prong, without strong preapical setae, except 2 anteroventral setae. Hind tarsomere 1 with 2 short ventral setae at base.

Wing: Yellowish-brown, darker at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu upright, almost straight, forming a right-angle with vein M. Calypters and margins yellow. Knob of haltere black.

Abdomen: Ground-colour black. Syntergite 1+2 wholly or half dusted like the other tergites, tergites 3-5 densely yellowish-grey dusted, each with narrow dark middle stripe that does not expand laterad along margins of tergites. Sternite 1 bare.

Terminalia: Figs 10 E-G.

FEMALE: Length of body, 4.2-6.0 mm. Length of wing, 3.8-5.0 mm.

Differs from the male as follows:

Head: Dichoptic. Head grey dusted. Frontal triangle inconspicuous, hardly reaching the crossed setae on frontal vitta. Ocellar setae strong. 5-6 pairs of inclinate frontal setae, including several interstitials; 3 pairs of orbital setae, the upper two pairs reclinate and exclinate, the lower pair proclinate and exclinate. Frontal vitta with a pair of strong crossed setae.

Thorax: Light grey dusted with an olive tinge, scutum with four distinct brown longitudinal vittae. Prealar absent or very short.

Legs: Fore tibia with 1 submedian posteroventral seta. All claws and pulvilli much shorter. Mid femur straight, anteroventral surface with 2 strong setae in basal quarter; posteroventral surface with or without 2-3 fine setae in basal half. Mid tibia with 2 anterodorsal setae, without anteroventrals; 5-6 posterodorsals and 2 short posteroventrals. Hind femur with 1-2 fine posteroventral setae in basal half. Hind tibia with 3 anteroventrals and 3-4 anterodorsals, with 3-4 posterodorsals.

Abdomen: All tergites yellowish-olive-grey dusted, without middle stripe.

Remark. Adults of this species are found on flowering plants.

Distribution. Russia: Altai-Sayan region. Mongolia.

***Drymeia groenlandica* (Lundbeck, 1901)**

Figs 11 A-E

Ophyra groenlandica Lundbeck, 1901: 281.

Material examined. RUSSIA: *Chukotka Autonomous Okrug: Chaunskii raion*, 6 male, Krasnoarmeyskii village, ~ 69°32'N 172°00'E, 8.vii.1963, K. Gorodkov (1 male in SZMN, rest in ZIN); 1 male, Pevek village, ~ 69°42'N 170°19'E, 4.viii.1972, K. Gorodkov (ZIN); *Iultinskii raion*, 1 male, 5 km N Egvekinot, ~ 66°22'N 179°07'E, 26.vii.1963, K. Gorodkov (ZIN). *Krasnoyarsky Krai*, Norilsk, 3 males, 3.vii.1967, Grunin (ZIN); *Taymyr Peninsula*: 2 males, Ary-Mas cordon, 72.5°N 101.94°E, 9-20.vii.2010, A. Barkalov; 1 male, middle part of Pyasina

River, Tareya River, ~ 73°12'N 91°36'E, 29.vii.1967, K. Gorodkov (ZIN). *Sakha Republic: Allaikhovskii ulus*, 1 male and 1 female, Chokurdakh, Indigirka River, ~ 70°37'N 147°54'E, 11.vii.1966, 12.vii.1966, K. Gorodkov; *Anabarskii ulus*, 1 male, Uryung-Khaya, bank of Anabar River, ~ 72°48'N 113°13'E, 7.viii.1988, K. Gorodkov.

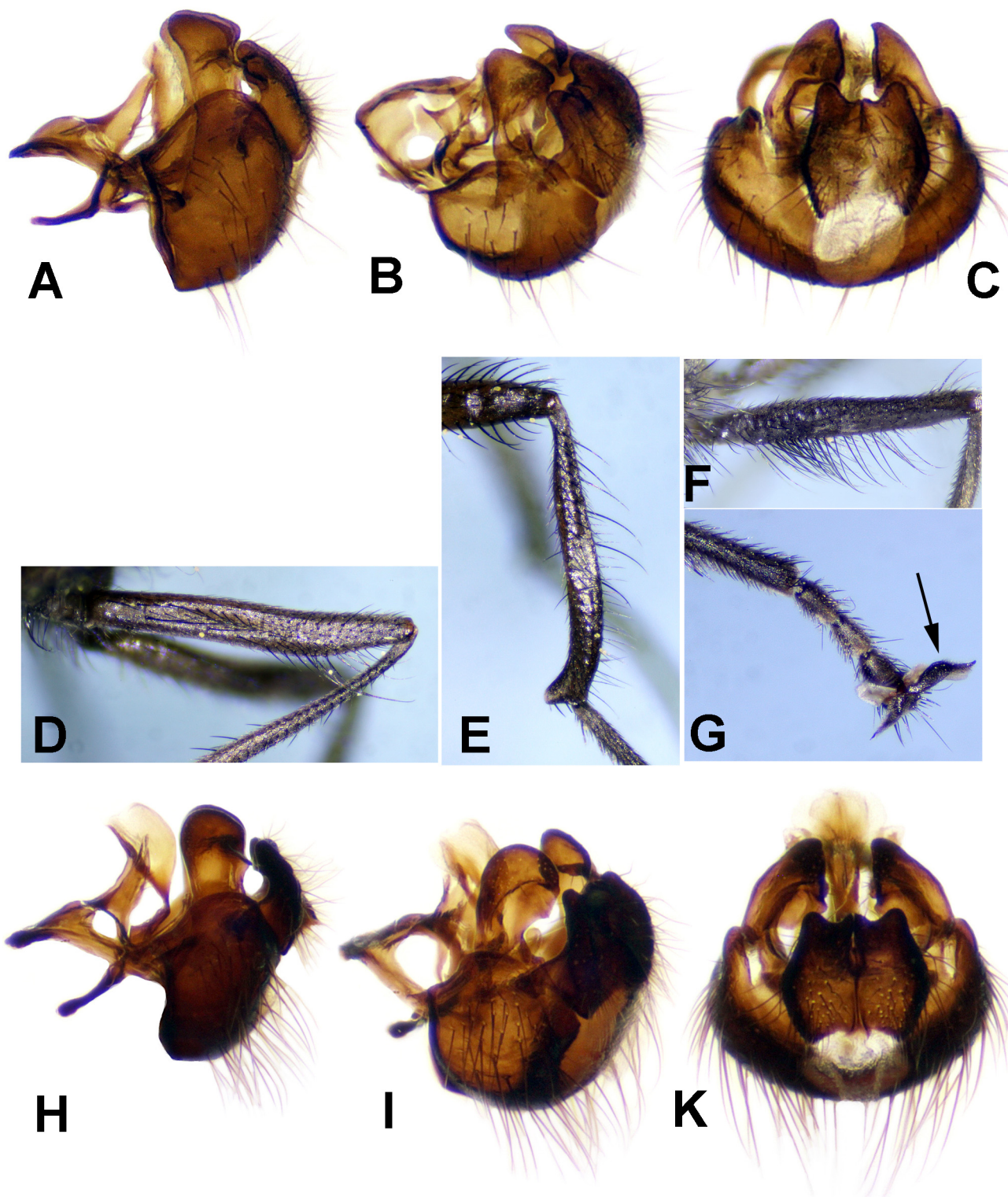


FIGURE 11. *Drymeia* spp., males. **A–E.** *Drymeia groenlandica*. **A–C.** Terminalia. **A.** Lateral view. **B.** Postero-lateral view. **C.** Posterior view. **D.** Mid femur. **E.** Hind tibia. **F–K.** *Drymeia pribilofensis*. **F.** Mid femur. **G.** Fore tarsus. **H–K.** Terminalia. **H.** Lateral view. **I.** Postero-lateral view. **K.** Posterior view.

Remarks. The species can be identified from the keys in Hockett (1965a), and a good description was given by Stein (1916: 46). Flies were collected from flowers of *Descurainia sophioides*, *Ledum* sp., *Matricaria* sp.

Distribution. Previously known only from northern North America: the Yukon, Northwest Territories, Quebec and Greenland.

***Drymeia gymnophthalma* (Hennig, 1963)**

Figs. 6 G–I

Trichopticoidea gymnophthalma Hennig, 1963: 55.

The specimens recorded by Sorokina (2012b) from the Altai Mts have proved to be *D. acrostichalis* **sp. nov.**, and we have not seen Russian specimens of this species which was described from Tajikistan (see also Sorokina & Pont 2011). However, we have included it in the key to species as it is likely that it will be found to occur in the mountains of southern Siberia.

***Drymeia hamata* (Fallén, 1823)**

Musca hamata Fallén, 1823: 61.

Drymeia hamata; Hennig, 1962a: 672; 1962b: 673.

Drymeia hamata; Pont, 1986: 71.

Material examined. RUSSIA: *Leningradskaya Oblast*: 2 males, *St Petersburgskii raion*, Komarovo village, 20.viii.1949, 4.ix.1949; 4 males, *Vsevolozhskii raion*, Yukki village, 5.viii.1933, 30.viii.1931; 1 male, Udel'naya station, 16.ix.1952; 2 males, *Gatchinskii raion*: Rozhdestveno village, 18.20.viii.1956; 1 male, Kartashevka, 25.vii.1926; *Luga raion*: 10 males, Gobzhitsa village, 10–13.viii.1931; 2 males, Tolmachevo village, 24.viii.1953; 11 males, Luga, 1,6,11.viii.1935, 8.viii.1952, 14–25.viii.1953, 3–12.viii.1954; 1 male, Yashera village, 11.viii.1958 (all material from Leningrad area collected by A. Shtakelberg, in ZIN). *Chelyabinskaya Oblast*: 1 male, South Ural Mts, environs of Zlatoust, Taganay Mts, ~ 55°10'N 59°40'E, 18–24.vii.2006, K. Tomkovich (ZMUM).

Remark. There is a full description of both sexes in Hennig (1962a: 672; 1962b: 673).

Distribution. Widespread and rather common in Europe, as far east as the Ural Mountains.

***Drymeia longiseta* sp. nov.**

Figs. 3E, 12 A–H, 13A–C

Diagnosis. The species is very similar to *D. alpicola* (Rondani, 1871). The new species can be distinguished as follows: prealar long and strong; anepimeron and katepimeron bare; eye bare; fronto-orbital plates in male separated by a broad black frontal vitta; proboscis thin, elongate; parafacial much broader than width of postpedicel; fore and mid coxae in male with long wavy setae, anterior surface of mid femur with a row of very long strong wavy setae which become anteroventral in position on apical half and become shorter at apex, and with complete rows of hair-like anteroventrals, ventrals and posteroventrals, some of them wavy; mid tarsomere 1 in male with the ventral spinules longer than tarsal depth; hind tibia in male with a ventral apical prong and without posteroventrals at apex.

Etymology. The species name refers to the long setae on the male mid femur and fore and mid coxae.

Type material examined. Holotype male, RUSSIA: Altai Republic, Kosh-Agachskii raion, south slope of Kurayskii range, 7 km NW Kuray village, 2251 m, 50°17'N 87°51'E, 17.vii.2013, V. Sorokina (SZMN).

Paratypes: *Altai Republic, Kosh-Agachskii raion*: 23 males and 29 females, same data as holotype, but 2251–2736 m, 17–19.vii.2013; 21 males and 5 females, upper part of Naryn-Gol River, 2520–3000 m, 49°49'N 88°13'E, 15–19.vii.2009, T. Novgorodova, A. Barkalov, V. Zinchenko & V. Sorokina; 41 males and 21 females, upper part of Zhumaly River, Rodonovyi spring, 2300–2900 m, 49°27'N 88°03'E, 24.vi.2005, 4.vii.2005, 23.vii.2006, 13.vi.2008, V. Sorokina, T. Novgorodova & A. Barkalov; 21 males and 6 females, Ukok plateau, Zerlukol'-Nur

lake, 2400 m, 49.56°N 88.21°E, 23.vi.2005, V. Sorokina & A. Barkalov; 44 males and 10 females, Ukok plateau, environs of Muzdy-Bulak lake, 2400–2900 m, 49.28°N 87.65°E, 24.vi.–2.vii.2005, 8,10.vii.2008, T. Novgorodova, A. Barkalov & V. Sorokina; 13 males and 2 females, Ukok plateau, environs of Tarkhatinskoe lake, 2300 m, 5.vii.2006, T. Novgorodova; 42 males and 15 females, Ukok plateau, 6–8 km NE Maitobe mountain, 2420–2800 m, 49°34'N 87°43'E, 6–10.vii.2006, V. Sorokina & T. Novgorodova (14 males and 2 females, half each in BMNH & OUMNH); 22 males and 6 females, Ukok plateau, environs of Kal'dzhin-Kul'-Bas lake, 2400–2800 m, 49°19'N 87°26'E, 17–21.vii.2006, V. Sorokina & T. Novgorodova (4 males in BMNH & OUMNH); 3 males and 2 females, Ukok plateau, valley of Ak-Allacha River, 2160 m, 49°25'N 87°37'E, 12,13.vii.2006, V. Sorokina; 2 males, south slope of Yuzhno-Chuyskii range, valley of Tara River, 2800–3300 m, 49.65°N 88.22°E, 19.vii.2009, A. Barkalov, 3 males and 2 females, 20–25 km NE Kokorya, Saylyugem Mts, 2100–2800 m, 24–25.vi.1999, D. Logunov; *Altai Republic, Ulaganskii raion*: 5 males and 3 females, environs of Dzhulukul' lake, 2200 m, 50.47°N 89.77°E, 21–26.vii.2007, V. Sorokina & A. Barkalov; 9 males and 2 females, Shapshalskii mountain range, 2878 m, 50.53°N 89.8°E, 24.vii.2007, V. Sorokina & A. Barkalov; 11 males and 6 females, Kuraysky mountain range, 2450–2800 m, 50.33°N 87.75°E, 29–30.vi.2008, 2,3.vii.2008, A. Barkalov; 2 females, 9 km E Aktash, 2400–2500 m, 50°19'N 87°45'E, 1,2.vii.2008, V. Zinchenko. *Tyva Republic: Morgun-Taiginskii kozhuun*: 1 male, 3–5 km SE Mugur-Aksy, valley of Kargy River, 1850–2000 m, 22.vii.1993, A. Barkalov; 1 male 1 female, 8–9 km NE Mugur-Aksy, 2700 m, ~ 50°22'N 90°25'E, 22.vii.1993, A. Barkalov; 2 females, Shapshalskii mountain range, upper part of Shui River, 2550–2900 m, 50.53°N 89.8°E, 25.vii.2007, V. Sorokina; 5 males and 6 females, east bank of Khindikig-Khol' lake, 2334 m, 50.4°N 89.9°E, 28.vii.2007, A. Barkalov.

All the above paratypes are located in the SZNM, OUMNH and BMNH except for 3 pairs from Altai Republic deposited in each of the following: ZIN, ZMUM, BUIC.

Description. MALE. Length of body, 6.5–8.5 mm. Length of wing, 5.2–6.3 mm.

Head: Ground-colour black. Eye bare. Fronto-orbital plate and parafacial grey-silver or silver-yellow pruinose; face grey, gena and lower occiput brown pruinose. Fronto-orbital plates separated by a broad black frontal vitta. Frontal vitta as wide as or slightly broader than width of postpedicel. Ocellar setae short. 14–16 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel circa 1.5 times as long as wide. Arista swollen in basal sixth, appearing almost bare, the longest hairs shorter than its basal diameter. Parafacial at level of insertion of arista much broader than width of postpedicel, almost twice as wide, hardly narrowing below. Upper part of face with a carina between antennal bases. In lateral view, facial edge projecting slightly forward beyond the level of profrons. Gena broad, depth below lowest eye-margin equal to length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis thin, elongate. Prementum of proboscis dusted, as long as palpus.

Thorax: Ground-colour black. Scutum shining in posterior view but in anterior view greenish-brown dusted, with two undusted vittae running along dorsocentrals and another one between them, and two indistinct undusted vittae running along intra-alars; postpronotal lobe, notopleuron, postalar callus and pleura as the scutum. Pleura with a small undusted patch anteriorly on katapisternum and medially on meron. Lower part of katapisternum with long wavy setae. Ground-setulae short. Anepimeron and katepimeron bare. Notopleuron setulose. Prosternum bare. Acrostichals 0+1. Dorsocentrals 2+3(4). Prealar long and strong. Katapisternal setae 1+2(3). Scutellum black and light shining.

Legs: Black. Fore tibia with 4–5 posteroventral setae on apical half. Fore tarsomere 1 without or with a small apical ventral spur. Fore claws as long as length of tarsomere 5, thin and pointed, but often short, blunt and obviously broken, shorter than length of tarsomere 5. Pulvilli a little longer than length of tarsomere 5. Fore and mid coxae with long wavy setae. Mid femur straight, slightly flattened, with complete rows of hair-like anteroventral, ventral and posteroventral setae but the anteroventrals longer and some of them wavy; anterior surface with a row of very long strong wavy setae which become anteroventral in position on apical half and become shorter and more straight at apex; 0 anterior and 3(4) posterodorsal to posterior preapical setae. Mid tibia with complete rows of all setae (anterodorsal, anterior, anteroventrals, ventral, posteroventral, posterior, posterodorsal) but dorsal setae much longer than ventrals, and ventral setae on apical 2/3. Mid tarsomere 1 with the ventral spinules longer than tarsal depth. Hind femur with complete rows of anteroventrals and posteroventrals, but the posteroventrals finer and more hair-like on basal half. Hind tibia with numerous long and intermediate short setae on anterior, posterior and dorsal surfaces; ventral surface without strong long setae but with a brush of short weak erect setae; anterodorsals and posterodorsals much longer than the others; with a ventral apical prong and with strong anteroventral setae at its tip but without or with fine posteroventral apicals.

Wing: Light brownish, darker at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu upright, almost forming a right-angle with vein M but sinuous, S-shaped. Calypters white-yellow, margins yellow. Knob of haltere black.

Abdomen: Cylindrical, elongate, black and light shining. In posterior view with brown dust on tergites 3–5 except for the undusted median triangles. Sternite 1 bare (sometimes with a pair of setulae). Sternite 5 swollen (Fig. 12H). Tergite 5 with numerous long strong setae. Epandrium with numerous hair-like wavy setae.

Terminalia: Figs 12 E–G.

FEMALE. Length of body, 6.2–9.5 mm. Length of wing, 5.2–6.7 mm.

Differs from the male as follows:

Head: Dichoptic. Frons at middle 0.38 of head-width at this point, and at this point each fronto-orbital plate 0.5 times width of frontal vitta. Frontal triangle inconspicuous, visible from above, reaching the crossed setae on frontal vitta, light shining. Ocellar setae strong. 3–4 pairs of strong inclinate frontal setae and several shorter weak interstitials; 3–4 pairs of orbital setae, the upper two pairs reclinate and excline, the lower pair(s) procline and excline. Frontal vitta with a pair of strong crossed setae.

Thorax: Scutum light shining in posterior view, in anterior view with the greenish-brown dust more dense, without distinct undusted vittae. Setae on lower part of katepisternum not wavy. Katepisternal setae 1+2.

Legs: Fore tibia with 2–4 posteroventral setae on apical half. Fore tarsomeres 1–4 with a dense brush of short setulae. All claws and pulvilli much shorter. Fore and mid coxae without long wavy setae. Mid femur with complete rows of anteroventral and posteroventral setae but the posteroventrals on basal half much longer; anterior surface without a row of very long strong wavy setae; 0 anterior and 2 posterodorsal to posterior preapical setae. Mid tibia with 4–5 long and short anterodorsals, 4–6 short anteroventrals, 1 long and 2–4 weak short posteroventrals and 4–5 long posterodorsals, without anterior and posterior setae. Mid tarsomere 1 with the ventral spinules much shorter than tarsal depth. Hind femur with complete rows of anteroventrals and fine posteroventrals which are longer on basal half. Hind tibia with 4–5 anterodorsals, 5 posterodorsals, 5 anteroventrals on apical half, 0 posteroventral setae; without a ventral apical prong and with a long apical seta.

Wing: Yellowish-brown tinged, yellowish at base.

Abdomen: Shining black with light brown dust.

Ovipositor: Figs 13B, C.

Remark. Adults of this species are found on flowering plants.

Distribution. Russia: Altai-Sayan region.

***Drymeia neoborealis* (Snyder, 1949)**

Helina neoborealis Snyder, 1949: 122.

Material examined. RUSSIA: *Chukotka Autonomous Okrug, Wrangel Island*: 1 male and 5 females, Somnitelnaya Bay, 21.26.vii.1966, 4.viii.1966, 9.vii.1972, 6.viii.1974, K. Gorodkov (1 female in SZMN, rest in ZIN); 4 females, 5 km N Somnitelnaya Bay, 27.vii.1966, K. Gorodkov (1 female in SZMN, rest in ZIN); 10 males, environs of Viyuchny, NW Somnitelnaya Bay, 21.vii.1972, K. Gorodkov (2 males in SZMN, rest in ZIN); 1 female, valley of Somnitelnaya River, Mineeva Mts, 22.vii.1966, K. Gorodkov (ZIN); 1 male and 1 female, 4 km N Somnitelnaya Bay, bank of Somnitelnaya River, 28.vii.1972, K. Gorodkov (ZIN); 1 female, valley of Somnitelnaya River, around lemming burrow, 8.vii.1972, K. Gorodkov (ZIN); 1 female, north slope of Berry Mt., 6 km S Sovetskaya Mt., 400 m, 13.vii.1972, K. Gorodkov (ZIN).

Remarks. The species can be identified with the keys in Hockett (1965a), and a detailed description of the male is given by Snyder (1949: 122–123). Flies were collected from flowers of *Potentilla* sp., *Potentilla emarginata*, *Dryas integrifolia*.

Distribution. Previously known only from North America: Alaska, Northwest Territories (Victoria and Ellesmere Islands), California and Colorado.

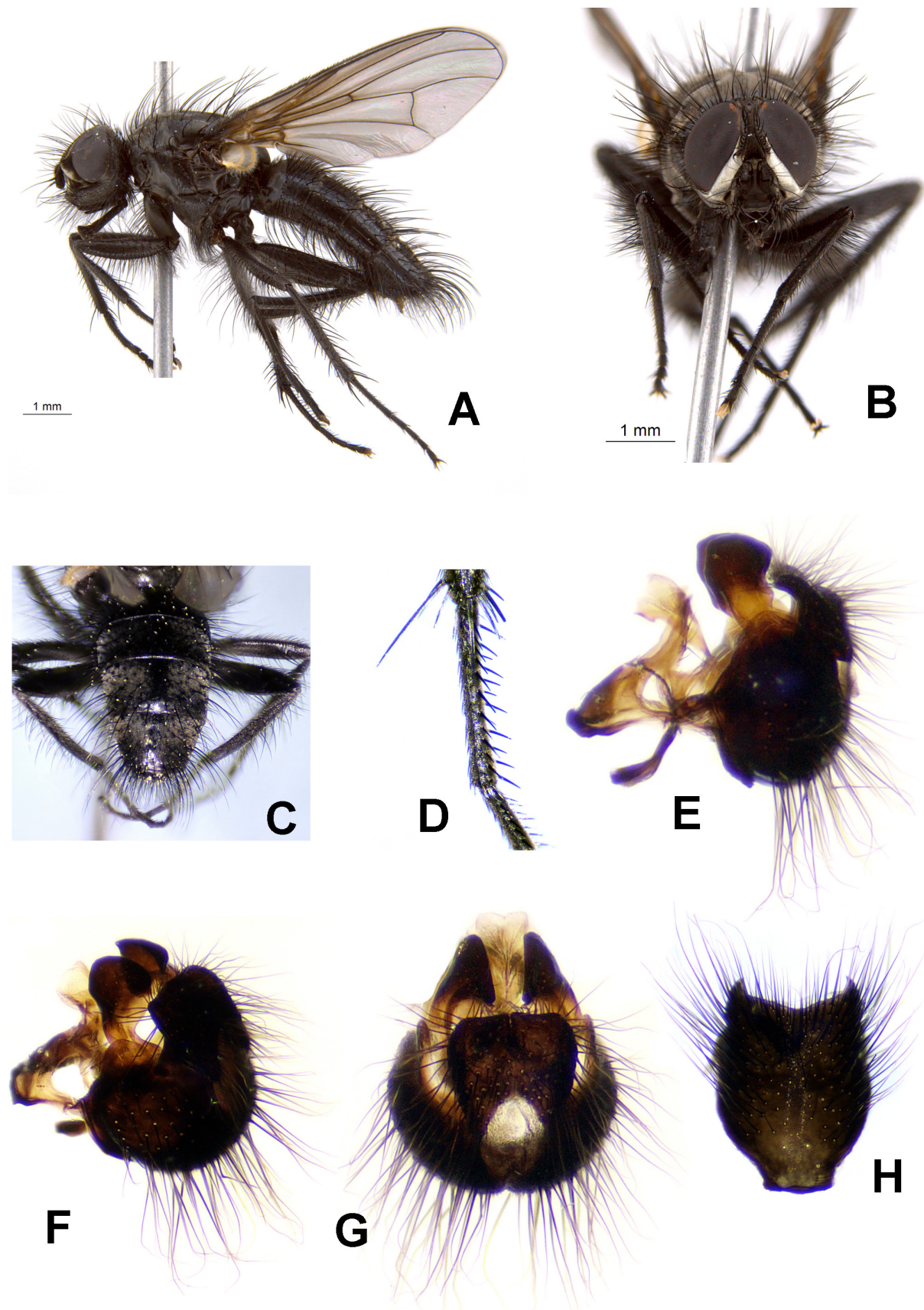


FIGURE 12. *Drymeia longiseta* (paratypes), male. **A.** Habitus, lateral view. **B.** Head, anterior view. **C.** Abdomen, dorsal view. **D.** Mid metatarsus. **E–G.** Terminalia. **E.** Lateral view. **F.** Postero-lateral view. **G.** Posterior view. **H.** Sternite 5.



FIGURE 13. *Drymeia longiseta* (paratype), female. **A.** Habitus, lateral view. **B, C.** Female, apical portion of ovipositor. **B.** Dorsal view. **C.** Ventral view.

***Drymeia phaonina* sp. nov.**

Figs. 14 A–F

Diagnosis. This new species resembles a species of the genus *Phaonia* Robineau-Desvoidy, 1830 in general appearance, but its characters, especially those of the leg setae, are clearly those of *Drymeia*. Males can be distinguished as follows: small grey species, eye bare; proboscis thin, elongate; facial edge not projecting forward beyond the level of profrons; arista plumose; anepimeron and katepimeron bare; prealar absent or shorter than 2nd notopleural seta; dorsocentrals 2+3; mid and hind femora with rows of anteroventral and posteroventral setae; hind tibia without a ventral apical prong and posteroventral apical seta.

Etymology. The species name is based on its similarity to the genus *Phaonia* Robineau-Desvoidy.

Type material examined. Holotype male, RUSSIA: Krasnoyarsk, W bank, Udachniy raion, environs, near Pinus forest stream, 28.vii.2009, K. Tomkovich (ZMUM).

Paratypes: 3 males, same data as holotype (ZMUM & SZMN).

Description. MALE. Length of body, 4.1–4.4 mm. Length of wing, 3.7–4.2 mm.

Head: Ground-colour black. Eye bare. Fronto-orbital plate and parafacial grey-silver pruinose; face grey, gena and lower occiput grey pruinose. Fronto-orbital plates separated by a narrow black frontal vitta. Frontal vitta less than width of postpedicel. Ocellar setae short. 6–7 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel circa 2 times as long as wide. Arista swollen in basal sixth, short-plumose. Parafacial at level of insertion of arista as wide as width of postpedicel, narrowing below. Upper part of face with a small carina between antennal bases. In lateral view, facial edge not projecting forward beyond the level of profrons. Gena broad, depth below lowest eye-margin equal to length of postpedicel, not so densely setose and without a group of upcurved setae on anterior part of genal dilation or just with several such setae. Palpus black. Proboscis thin, elongate. Prementum of proboscis dusted, as long as palpus.

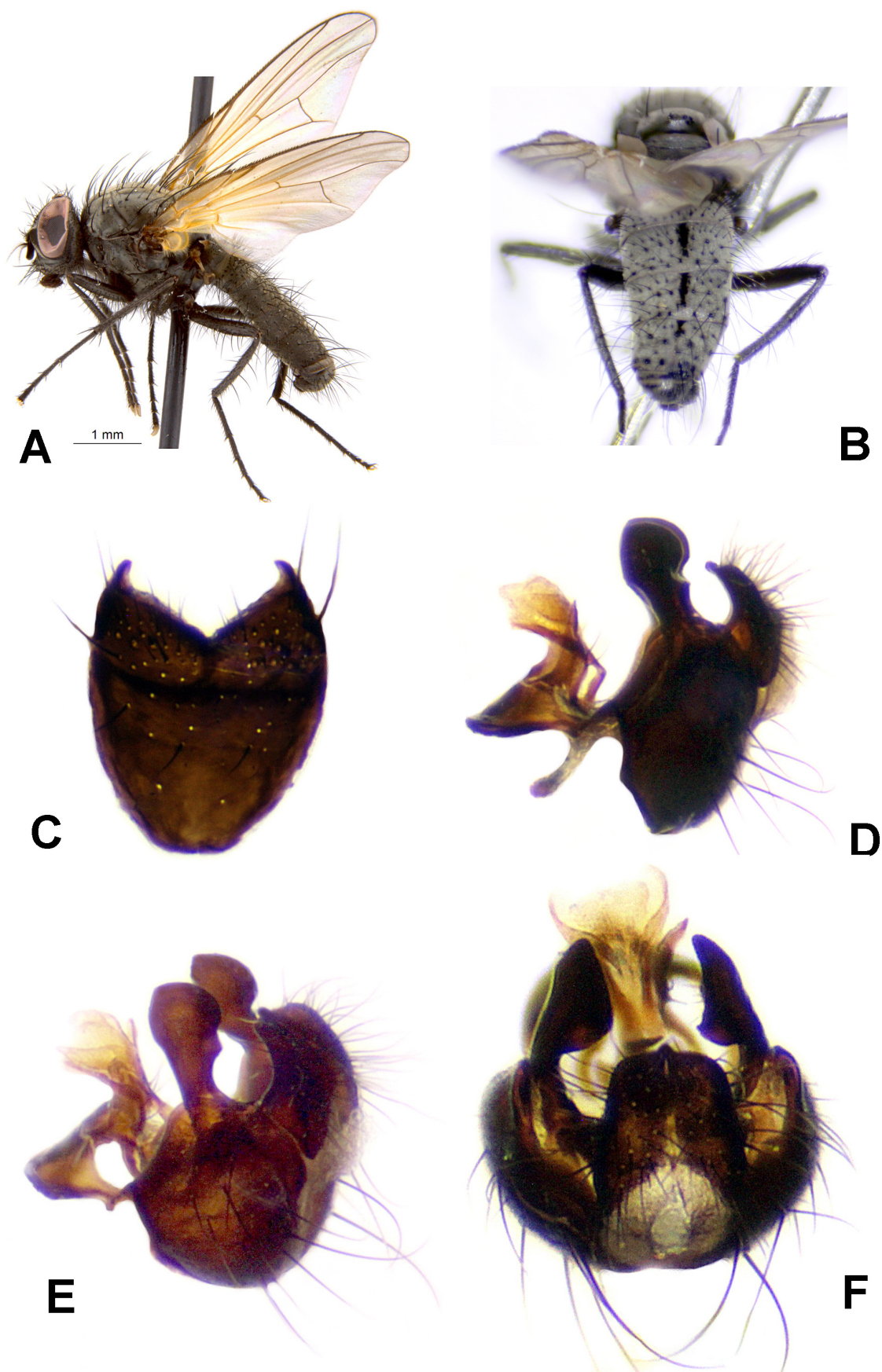


FIGURE 14. *Drymeia phaonina* (paratypes), male. **A.** Habitus, lateral view. **B.** Abdomen, dorsal view. **C.** Sternite 5. **D–F.** Terminalia. **D.** Lateral view. **E.** Postero-lateral view. **F.** Posterior view.

Thorax: Ground-colour black. Scutum matt, black with brownish-grey dust, viewed from in front with small undusted marks in front along suture, behind suture black with two short dusted vittae outside postsutural acrostichals and two long dusted vittae outside postsutural dorsocentrals which reach postalar callus; postpronotal lobe, notopleuron and postalar callus brownish-grey dusted. Ground-setulae short. Pleura brownish-grey dusted, without a distinct shining patch anteriorly on katepisternum and medially on meron. Anepimeron and katepimeron bare. Notopleuron bare. Prosternum bare. Acrostichals 1+2, presutural and first postsutural pairs shorter and weaker than the last pair. Dorsocentrals 2+3. Prealar absent or shorter than 2nd notopleural seta. Katepisternal setae 1+1(2). Scutellum dusted in posterior view, with two light spots on lateral margins.

Legs: Black. Fore tibia with 1 posteroventral seta on apical half. Fore tarsomeres 1–4 each without fine anteroventral and posteroventral hairs at tip, fore tarsomere 1 without posteroventrals at apex. Fore claws of all males blunt and much shorter than length of tarsomere 5, probably broken. Pulvilli as long as tarsomere 5. Mid femur straight, with rows of anteroventral and posteroventral setae, these longer on basal half; with 1 anterior and 2 posterodorsal to posterior preapical setae. Mid tibia with 0–1 anterodorsals and without anteroventrals; 3–4 posterodorsals, 2 posteroventrals on basal half. Hind femur with a row of anteroventral setae, posteroventral surface with a row of long setae on basal half and short setae on apical half. Hind tibia with 3 anterodorsals, 4 anteroventrals, 4 long posterodorsals, 3 short weak posteroventrals on apical half and with a row of short but strong posterodorsal setae on apical fourth; without a ventral apical prong, without posteroventral apical seta but with 1 anteroventral at the tip. Hind tarsomere 1 with 2 short ventral setae at base.

Wing: Faintly yellow, conspicuously so at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu upright, almost straight, forming a right-angle with vein M. Calypters and margins yellow. Knob of haltere black.

Abdomen: Cylindrical, elongate; ground-colour black. Densely yellow-grey dusted with a narrow black median line that becomes narrower towards the tip of abdomen. Sternite 1 bare. Sternite 5 (Fig. 14C).

Terminalia: Figs 14 D–F.

FEMALE: unknown.

Distribution. Russia: Krasnoyarsk.

***Drymeia pribilofensis* (Malloch, 1921)**

Figs. 11 F–K

Eupogonomyia pribilofensis Malloch, 1921: 179.

Pogonomyia inaequalis Malloch, 1922: 81. **Syn. nov.**

Pogonomyia inaequalis; Hennig, 1962b: 681.

Drymeia inaequalis; Pont, 1986: 72.

Drymeia inaequalis; Sorokina & Pont, 2010: 10.

Drymeia pribilofensis; Sorokina, 2012a: 329.

Drymeia pribilofensis; Sorokina & Khruleva, 2012: 555.

Note. Malloch (1921) described *D. pribilofensis* from St. Paul Island in the Pribilof Islands, Alaska, and *D. inaequalis* from “Northern Ural Mountains” (Malloch 1922). The holotype of *D. inaequalis* should be in the Finnish Museum of Natural History, Helsinki, Finland, but it was not found there by Hennig (1962b) who did not otherwise know the species and reproduced Malloch’s original description. We have not seen either type, but Malloch’s description of the structure of the fore tarsomeres is the same for both species and is actually unique in the genus *Drymeia*. For this reason we have no hesitation in proposing this synonymy.

Material examined. RUSSIA: *Chukotka Autonomous Okrug: Wrangel Island*, 17 males and 29 females, middle part of Mamontovaya River, 71°13'N 179°46'W, 6–11.20.vii.2006, O. Khruleva; 6 males, middle part of Mamontovaya River, N Perkatkun, 17.vii.1972, K. Gorodkov (ZIN); 2 males, upper reaches of the River Neizvestnaya, 71°13'N 170°19'W, 3.vii.2006, O. Khruleva; 1 male, Tundrovii Mt., 71°18'N 179°48'W, 25.vii.2006, O. Khruleva; 2 females, Somnitel’nye Mts, 71°00'N 179°35'W, 14.vii.2006, O. Khruleva (ZMUM & SZNM); *Chaunskii raion*, 16 males and 10 females, Krasnoarmeyskii village, ~ 69°32'N 172°00'E, 8.vii.1963, K. Gorodkov (ZIN); 1 male, 15 km NEE Pevek, Apapel’khin [environs of Pevek, ~ 69°46'N 170°39'E], 14.vii.1963, K. Gorodkov (ZIN); *Iulinskii raion*, 2 males, 5 km N Egvekinot, ~ 66°22'N 179°07'E, 26.vii.1963, K. Gorodkov

(ZIN). *Krasnoyarsky Krai*, 5 males, environs of Norilsk, 4.vii.1967, K. Gorodkov (ZIN); 1 male, environs of Norilsk, Medvezhii village, 6.vii.1967, K. Gorodkov (ZIN); *Taymyr Peninsula*: 1 female, Eniseyskiy Bay, Voronzovo village, 71°42'N 83°34'E, 29.vii.1966, V. Sychevskaya (ZIN); 1 male, Dudinka, valley of Enisey River, 2.vii.1967, K. Gorodkov (ZIN); 12 males and 11 females, 60 km NW Khatanga, left bank of Novaya River, Ary-Mas cordon, 72.5°N 101.94°E, 10–20.vii.2010, A. Barkalov & V. Zinchenko; 3 males and 7 females, 90 km NW Khatanga, valley of Zakharova-Rasokha River (left tributary of Novaya River), 72.7°N 101.08°E, 2–16.vii.2011, A. Barkalov & V. Zinchenko; 13 males and 10 females, 13.5 km S Dixon, mouth of Lemberova River, 73.39°N 80.66°E, 6,7,25.vii.2012, A. Barkalov & V. Zinchenko; 5 males and 3 females, middle part of Pyasina River, Tareya River, ~ 73°12'N 91°36'E, 25, 26.vii.1967, K. Gorodkov (ZIN); *Ust'-Eniseyskii raion*, 1 male, Nosok village, low part of Enisey River, 70°10'N 82°19'E, 15.vii.1977, A. Barkalov. *Tyumenskaya Oblast*: 1 male, Yamalo-Nenezkiy AO, 150 km NE Salekhard, 20.vi.1983, P. Basikhin (ZMUM). *Sakha Republic: Allaikhevskii ulus*, 28 males and 10 females, Chokurdakh, Indigirka River, ~ 70°37'N 147°54'E, 10,11.vii.1966, K. Gorodkov (ZIN); *Bulunskii ulus*, 1 female, Chekurovka, low part of Lena River, ~ 71°02'N 127°30'E, 24.vii.1957, K. Gorodkov (ZIN); 1 female, Kyusyur, low part of Lena River, ~ 70°41'N 127°21'E, 13.vii.1957, K. Gorodkov (ZIN).

Remarks. A detailed description of the male is given by Malloch (1921: 179; 1922: 81). Flies were collected from flowers of *Descurainia sophioides*.

Distribution. The species is known from North America (Alaska, the Yukon, Northwest Territories, Quebec) and from Russia (West Siberia, Far East).

***Drymeia puchokana* sp. nov.**

Figs. 15 A–G

Diagnosis. This species is similar to *D. segnis* (Holmgren, 1883). Males of the new species can be distinguished as follows: prealar absent; anepimeron and katepimeron bare; eye with very short sparse hairs; proboscis thin, elongate; fore coxa not prolonged into a knob-like structure at apex; mid femur with the anteroventral setae restricted to a tuft of long apical wavy setae on apical third, without posteroventral setae except for a few very short setae on apical third; hind femur without posteroventrals; hind tibia without an apical ventral prong.

Etymology. The species name is based on the Russian word “puchok” that means “a tuft” and refers to the setae on mid femur.

Type material examined. Holotype male, RUSSIA: Altai Republic, Kosh-Agachskii raion, Ukok plateau, 6–8 km NE Maitobe mountain, 2600–2800 m, 49°34'N 87°43'E, 8.vii.2006, V. Sorokina (SZMN).

Paratypes: 1 male, same data as holotype (SZMN); 1 male, *Altai Republic, Kosh-Agachskii raion*, upper part of Naryn-Gol River, 2600–3000 m, 49°49'N 88°13'E, 15–17.vii.2009, A. Barkalov (SZMN).

Description. MALE. Length of body, 7.0 mm. Length of wing, 5.0 mm.

Head: Ground-colour black. Eye with very short sparse hairs. Fronto-orbital plate and parafacial silvery-white pruinose; face grey, gena and lower occiput dark grey pruinose. Fronto-orbital plates touching. Frons at narrowest point as wide as diameter of anterior ocellus. Ocellar setae short. 16–20 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel 1.5 times as long as wide. Arista swollen in basal sixth, appearing almost bare, the longest hairs shorter than basal diameter of arista. Parafacial at level of insertion of arista slightly narrower than width of postpedicel. Upper part of face with a small knob or carina between antennal bases. In lateral view, facial edge little projecting forward beyond the level of profrons. Gena broad, depth below lowest eye-margin equal to length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis thin, elongate, prementum dusted.

Thorax: Ground-colour black. Scutum matt, black, without distinct dusted vittae. Ground-setulae fine. Postpronotal lobe with some thin grey dust. Pleura thinly dusted, with a shining patch anteriorly on katepisternum and medially on meron. Anepimeron and katepimeron bare. Acrostichals 0+1, the presutural setulae in 4 irregular rows. Dorsocentrals 2+4. Prealar absent. Notopleuron setulose. Prosternum bare. Katepisternal setae 1+1, with 2–3 stronger setulae below posterior seta. Scutellum black and undusted in posterior view; without setulae on sides below the strong setae.

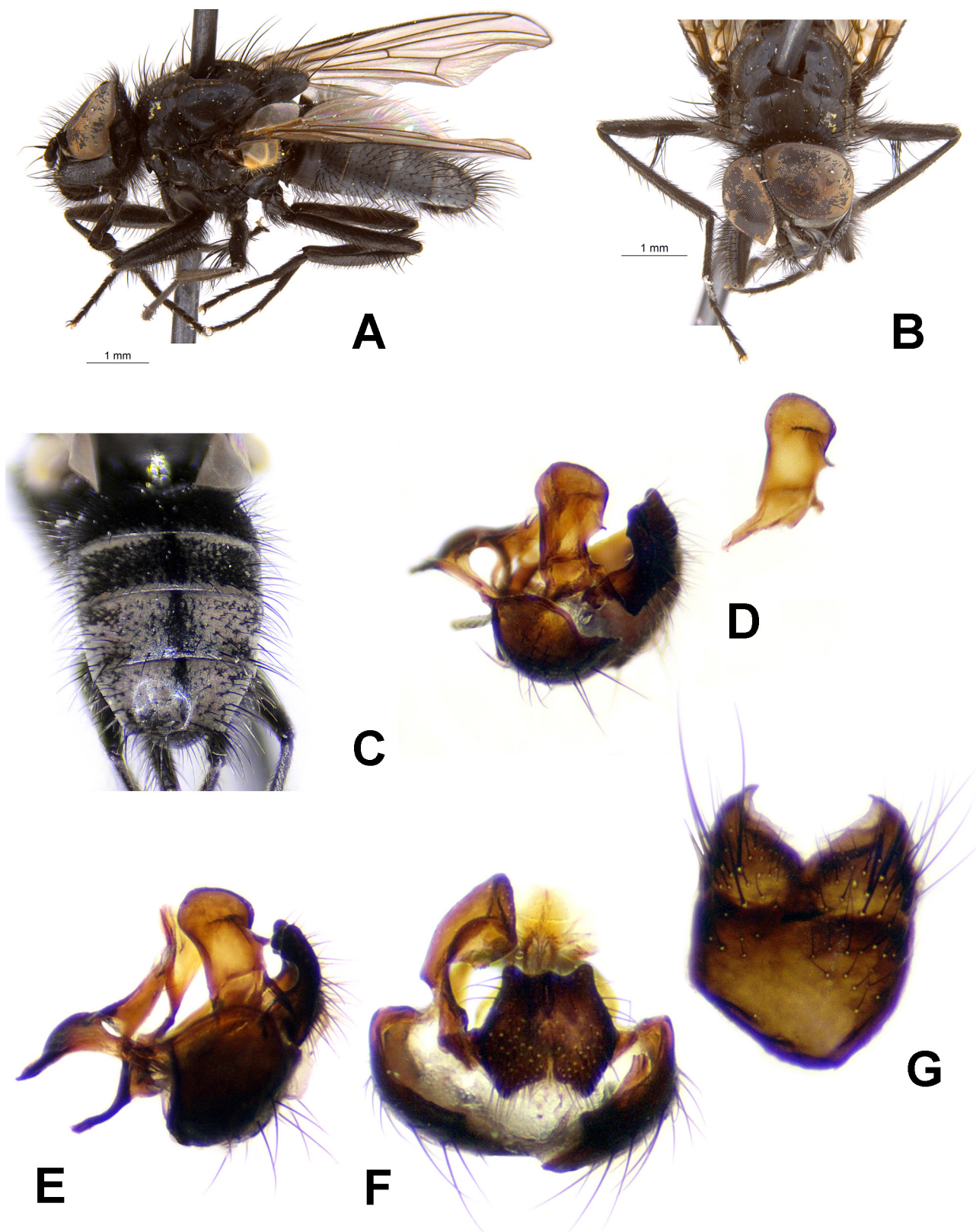


FIGURE 15. *Drymeia puchokana* (paratypes), male. **A.** Habitus, lateral view. **B.** Head, anterior view. **C.** Abdomen, dorsal view. **D–F.** Terminalia. **D.** Postero-lateral view. **E.** Lateral view. **F.** Posterior view. **G.** Sternite 5.

Legs: Black. Fore tibia with 2 submedian posteroventral setae. Fore tarsomeres 1–4 each with a short fine anteroventral and posteroventral hair at tip, and tarsomere 1 with 2–3 short posteroventrals at apex. Fore claws elongate, as long as length of tarsomere 5, pointed. Pulvilli as long as length of claws. Mid femur curved and flattened ventrally, with the anteroventral setae restricted to a tuft of long apical wavy setae on apical third; with a row of short anterior setae and a few fine posterior setae on basal ¼; posteroventral surface bare except for a row of short setae on apical third, shorter than femoral depth; 0 anterior and 1–2 posterior to posteroventral preapical setae. Mid tibia without any anterior setae; 5–7 posterodorsals and 3–4 posteroventrals. Hind femur without posteroventrals but with some fine setae on basal half of posterior surface; with 7 strong anteroventral setae on apical third. Hind tibia curved ventrad, with 6–7 weak posterodorsals on basal half, these no longer or slightly shorter than tibial depth; with rows of numerous short erect anterodorsals, those near base equal to tibial depth; 1–3 weak anteroventrals; without an apical ventral prong, without dorsal and anterodorsal preapical setae; with 1 short anteroventral but 0 posteroventral apical seta. Hind tarsomere 1 with 2 short ventral setae at base.

Wing: With a slight brown tinge, darker at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu upright, almost straight, forming a right-angle with vein M. Calypters and margins yellow. Knob of haltere black.

Abdomen: Ground-colour black. Thinly grey dusted when viewed from behind. Syntergite 1+2 black; tergites 3–5 with an ill-defined undusted median vitta. Sternite 1 bare. Sternite 5 (Fig. 15G).

Terminalia: Figs 15 D–F.

FEMALE: Not known.

Distribution. Russia: Altai Mts.

***Drymeia quadrisetosa* (Malloch, 1919)**

Figs. 16 A–F

Pogonomyia quadrisetosa Malloch, 1919: 77.

Pogonomyia amurensis Lavčiev, 1971: 220. **Syn. nov.**

Drymeia amurensis; Pont, 1986: 71.

Note. Lavčiev (1971) described *Pogonomyia amurensis* from Klimoutsky and Samodon in Khabarovskiy Kray, Russia. The holotype of *D. amurensis* should be in the Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia, but it was not found there by Pont (2004) or by VSS. We have not seen the type, but Lavčiev's description of *D. amurensis* and his figures of the hypopygium and mid femur are the same as for *D. quadrisetosa* Malloch, except for the number of strong anteroventral setae at the apex of mid femur. The mid femur of *D. amurensis* has only one such seta (Lavčiev 1971), but the mid femur of *D. quadrisetosa* is said to have two such setae. However, many of the specimens of *D. quadrisetosa* which we have studied have a variable number of these setae, from 1 to 3, which may be the same or different on each mid leg. So the number of strong setae is a variable character and we have no hesitation in proposing this synonymy.

Material examined. RUSSIA: *Chukotka Autonomous Okrug, Chaunskii raion*: 1 male, Pevek, 28.vi.1963, K. Gorodkov; *Anadyrskii raion*, 3 males and 4 females, low part of Anadyr' River, 64.83°N 175.96°E, 18.vii.2013, A. Barkalov. *Krasnoyarsky Krai, Taymyr Peninsula*: 2 males and 1 female, 114 km Khatanga, Kotuy River, 71.4°N 103°E, 1–5.vii.2010, A. Barkalov. *Altai Republic, Kosh-Agachskii raion*: 2 males, Ukok plateau, environs of Kal'dzhin-Kul'-Bas lake, 2400 m, 49°19'N 87°26'E, 21.vii.2006, T. Novgorodova. *Zabaykalsky Krai* [Chitinskaya Oblast]: 1 male, Nature Reserve "Sokhondinskii", Verkhniy Bukukun cordon, ~ 1540 m, 49°36'N 111°06'E, 6.viii.1991, V. Pekin. *Sakha Republic*: 1 male, ~ 100 km NW Oymyakon, 64°08'N 141°27'E, [as 364 km from on road Khangyga], 5.vii.1985, A. Barkalov.

Remark. There has been no description of this species since Malloch's (1919) original description, but the species can be reliably identified with the key by Hockett (1965a).

Distribution. Alaska, northern Canada (Yukon, Northwest Territories, Manitoba, Quebec, Labrador) and Russia (Siberia).

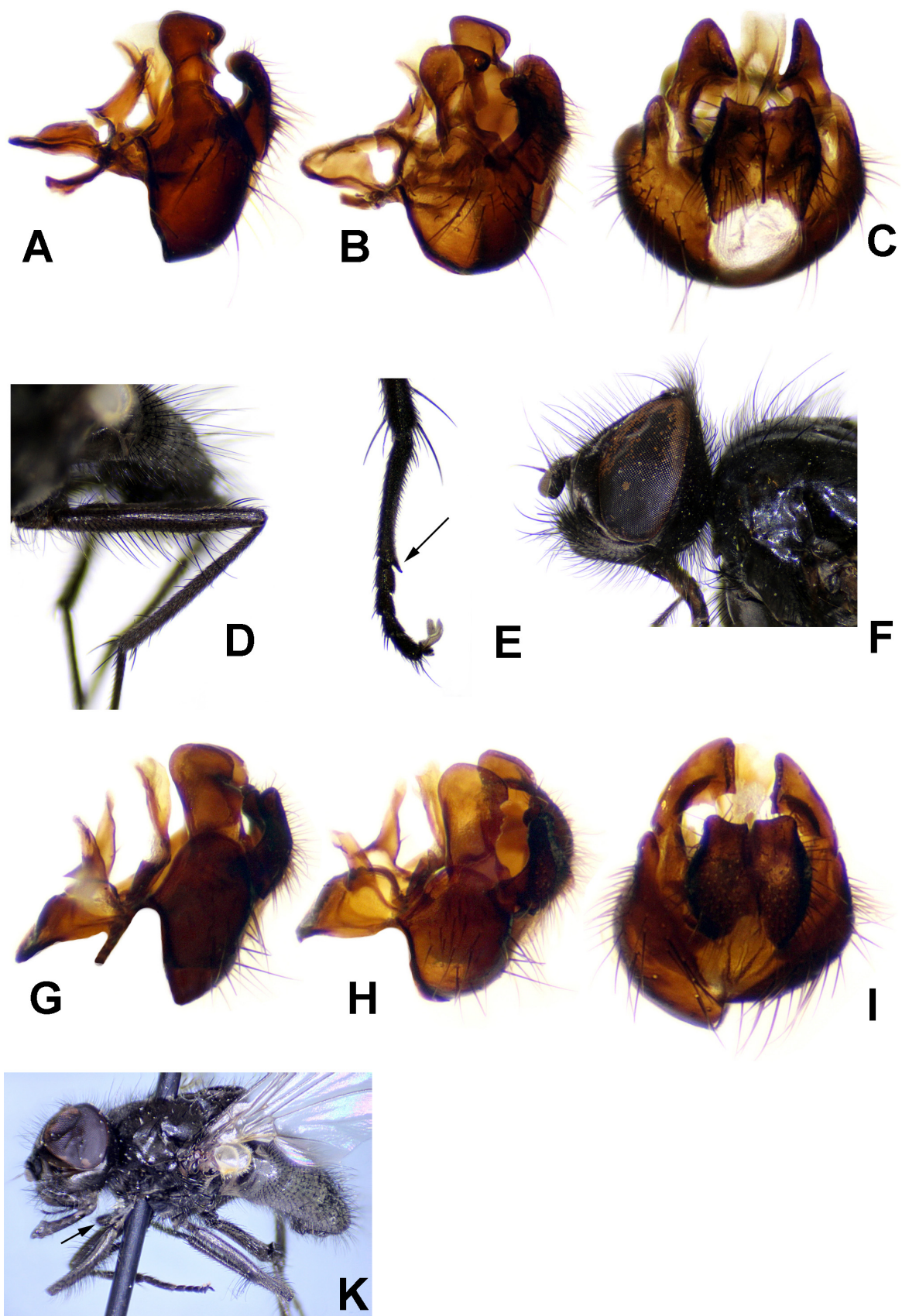


FIGURE 16. *Drymeia* spp., males. **A–F.** *Drymeia quadrisetosa*. **A–C.** Terminalia. **A.** Lateral view. **B.** Postero-lateral view. **C.** Posterior view. **D.** Mid femur. **E.** Fore metatarsus. **F.** Head, lateral view. **G–K.** *Drymeia segnis*. **G–I.** Terminalia. **G.** Lateral view. **H.** Postero-lateral view. **I.** Posterior view. **K.** Habitus, lateral view.

Drymeia segnis (Holmgren, 1883)

Figs. 16 G–K

Aricia segnis Holmgren, 1883: 169.

Pogonomyia segnis; Hennig, 1962b: 683.

Drymeia segnis; Pont, 1986: 72.

Drymeia segnis; Sorokina & Pont, 2010: 10.

Drymeia segnis; Sorokina, 2012a: 329.

Note. Holmgren described this species from the three localities in arctic Russia, "Gåskap. Matotschkin Scharr. Jamál." on Novaya Zemlya Island, and the syntype series is in the Riksmuseum, Stockholm, Sweden.

Material examined. RUSSIA: *Krasnoyarsky Krai, Taymyr Peninsula*: 2 males and 2 females, 60 km NW Khatanga, left bank of Novaya River, Ary-Mas cordon, 72.5°N 101.94°E, 10–20.vii.2010, A. Barkalov, V. Zinchenko & O. Khruleva (1 male and in ZMUM); 21 males and 2 females, 90 km NW Khatanga, valley of Zakharova-Rasokha River (left tributary of Novaya River), 72.7°N 101.08°E, A. Barkalov & V. Zinchenko (1 male in ZMUM); 2 males, 13.5 km S Dixon, mouth of Lemberova River, 73.39°N 80.66°E, 6,7,25.vii.2012, A. Barkalov & V. Zinchenko; 4 males and 1 female, middle part of Pyasina River, Tareya River, ~ 73°12'N 91°36'E, 20,21.vii.1971, Yu. Chernov (ZIN). *Chukotka Autonomous Okrug, Wrangel Island*: 1 female, W Rodzhers Bay, 29.vii.1966; 1 female, Rodzhers Bay, 18.vii.1971; 1 male, environs of Tundrovaya Mt., near stream, 18.vii.1972; 1 male and 2 females, Somnitel'naya Bay, 24.vii.1971, 7.viii.1971; 2 females, south slope of Vysokaya Mt., 9.viii.1971; 3 males, valley of Somnitel'naya River, Mineeva Mts, 100–150 m, 20,22,26.vii.1966; 9 males and 10 females, 3–5 km N Somnitel'naya Bay, bank of river, 27.vii.1966; 150 m, 7,8,25.vii.1972; 1 male, NW Somnitel'naya Bay, environs of Vyuchniy, 17.vii.1972; 1 male, north slope of Berry Mt., 6 km S Sovetskaya Mt., 15.vii.1972. *Sakha Republic: Bulunskii ulus*, 1 male, 19 km SE Kyusyur, low part of Lena River, ~ 70°33'N 127°41'E, 20.vii.1957, K. Gorodkov (ZIN); 1 female, Delta of Lena River, Olenekskaya protoka (branch) [as Chay-Tumus, 125°40'E], 27.vii.1957, K. Gorodkov (ZIN).

Remarks. There is a description of both sexes of this species by Hennig (1962b: 683), and the species can also be identified with the keys in Hockett (1965a). All the above material from Wrangel Island collected by K. Gorodkov is located in the ZIN. Flies were collected from flowers of *Dryas integrifolia*, *Saxifraga hirculus*, *Potentilla emarginata*.

Distribution. Alaska, northern Canada (Yukon, Northwest Territories, Manitoba, Quebec, Labrador), Greenland, and arctic Russia.

Drymeia setibasis (Hockett, 1965)

Figs. 17 A–F, 18 A–C

Eupogonomyia setibasis Hockett, 1965a: 301.

Trichopticooides gymnophthalma sibirica Lavčiev, 1971: 220. **Syn. nov.**

Drymeia setibasis; Sorokina, 2012a: 329.

Note. Lavčiev (1971) described the subspecies *Trichopticooides gymnophthalma sibirica* based on one male from Sarma [256 km NE Irkutsk, 53°06'N 106°50'E], Irkutsk raion, Russia. The holotype of *D. gymnophthalma sibirica* should be in the Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia, but it was not found there by Pont (2004) or by VSS. Although we have not seen the type, Lavčiev's description of *D. gymnophthalma sibirica*, especially of the mid femur with several curved setae at extreme base of anteroventral surface and several strong setae on anterodorsal surface at base, and also his figures of the hypopygium and hind tibia, are the same as in *D. setibasis* Hockett. We have no hesitation in proposing this synonymy. The name *sibirica* Lavčiev is in any case a junior secondary homonym in *Drymeia* of *Bebryx* (now *Drymeia*) *sibirica* Hennig, 1962, and is therefore an unavailable name.

Material examined. RUSSIA: *Krasnoyarsky Krai, Taymyr Peninsula*: 24 males and 20 females, 60 km NW Khatanga, left bank of Novaya River, Ary-Mas cordon, 72.5°N 101.94°E, 10–20.vii.2010, A. Barkalov & V. Zinchenko (1 male and 1 female in ZMUM); 18 males and 17 females, 90 km NW Khatanga, valley of Zakharova-Rasokha River (left tributary of Novaya River), 72.7°N 101.08°E, 2–16.vii.2011, A. Barkalov & V. Zinchenko;

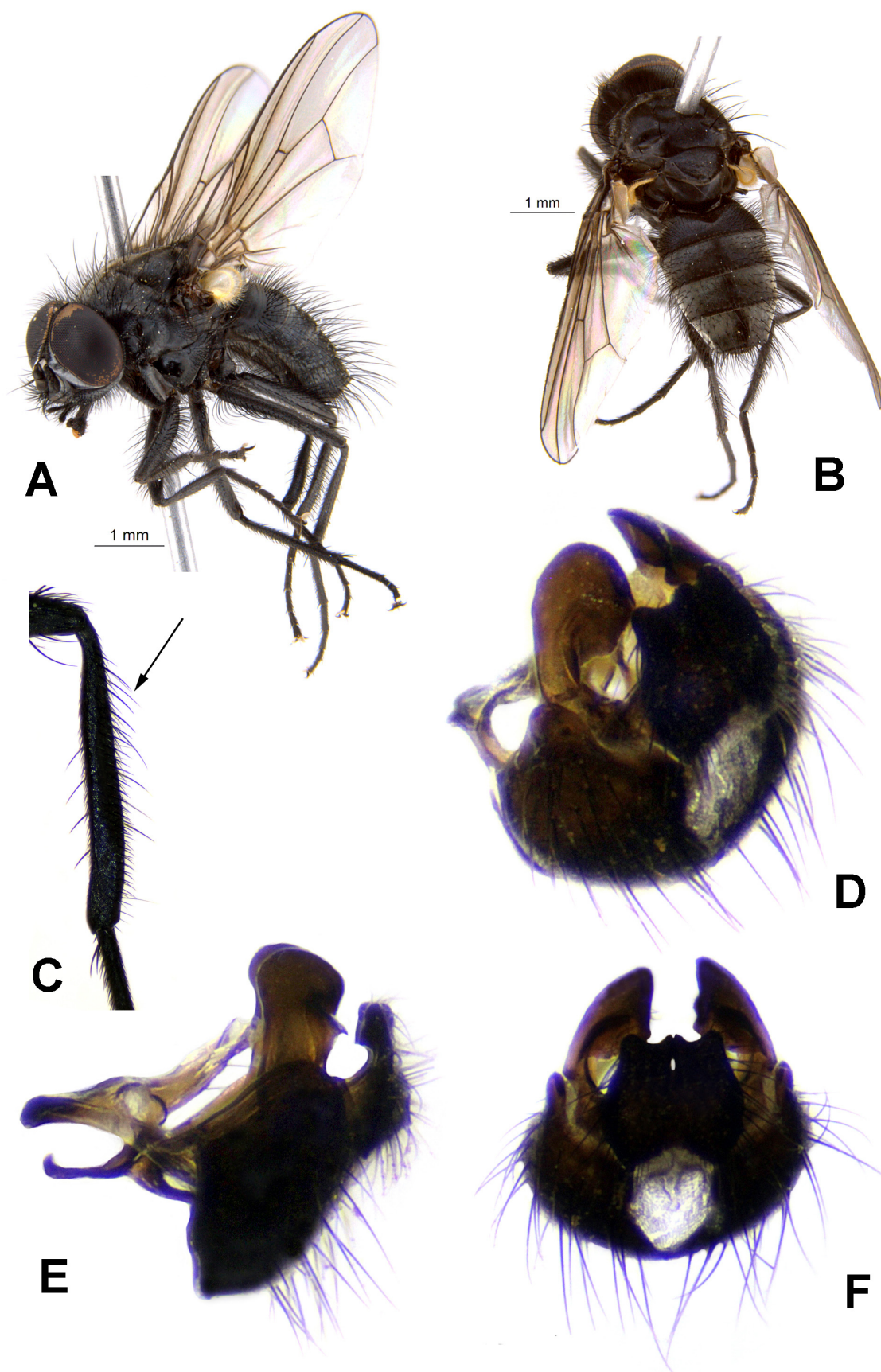


FIGURE 17. *Drymeia setibasis*, male. **A.** Habitus, lateral view. **B.** Abdomen and scutum, dorsal view. **C.** Hind tibia. **D–F.** Terminalia. **D.** Postero-lateral view. **E.** Lateral view. **F.** Posterior view.

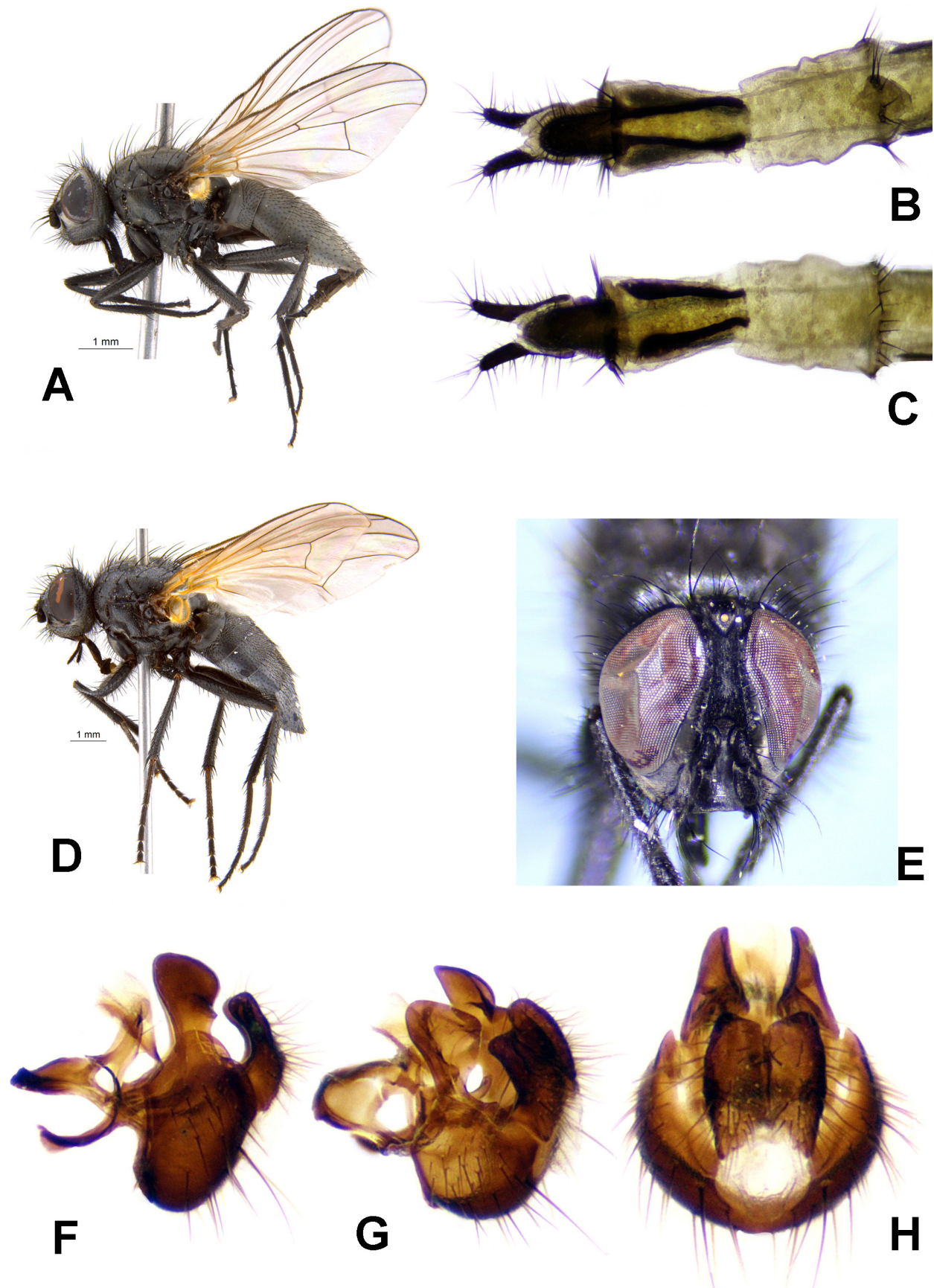


FIGURE 18. *Drymeia* spp. **A–C.** *Drymeia setibasis*, female. **A.** Habitus, lateral view. **B, C.** Apical portion of ovipositor. **B.** Dorsal view. **C.** Ventral view. **D.** *Drymeia sibirica*, female, habitus, lateral view. **E–H.** *Drymeia tetra*, male. **E.** Head, anterior view. **F–H.** Terminalia. **F.** Lateral view. **G.** Postero-lateral view. **H.** Posterior view.

2 females, 13.5 km S Dixon, mouth of Lemberova River, 73.39°N 80.66°E, 6,7,25.vii.2012, A. Barkalov & V. Zinchenko; *Chukotka Autonomous Okrug, Wrangel Island*: 2 males and 8 females, 5 km N Somnitel'naya Bay, valley of river, 150 m, 7,8.vii.1972, K. Gorodkov. *Altai Republic, Turochakskii raion*: 1 male, 25 km SE Artybash, 2200 m, 12.vii.1991, A. Barkalov; 1 male, 50 km S Artybash, 2000 m, 12.vii.1991, A. Barkalov; *Altai Republic, Kosh-Agachskii raion*: 4 males and 1 female, upper part of Zhumaly River, Rodonovyi spring, 2410 m, 49°27'N 88°03'E, 24.vi.2005–4.vii.2005, V. Sorokina, A. Barkalov, 23.vii.2006, T. Novgorodova; 1 female, 10 km SE Dzhazator, valley of Dzhazator River, 1700 m, 49°39'N 87°39'E, 5.vii.2006, V. Sorokina; 50 males and 36 females, upper part of Naryn-Gol River, 2520–3000 m, 49°49'N 88°13'E, 15–19.vii.2009, V. Sorokina, V. Zinchenko, A. Barkalov & T. Novgorodova; 13 males and 11 females, south slope of Kurayskii range, 7 km NW Kuray, 2251–2736 m, 50°18'N 87°51'E, 17,19.vii.2013, V. Sorokina (2 males and 1 female in ZMUM); *Ukok plateau*: 2 males, environs of Zerlukol'-Nur lake, 2400 m, 49.56°N 88.21°E, 23.vi.2005, V. Sorokina; 38 males and 20 females, environs of Muzdy-Bulak lake, 2450–2900 m, 49.28°N 87.65°E, 26.vi.–1.vii.2005, V. Sorokina & A. Barkalov, 2500–3000 m, 9.vii.2008, A. Barkalov; 5 males and 12 females, south slope of Yuzhno-Chuyskii range, valley of Tara River, 49°39'N 88°13'E, 2200–2800 m, 1–4.vii.2006, V. Sorokina, 2800–3300 m, 19.vii.2009, A. Barkalov; 38 males and 27 females, 6–8 km NE Maitobe Mt., 2450–2800 m, 49°34'N 87°43'E, 6,8,10.vii.2006, V. Sorokina & T. Novgorodova (1 male OUMNH); 14 males and 2 females, Bugymuiz Pass, 2800 m, 49°34'N 87°43'E, 11.vii.2006, V. Sorokina & T. Novgorodova; 2 females, valley of Ak-Allacha River, 2160 m, 49°25'N 87°37'E, 12–14.vii.2006, V. Sorokina; 8 males and 5 females, environs of Kal'dzhin-Kul'-Bas lake, 49°19'N 87°26'E, 2400–3000 m, 17–21.vii.2006, V. Sorokina & T. Novgorodova; *Altai Republic, Shebalinskii raion*: 2 males and 5 females, environs of Belok Mukhor-Cherga Mt., 1767–1854 m, 51°19'N 85°18'E, 22.vii.2011, V. Sorokina; *Altai Republic, Ust'-Koksinskii raion*: 5 males and 8 females, north slope of Katunskiy range, 2272 m, 13 km S Mul'ta, 50°04'N 85°57'E, 14.vii.2013, V. Sorokina (1 male in ZMUM); *Altai Republic, Ulaganskii raion*: 2 females, environs of Dzhulukul' lake, 2200 m, 50.47°N 89.77°E, 21.vii.2007, V. Sorokina; 28 females, Shapshalskii range, 2878 m, 50.53°N 89.8°E, 24.vii.2007, V. Sorokina; 2 males and 3 females, Kurayskii range, 2500–2800 m, 50.33°N 87.75°E, 29,30.vi.–3.vii.2008, A. Barkalov; *Altai Republic, Ongudayskii raion*: 8 females, Terektinskii range, upper part of B. Yaloman River, 2200–2300 m, 50.47°N 86.32°E, 3.viii.2007, V. Sorokina. *Tyva Republic, Mongun-Tayginskii kozhuun*: 3 females, Shapshalskii range, upper part of Shui River, 2550–2900 m, 50.53°N 89.8°E, 25.vii.2007, V. Sorokina; 1 male, east bank of Khindiktig-Khol' lake, 2334 m, 50.4°N 89.9°E, 21.vii.2007, A. Barkalov.

Remarks. All the above material from Wrangel Island collected by K. Gorodkov is located in the ZIN. Both sexes were well described by Hockett (1965a: 301) and the species can be easily recognized from his keys (op. cit.: 300). Flies were collected from flowers of *Dryas integrifolia*, *Potentilla emarginata*, *Ranunculus* sp.

Distribution. Known from North America (Alaska, the Yukon, Northwest Territories) and Russia.

Drymeia sibirica (Hennig, 1962)

Fig. 18D

Bebryx sibirica Hennig, 1962a: 671.

Drymeia sibirica; Pont, 1986: 72.

Drymeia sibirica; Sorokina & Pont, 2010: 11.

Material examined. Holotype, male, RUSSIA: *Sakha Republic* [Yakutskaya Oblast]: Verkhoyansk, 1–2.vi.–vii.1903, Rozhnovskiy (ZIN). *Tyva Republic, Morgun-Taiginskii kozhuun*: 1 male, environs of Mugur-Aksy, 2000–2100 m, ~ 50°22'N 90°25'E, 22.vii.1993, A. Barkalov. *Altai Republic, Kosh-Agachskii raion*: 2 females, valley of River Akbul, 49°39'N 88°1'E, 12.vii.2009, T. Novgorodova.

Description. Hennig (1962a: 671) gave a detailed description of the male, with illustrations of several leg characters, but he did not know the female. We give here a description of the female, based on our new material.

FEMALE. Length of body, 7.2–8.5 mm. Length of wing, 6.2–7.0 mm.

Head: Dichoptic. Frons at middle 0.42 of head-width at this point, and at this point each fronto-orbital plate 0.24 of frontal vitta. Head whitish-grey dusted. Frontal triangle inconspicuous, not reaching the crossed setae on frontal vitta. Frontal vitta grey or yellowish dusted. Eye with short fine hairs. Ocellar setae strong. 7–8 pairs of inclinate frontal setae, including several interstitials; 3 pairs of orbital setae, the upper two pairs reclinate and exclinate, the lower pair proclinate and exclinate. Frontal vitta with a pair of strong crossed setae. Antenna black,

postpedicel circa 1.5 times as long as wide. In lateral view, facial edge not projecting forward beyond the level of profrons. Arista swollen in basal sixth, appearing almost bare, the longest hairs shorter than basal diameter of arista. Parafacial at level of insertion of arista 1.7 times as wide as width of postpedicel. Gena broad, depth below lowest eye-margin equal to or slightly broader than length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis thickened, short. Labella large. Prementum of proboscis dusted, as long as palpus.

Thorax: Ground-colour black. Scutum whitish-grey or brownish-grey dusted, sometimes with three indistinct brown vittae running along dorsocentrals and between them. Pleura and scutellum dusted as the scutum. Ground-setulae very short. Dorsocentrals 2(3)+4. Prealar present, but weaker and half as long as 2nd notopleural seta. Acrostichals 0+2. Katepisternal setae 1+1, sometimes with 2–3 stronger setulae below posterior seta. Anepimeron setulose. Katepimeron bare. Scutellum black and dusted in posterior view.

Legs: Black, but all legs with tarsomeres 1–2 brownish-yellow, all tarsomeres brownish laterally. Fore tarsomeres 1–4 each with a short fine anteroventral and posteroventral hair at tip. Fore tibia with 2–3 posteroventral setae on apical half. Mid femur with 2 strong anteroventral setae and 3–4 posteroventral setae on basal quarter and with a few fine setae on the posterior to posteroventral surface at base. Mid tibia with 3 anterodorsals, without anteroventrals, 7 posterodorsals, 3–6 posteroventrals (2 long and 4 very short). Hind femur without posteroventrals; with 6 strong anteroventral setae on apical half and a row of shorter setae on basal half. Hind tibia with 5–6 posterodorsals, with a row of 6 anterodorsals, and 4–6 anteroventrals on middle part; dorsal preapical seta strong, and anterodorsal preapical 2/3 of its length; 1 anteroventral but 0 posteroventral apical setae.

Wing: Yellow or brownish tinged, especially at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein dm-cu oblique, sinuous. Calypters and margins yellow. Knob of haltere black.

Abdomen: Grey dusted, with an indistinct dark vitta. Without strong setae.

Distribution. Known only from the Russian localities listed above.

***Drymeia similis* (Malloch, 1918)**

Pogonomyia similis Malloch, 1918: 279.

This species is widespread in northern and montane North America, but has not yet been found in the Old World. It is included in the key, based on Hockett (1965a) and on specimens seen in the BMNH and in the ZIN, in order to facilitate comparison with other species.

***Drymeia taymirensis* sp. nov.**

Figs. 19 A–H

Diagnosis. The species is very similar to *D. brumalis* (Rondani, 1866). The new species can be distinguished as follows: anepimeron and katepimeron bare; prealar long and strong; eye bare; facial edge projecting a little forward beyond the level of profrons; proboscis elongated, slender; fronto-orbital plates in male separated by a narrow frontal vitta; mid and hind femora in male with rows of fine dense anteroventral, ventral and posteroventral setae; hind tibia in male with a small ventral apical prong, without or with short posteroventral apical seta; abdomen deep brownish-grey dust except for black marks on tergites 3–5, in female abdomen black, shining.

Etymology. The species name is based on the type-locality, the Taymyr Peninsula.

Type material examined. Holotype male, RUSSIA: Krasnoyarsky Krai, Taymyr Peninsula, 90 km NW Khatanga, valley of Zakharova-Rasokha River (left tributary of Novaya River), 72.7°N 101.08°E, 10.vii.2011, A. Barkalov (SZMN).

Paratypes: 2 males and 1 female, same data as holotype, 3–10.vii.2001, A. Barkalov & V. Zinchenko (SZMN). *Kamchatskii Krai: Olyutorskii raion* [as Koryakskiy NO], 6 males and 2 females, environs Apuka, ~ 60°27'N 169°34'E, Pakhachinskiy range, 3 & 7.vii.1959, K. Gorodkov. *Chukotka Autonomous Okrug: Chaunskii raion*, 1 male, environs of Pevek [as Val'kumey], ~ 69°36'N 170°11'E, 12.vii.1963, Gorodkov; 3 males and 3 females, Pevek, ~ 69°42'N 170°19'E, 28,30.vi.1963, 3.vii.1963, 29.vii.1963, Gorodkov; 3 males, 110 km SE Pevek, ~

69°08'N 172°45'E [as Komsomol'skii], valley of Ichuviev River, 5.vii.1963, Gorodkov; 1 male, 67 km SE Pevek, ~ 69°32'N 172°00'E [as Krasnoarmeiskii], 10.vii.1963, Gorodkov; *Iultinskii raion*: 1 male and 1 female, ~ 67°52'N 178°43'E [as Iultin], 20.vii.1963, Gorodkov; 3 males, ~ 67°42'N 178°35'E [as 20 km SSE Iultin], valley of Anguema River, 22.vii.1963, Gorodkov; 3 males, 5 km N Egvekinot, ~ 66°22'N 179°07'E, on *Oasiphora fruticosa*, 26,27.vii.1963, Gorodkov; 3 males and 1 female, 55 km N Egvekinot, river valley, 29.vii.1963, Gorodkov.

All the above paratypes from Chukotskiy AO collected by K. Gorodkov are located in the ZIN except for 2 pairs deposited in the SZMN.

Description. MALE. Length of body, 5.0–5.8 mm. Length of wing, 4.0–4.5 mm.

Head: Ground-colour black. Eye bare. Fronto-orbital plate and parafacial silvery-grey pruinose; face grey, gena and lower occiput light grey pruinose. Fronto-orbital plates separated by a narrow frontal vitta. Frons at narrowest point 2.5 times as wide as diameter of anterior ocellus (rarely 3–3.5 times). Ocellar setae short. 11–14 pairs of frontal setae, including interstitials, reaching almost to anterior ocellus. Antenna black, postpedicel circa 1.3 times as long as wide. Arista swollen in basal sixth, appearing almost bare, the longest hairs shorter than basal diameter of arista. Parafacial at level of insertion of arista slightly broader than width of postpedicel, hardly narrowing below. Upper part of face without a distinct carina between antennal bases. In lateral view, facial edge projecting a little forward beyond the level of profrons. Gena broad, depth below lowest eye-margin equal to or slightly broader than length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis elongated, slender. Prementum of proboscis as long as palpus, shining, with very light dust in middle.

Thorax: Ground-colour black. Scutum black, subshining, viewed from in front with brown dust, without distinct longitudinal vittae, but sometimes with indistinct undusted lines along the postsutural dorsocentral and acrostichal lines; postpronotal lobe, notopleuron and postalar callus the same as the scutum. Ground-setulae short. Pleura subshining, light brownish dusted, without a shining patch anteriorly on katepisternum and medially on meron. Anepimeron and katepimeron bare. Notopleuron densely setulose. Prosternum bare. Acrostichals 0+1. Dorsocentrals 2+4. Prealar long and strong. Katepisternal setae 1+1. Scutellum black, shining in posterior view.

Legs: Black. Fore tibia with 3–5 posteroventral setae on apical half (sometimes with 1–3 fine posterodorsals). Fore tarsomeres 1–4 each with a short fine anteroventral and posteroventral hair at tip, fore tarsomere 1 without posteroventrals at apex. Fore claws as long as length of tarsomere 5, thin and pointed, but often short, blunt and obviously broken, shorter than length of tarsomere 5. Pulvilli as long as tarsomere 5. Mid femur straight, slightly flattened, with rows of fine dense anteroventral, ventral and posteroventral setae; 2 short anterior and 3 posterodorsal to posterior preapical setae. Mid tibia with 2 anterodorsal (sometimes with an additional 2 short) setae and without anteroventrals; 5–6 posterodorsals, 3–4 posteroventrals and often with 2–3 posterior. Hind femur with long dense setae on anteroventral, posteroventral and ventral surfaces, the setae on apical third of anteroventral surface strong. Hind tibia with a row of long and short setae between the posterodorsals; with a row of uneven anterodorsals; with numerous fine and short setae on anteroventral, anterior, posterior and posteroventral surfaces; with a small ventral apical prong, without or with a short posteroventral apical seta and strong anteroventral seta, without other strong preapical setae. Hind tarsomere 1 with 1 short ventral seta at base.

Wing: Brownish, darker at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu upright, almost straight, forming a right-angle with vein M. Calypters and margins yellow. Knob of haltere black.

Abdomen: Conical, ground-colour black. Viewed from behind, tergites 3–5 deep brownish-grey dusted except for a large black triangular spot on tergite 3 and a smaller triangular spot on tergite 4, with a median vitta on tergite 5. Sternite 1 bare. Sternite 5 a little swollen (Fig. 19D).

Terminalia: Figs 19 E–H.

FEMALE. Length of body, 5.4–6.4 mm. Length of wing, 4.7–5.5 mm.

Differs from the male as follows:

Head: Dichoptic. Frons at middle 0.33 of head-width at this point, and at this point each fronto-orbital plate 0.5 of frontal vitta. Head brown dusted. Frontal triangle subshining, not or hardly reaching the crossed setae on frontal vitta. Ocellar setae strong. 5–6 pairs of inclinate frontal setae, including several interstitials; 3 pairs of orbital setae, the upper two pairs reclinate and exclinate, the lower pair proclinate and exclinate. Frontal vitta with a pair of strong crossed setae.

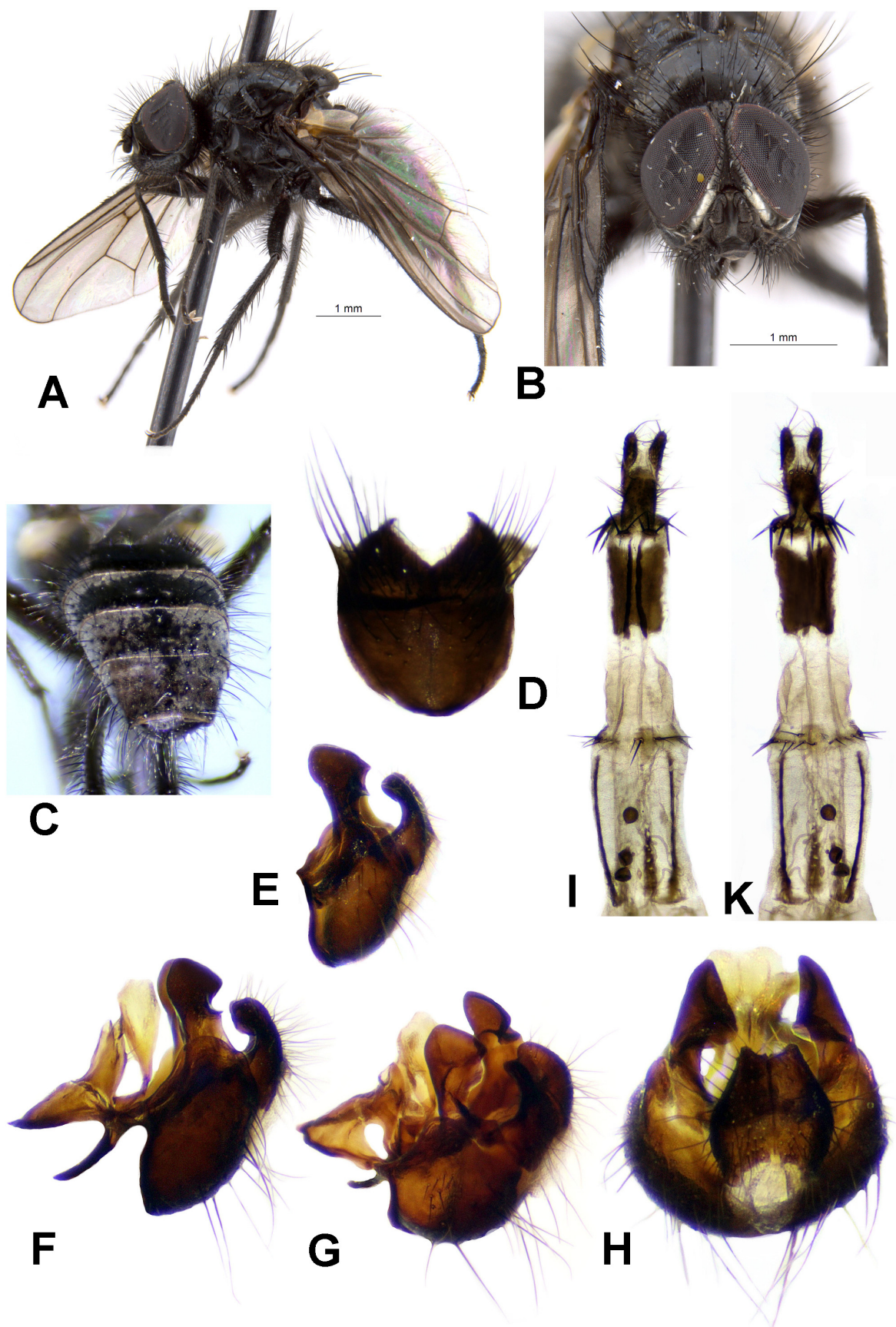


FIGURE 19. *Drymeia taymirensis* (paratypes). **A.** Male habitus, lateral view. **B.** Male head, anterior view. **C.** Male abdomen, dorsal view. **D.** Sternite 5. **E–H.** Male terminalia. **E, F.** Lateral view (variation of the shape of the surstyli). **G.** Postero-lateral view. **H.** Posterior view. **I, K.** Female, apical portion of ovipositor. **I.** Ventral view. **K.** Dorsal view.

Thorax: As in the male.

Legs: Black. Fore tibia with 2–3 posteroventral setae on apical half. All claws and pulvilli much shorter. Mid femur straight, anteroventral surface with 1–2 strong setae on basal quarter and several short strong setae on apical third; posteroventral surface with a row of short fine setae. Mid tibia with 3–4 anterodorsals, 0 anteroventrals, 5–6 posterodorsals, and 2–4 posteroventrals. Hind femur with a row of short fine posteroventral setae and a row of strong anteroventrals which are shorter and fine on basal third. Hind tibia with 5–6 long posterodorsals on middle part, 4–5 short anteroventrals, and 3–4 strong and several short anterodorsals; with strong apical setae on anterior and ventral surfaces.

Wing: Yellowish-brown tinged, dark yellow at base.

Abdomen: Black, shining, without any dusted marks.

Ovipositor: Figs 19I, K.

Distribution. Russia: Taymyr Peninsula, Kamchatka, Chukotka.

***Drymeia tetra* (Meigen, 1826)**

Figs. 18 E–H

Anthomyia tetra Meigen, 1826: 158.

Pogonomyia tetra; Hennig, 1962b: 684.

Drymeia tetra; Pont, 1986: 72.

Drymeia tetra; Sorokina & Pont, 2010: 11.

Drymeia tetra; Sorokina, 2012b: 197.

Material examined. *Leningradskaya Oblast, Luga raion*: 7 males, Luga, 9.vii.1934, 6,11.viii.1935, 2.viii.1952, 20.vii.1953, 10.viii.1955; 4 males, Gobzhitsa, 14, 21 & 24.vii.1934; 1 male, Yashera, 24.vii.1957, Shtakelberg (ZIN). *Moskovskaya Oblast: Stupinskii raion*, 1 male, Sokolova Pustyn' village, 5.viii.1937, Rodendorf (ZMUM). *Republic of Bashkortostan*: 1 male, environs of Abzakovo-Murakaevo, Kryktytau Mts, 2–8.viii.2008, K. Tomkovich (ZMUM). *Novosibirskaya Oblast: Cherepanovskii raion*, 1 male and 1 female, Cherepanovo, 23.vi.1961, O. Ivanovskaya; *Kolyvanskii raion*, 2 males, Cherny Mys village, ~ 55°30'N 83°15'E, 4.vii.1991, A. Barkalov; *Toguchinskii raion*, 2 males and 1 female, 2 km NE Otgonka station, ~ 55°13'N 83°57'E, 17.vii.2004, V. Sorokina; Novosibirsk, 2 males and 1 female, botanical garden, 12.vii.2008, V. Sorokina. *Altai Krai*: 1 male, environs of Basargino, 705 m, 51°44'N 85°25'E, 14.vii.2011, V. Sorokina. *Altai Republic: Ongudayskii raion*, 2 males and 4 females, Terektinskii range, upper part of B. Yaloman River, 955 m, 50.7°N 86.32°E, 2–4.viii.2007, V. Sorokina & A. Barkalov (1 male and 1 female in OUMNH); *Ust'-Koksinskii raion*, 9 males and 1 female, environs of Mul'ta, 915–962 m, 50°09'N 86°00'E, 11.vii.2013, V. Sorokina; 1 male, 6.5 km SE Mul'ta, 1026 m, 50°07'N 86°01'E, 12–15.vii.2013, V. Sorokina; 1 male, north slope of Katunskii range, between Orotoi River and Akkem River, 1009 m, 50°06'N 86°28'E, 4–8.vii.2007, O. Kosterin (ZMUM); *Kosh-Agachskii raion*, 1 male, Kuray steppe, 1662 m, 50.2°N 87.8°E, 9.vii.2006, A. Barkalov. *Krasnoyarskii Krai*: 2 males and 1 female, Krasnoyarsk, W bank, Udachnii raion, environs, Betula forest edge, 28.vii.2009, K. Tomkovich (ZMUM); 5 males and 1 female, Krasnoyarsk, W bank, environs of Stolby Reserve, Laletina River, 55.96°N 92.73°E, 24–31.vii.2009, K. Tomkovich (ZMUM). *Kemerovskaya Oblast: Tisulskii raion*, 2 females, Soldatkin, ~ 55°28'N 88°37'E, 23.vii.2004, D. Lopatin. *Sakha Republic*: 1 male, 35 km from Yakutsk, Kantagay, 5.vii.1975, A. Bagachanova (ZIN). *Khabarovskii Krai*: 1 male, Radde, 11.viii.1980, A. Ozerov (ZMUM). *Amurskaya Oblast*: 2 males, Zeya, 25.vii.1978, A. Shatalkin (ZMUM & BMNH); 1 male, 40 km W Svobodny, Klimoutsy village, 51°28'N 127°35'E, 14.viii.1959, Borisova (ZIN); 1 male, 100 km W Svobodny, Korsakovo, 8.viii.1959, Borisova (ZIN); *Svobodny raion*, 1 male, valley of Amur River, between Malaya Pera and Bol'shoy Ergel' Rivers 11.viii.1957, A. Zinoviev (ZIN).

Remarks. Both sexes were fully described by Hennig (1962b: 684–685). Adults of this species are found on flowering plants.

Distribution. North, Central and East Europe, eastwards to China and the Russian Far East.

***Drymeia trisetata* sp. nov.**

Figs. 20 A–G, 21 A–D

Diagnosis. The species is very similar to *D. firthiana* (Huckett, 1965). The new species can be distinguished as follows: anepimeron and katapimeron bare; prealar seta long and strong; proboscis thin, elongate; eye bare; mid femur in male with a row of uniform anteroventral setae, and with very long posteroventrals on basal 2/3 which are 2–2.5 times as long as depth of femur; mid tibia with 2 anterodorsals; hind femur without posteroventral setae; hind tibia in male with a small ventral apical prong and a short apical posteroventral seta; abdomen brownish-grey dusted, in male with a large black trapeziform or rectangular spot on tergite 3 and a median vitta on tergites 4–5.

Etymology. The species name refers to the three postsutural dorsocentral setae on the scutum.

Type material examined. Holotype male, RUSSIA: Altai Republic, Kosh-Agach raion, south slope of Kurayskii range, 7 km NW Kuray, 2251 m, 50°17'N 87°51'E, 17.vii.2013, V. Sorokina (SZMN).

Paratypes: *Altai Republic, Turochakskii raion*: 1 male, environs of Teletskoe lake, 1750 m, 15.vii.1987, A. Barkalov; *Shebalinskii raion*: 11 male, 10 km NE Verkh-Kokuya Pass, 842 m, 51.49°N 85.42°E, 26.vi.2009, V. Sorokina & A.C. Pont (10 males and 8 females, half BMNH & OUMNH); 14 males, mouth of Sarlyk River, 1252 m, 51.12°N 85.60°E, 30.vi.2009, V. Sorokina & A.C. Pont (9 males in BMNH & OUMNH); 2 females, River Peschanka, 840 m, 51°39'N 86°16'E, 26.vi.2009, A.C. Pont (BMNH & OUMNH); 5 males and 2 females, environs of Il'inka, Gladkikh Mt., 1308 m, 51°27'N 85°07'E, 19.vii.2011, V. Sorokina; 2 males and 2 females, environs of Belok-Mukhor-Cherga Mt., 1767–1854 m, 51°19'N 85°18'E, 22.vii.2011, V. Sorokina; 1 male, D'ektirek, River Gorduba, 957 m, 51°28'N 86°61'E, 27.vii.2009, A.C. Pont (OUMNH); *Altai Republic, Ulaganskii raion*: 1 male, 10 km SW Altash, Severo-Chuyskii range, 2200–2400 m, 16.vii.2003, A. Barkalov; 17 males 1 female, environs of Dzhulukul' lake, 2200 m, 50.47°N 89.77°E, 21.vii.2007, V. Sorokina; 6 males, Shapshalskii range, 2878 m, 50.53°N 89.8°E, 24.vii.2007, V. Sorokina; 8 males and 1 female, Kurayskii range, 2450–2800 m, 50.33°N 87.75°E, 29–30.vi.2008, 2,3.vii.2008, A. Barkalov; *Altai Republic, Kosh-Agachskii raion*: 17 males and 2 females, upper part of Zhumaly River, Rodonovyi spring, 2412 m, 49°27'N 88°03'E, 24.vi.2005, V. Sorokina, 4.vii.2005, 23.vii.2006, T. Novgorodova; 19 males and 3 females, south slope of Yuzhno-Chuyskii range, valley of Tara River, 2175–2200 m, 49°39'N 88°13'E, 30.vi.2006, 1–4.vii.2006, V. Sorokina & T. Novgorodova, 11.vii.2009, V. Sorokina; 44 males and 16 females, 18 km SE Dzhazator, 2115 m, 49°37'N 87°39'E, 5.vii.2006, V. Sorokina; 14 males and 3 females, Ukok plateau, 8 km NE Maitobe Mt., 2420–2800 m, 49°34'N 87°43'E, 6–10.vii.2006, V. Sorokina & T. Novgorodova; 5 males and 2 females, Ukok plateau, valley of Ak-Allacha River, 2160 m, 49°25'N 87°37'E, 12–14.vii.2006, V. Sorokina & T. Novgorodova (3 males in OUMNH); 3 males, Ukok plateau, environs of Kal'dzhin-Kul'-Bas lake, 2400–2800 m, 49°19'N 87°26'E, 17,18.vii.2006, V. Sorokina & T. Novgorodova; 1 male, Ukok plateau, environs of Muzdy-Bulak lake 2400 m, 49.28°N 87.65°E, 12.vii.2008, A. Barkalov; 12 males and 1 female, upper part of Naryn-Gol River, 2520 m, 49°49'N 88°13'E, 15–19.vii.2009, V. Sorokina & T. Novgorodova; 34 males and 7 females, south slope of Kurayskii range, 7 km NW Kuray, 2251–2588 m, 50°18'N 87°51'E, 17–19.vii.2013, V. Sorokina; 7 males and 2 females, north slope of Severo-Chuyskii range, valley of Akturu River, 2014–2064 m, 50°06'N 87°48'E, 21.vii.2013, V. Sorokina; *Altai Republic, Ust'-Koksinskii raion*: 27 males and 5 females, Nizhne-Mul'tinskoe lake, 1633 m, 50°01'N 85°49'E, 13.vii.2013, V. Sorokina; 1 male, north slope of Katunskiy range, 2272 m, 13 km S Mul'ta, 50°04'N 85°57'E, 14.vii.2013, V. Sorokina; 1 male, Katunskiy reserve, between Oroktoy River and Tukman River, 1009–1940 m, 50°05'N 86°32'E, 28.vi.2007, O. Kosterin (ZMUM); 2 males, between Oroktoy River and Akkem River, 1009 m, 50°06'N 86°28'E, 4–8.vii.2007, O. Kosterin (ZMUM). *Krasnoyarsky Krai*: 7 males, Sayany Mts, Kryzhina Mt., upper part of Bely Kitat, 1350–1400 m, 53.99°N 95.43°E, 13–16.vii.2009, R. Dudko & Shevelev. *Khakasiya*: 4 males and 4 females, *Shirinskii raion*, Shira-Itkul' lake env., 54.45°N 90.18°E, tophill Betuletum, 25–28.vi.2011, K. Tomkovich (ZMUM). *Tyva Republic, Morgun-Taiginskii kozhuun*: 9 males, environs of Mugur-Aksy, 2000–2100 m, ~ 50°22'N 90°25'E, 22.vii.1993, A. Barkalov; 3 males and 1 female, Shapshalskii range, upper part of Shui River, 2550–2900 m, 50.53°N 89.8°E, 25.vii.2007, V. Sorokina; 5 males and 3 females, east bank of Khindiktig-Khol' lake, 2334, 50.4°N 89.9°E, 28.vii.2007, A. Barkalov. MONGOLIA: 1 male, Khubsugulskii aimak, 25 km SSW Murena, 23.vii.1975, E. Narchuk (ZIN).

All the above paratypes are located in the SZNM, OUMNH and BMNH except for 3 pairs from Altai Republic deposited in each of the following: ZIN, ZMUM, BUIC.

Description. MALE. Length of body, 3.8–6.3 mm. Length of wing, 3.7–4.6 mm.

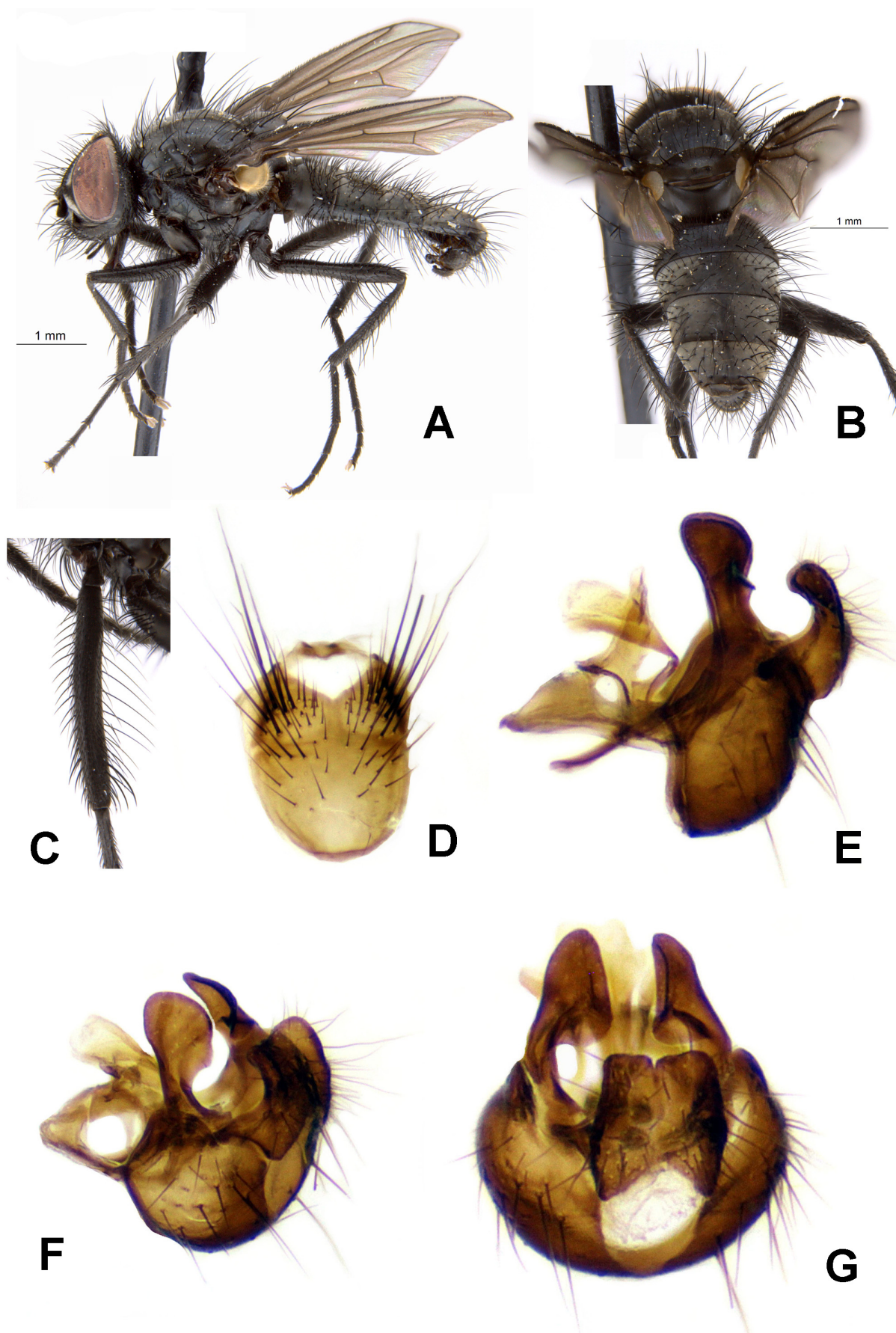


FIGURE 20. *Drymeia triseta*, male. **A.** Habitus, lateral view. **B.** Abdomen and scutum, dorsal view. **C.** Mid femur, dorsal view. **D.** Sternite 5. **E–G.** Terminalia. **E.** Lateral view. **F.** Postero-lateral view. **G.** Posterior view.

Head: Ground-colour black. Eye bare. Fronto-orbital plate brownish-grey pruinose, parafacial grey-silver pruinose; face grey, gena and lower occiput brownish-grey pruinose. Fronto-orbital plates touching. Frons at narrowest point 1.5 times as wide as diameter of anterior ocellus. Ocellar setae short. 12–15 pairs of frontal setae, including interstitials, reaching to anterior ocellus. Antenna black, postpedicel circa 1.5 times as long as wide. Arista swollen in basal sixth, pubescent, the longest hairs slightly longer than basal diameter of arista. Parafacial at level of insertion of arista as wide as or slightly wider than width of postpedicel, narrowing below. Upper part of face with a small carina between antennal bases. In lateral view, facial edge a little projecting forward beyond the level of profrons. Gena broad, depth below lowest eye-margin equal to length of postpedicel, densely setose and with a group of upcurved setae on anterior part of genal dilation. Palpus black. Proboscis thin, elongate. Prementum of proboscis dusted, as long as palpus.

Thorax: Ground-colour black. Scutum matt, black, viewed from in front greenish-bluish-brown dusted, with two brown vittae along dorsocentrals, viewed from behind blackish; postpronotal lobe, notopleuron and postalar callus as scutum. Ground-setulae short. Pleura brownish-grey dusted, with a shining patch anteriorly on katepisternum and medially on meron. Anepimeron and katepimeron bare. Notopleuron setulose. Prosternum bare. Acrostichals 0+1. Dorsocentrals 2+3 (rarely 4 postsutural pairs). Prealar long and strong. Katepisternal setae 1+1(3), if 3 posterior setae present then the two lower ones shorter and weaker. Scutellum shining black in posterior view, with small dusted spots on lateral margins and at tip.

Legs: Black. Fore tibia with 1–3 posteroventral setae on apical half. Fore tarsomeres 1–4 each without fine anteroventral and posteroventral hairs at tip, fore tarsomere 1 without posteroventrals at apex. Fore claws of all males blunt and much shorter than length of tarsomere 5, probably broken. Pulvilli as long as tarsomere 5. Mid femur straight, with a row of uniform anteroventral setae; with a row of posteroventrals which are very long on basal 2/3, longer than 2–2.5 times depth of femur; with 0 anterior and 2(3) posterodorsal to posterior preapical setae. Mid tibia with 2 anterodorsals on apical half, without anteroventrals, 3–4 posterodorsals, 3–4 posteroventrals. Hind femur with a row of anteroventrals, on posteroventral surface at most with a few weak setae at apical 1/4 and posteriorly at base. Hind tibia with rows of long anterodorsals and posterodorsals, with numerous setae on anterior surface, with 4–5 short anteroventrals and 3–4 short hair-like posteroventrals; with a small ventral apical prong and a short posteroventral apical seta. Hind tarsomere 1 with 1 short ventral seta at base.

Wing: Brown, almost black at base. Basicosta and tegula black. Costa with weak spinules, without costal spine. Cross-vein r-m below the point where subcosta enters costa. Cross-vein dm-cu upright, almost straight, forming a right-angle with vein M. Calypters and margins yellow. Knob of haltere black.

Abdomen: Conical; ground-colour black. Viewed from behind, tergites 3–5 deep brownish-grey dusted except for a large black trapeziform or rectangular spot on tergite 3 and a median vitta on tergites 4–5 that becomes narrower towards the tip of abdomen. Sometimes tergite 4 also with a trapeziform or rectangular black spot. Sternite 1 bare or with several setulae. Sternite 5 (Fig. 20D).

Terminalia: Figs 20 E–G.

FEMALE. Length of body, 5.1–6.2 mm. Length of wing, 4.1–4.7 mm.

Differs from the male as follows:

Head: Dichoptic. Frons at middle 0.38 of head-width at this point, and at this point each fronto-orbital plate 0.4 of frontal vitta. Frontal triangle visible from above, subshining, not reaching the crossed setae on frontal vitta. Ocellar setae strong. 3–4 pairs of strong inclinate frontal setae and several shorter weak interstitials; 3 pairs of orbital setae, the upper two pairs reclinate and exclinate, the lower pair proclinate and exclinate. Frontal vitta brown, with a pair of strong crossed setae.

Thorax: Scutum brownish dusted, without distinct brown vittae, light greenish tinged.

Legs: Fore tibia with 2–3 posteroventral setae on apical half. All claws and pulvilli much shorter. Mid femur with 1 prebasal and 5–6 apical anteroventrals; with or without 1 or 2 weak posteroventral setae; 0 anterior and 2 posterodorsal to posterior preapical setae. Mid tibia with 2–3 anterodorsals, 0–2 anteroventrals, 2–3 posteroventrals, 3–4 posterodorsals. Hind femur with a complete row of anteroventrals and with 1 or 2 fine hair-like posteroventrals on basal quarter. Hind tibia with 3–4 anterodorsals, 3–4 posterodorsals, 3 anteroventrals.

Wing: Yellowish tinged.

Abdomen: Shining black with brown dust.

Ovipositor: Figs 21C, D.

Remark. Adults of this species are found on flowering plants.

Distribution. Russia: Altai-Sayan region, Khakasiya. Mongolia.

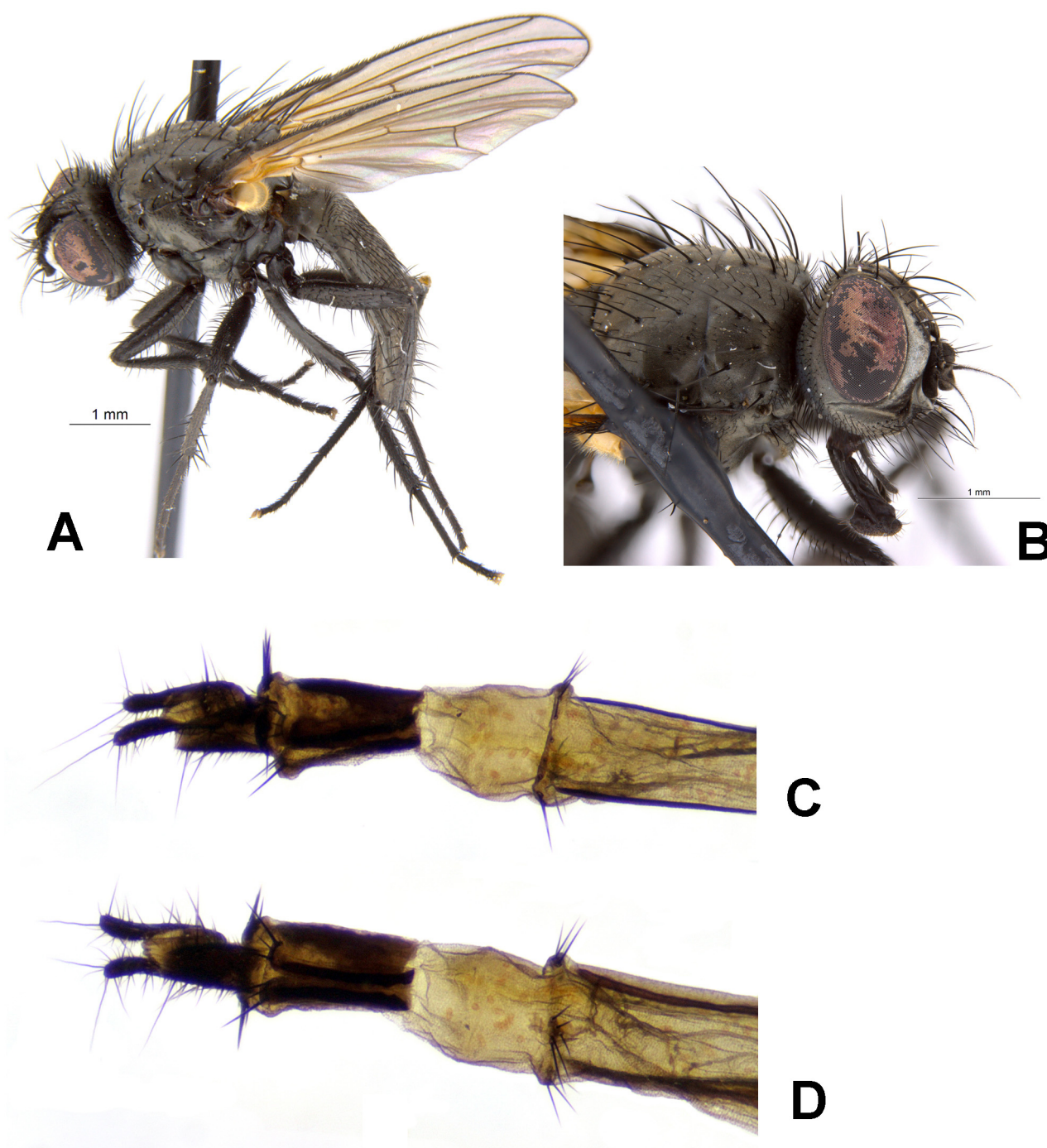


FIGURE 21. *Drymeia triseta*, female. **A.** Habitus, lateral view. **B.** Head, lateral view. **C, D.** Apical portion of ovipositor. **C.** Dorsal view. **D.** Ventral view.

***Drymeia vicana* (Harris, 1780)**

Musca vicana Harris, 1780: 152, plate 45 fig. 78.

Musca decolor Fallén, 1824: 68.

Trichopticoides decolor; Hennig, 1962a: 672.

Drymeia vicana; Pont, 1986: 73.

Drymeia vicana; Sorokina & Pont, 2010: 11.

Drymeia vicana; Sorokina, 2012b: 197.

Material examined. *Leningradskaya Oblast*: Vsevolozhskii raion, 1 male, Yukki village, 11.viii.1932; 1 male, Luga raion, Tolmachevo village, 18.viii.1936, A. Shtakelberg (ZIN). *Kabardino-Balkar Republic*: 1 female, Baksanskoe gorge, toe of Elbrus Mt., 2500–3000 m, 24.vii.1999, A. Barkalov. *Tyumenskaya Oblast*, *Yamalo-Nenets Autonomous Okrug*: 2 females, Labytnangi, around cattle, 28.vii.1981, G. Veselkin (ZMUM). *Chelyabinskaya Oblast*: 1 male, environs of Miass, 18.vi.1926 (ZMUM). *Kurganskaya Oblast*: Zverinogolovskii raion, 1 female, Iskra village, 54°24'N 64°33'E, 30.v.2001, V. Sorokina; Ketovskii raion, 1 female, 2 km SW Temlyakovo, 9,10.vi.2006, V. Sorokina. *Novosibirskaya Oblast*: Novosibirsk, 3 females, botanical garden, 9.vi.2007 (OUMNH), 15.vi.2008, 3.vi.2012, V. Sorokina; Cherepanovskii raion, 1 female, 2 km SE Lozhok station, valley of Shipunikha River, ~ 54°33'N 83°20'E, 21.viii.2005, V. Sorokina. *Altai Krai*: Ust'-kalmanskii raion, 1 female, 3 km SW Novokalmanka, ~ 51°55'N 83°19'E, 3.vi.2004, V. Sorokina. *Krasnoyarsky Krai*: 1 female, Turukhansk, 5.viii.1964; 1 female, Shushenskoe, 20.viii.1966; 3 females, Kureyka village, Enisey River, 66°28'N 87°09'E, 1.viii.1966; 1 female, Igarka village, Enisey River, 67°27'N 86°35'E, 26.vii.1966, V. Sychevskaya (ZIN). *Altai Republic*, *Ulaganskii raion*: 1 female, 3 km S Aktash, 1360 m, 50°28'N 88°67'E, 21.vi.2005, V. Sorokina; *Turochakskii raion*: 1 female, 14 km S of Iogach, 600 m, 51.7°N 87.3°E, 22.vi.2009, A. C. Pont (BMNH); 1 female, 8 km S Obogo village, Archa Mt., 23.vi.2004, V. Sorokina, 2 females, 5 km SW Kebezen' village, 21.06.2004, V. Sorokina; *Shebalinskii raion*: 2 females, Shebalino, valley of Sema River, 27–30.vii.2009, V. Sorokina; 1 female, valley of Peschanaya River, 840 m, 51.39°N 85.16°E, 26.vi.2009, V. Sorokina; 2 females, mouth of Sarlyk River, 1252 m, 51.12°N 85.60°E, 30.vi.2009, V. Sorokina; 1 female, 7 km N of Shebalino, 896 m, 51.30°N 85.66°E, 27.vi.2009, A. C. Pont (BMNH); 1 female, River Gorduba, 896 m, 51.28°N 85.65°E, 27.vi.2009, A. C. Pont (BMNH); 1 female, D'ektirek, River Gorduba, 957 m, 51.28°N 85.61°E, 27.vi.2009, A. C. Pont (BMNH); 2 females, environs of Il'inka village, Gladkikh Mt., 1308 m, 51°27'N 85°07'E, 19.vii.2011, V. Sorokina; 1 female, Cherga village, 470 m, 51°34'N 85°34' E, 20.vii.2011, V. Sorokina; 1 female, environs of Mukhorcherga village, 1548 m, 51°20'N 85°19'E, 22.vii.2011, V. Sorokina; *Kosh-Agachskii raion*, 2 females, north slope of Severo-Chuyskii range, valley of Akturu River, 2064 m, 50°06'N 87°48'E, 21.vii.2013, V. Sorokina; 1 female, 5 km SW Kuray, 2111 m, 50°18'N 87°51'E, near marmot burrow, 21.vii.2013, D. Taranenko; Ukok plateau: 1 male, environs of Muzdy-Bulak lake, 2400 m, 49.28°N 87.65°E, 27.28.vi.2005, V. Sorokina; 6 females, valley of Ak-Allacha River, 2160 m, 49°25'N 87°37'E, 12–14.vii.2006, V. Sorokina; 1 female, south slope of Yuzhno-Chuyskii range, valley of Tara River, 2200 m, 49°39'N 88°13'E, 2–4.vii.2006, V. Sorokina; 2 females, 17 km SE Dzhazator, 1790 m, 49°39'N 87°39'E, 5.vii.2006, V. Sorokina. *Khakasiya*: 1 female, Shira raion, environs Shira salt lake, 350–355 m, 54.48°N 90.17°E, 21–24.vi.2011, K. Tomkovich (ZMUM). *Tyva Republic*: 1 male, 5 km E Khol'-Oozhu, ~ 50°44'N 94°25'E, valley of Aryksanny-Khem River, 15–17.vii.1993, A. Barkalov (OUMNH); *Tes-Khemskii kozhuun*, 1 female, 1.5 km W Samagaltay, ~50°36'N 95°00'E, 13–14.vii.1993, A. Barkalov. *Irkutskaya Oblast*: 1 female, environs of Ust-Kut, ~66.8°N 105.8°E, 25.vii.1979, G. Veselkin (ZMUM). *Republic of Buryatia*, *Selenginskii raion*: 1 female, Tazhny village, Temnik River, 51°12'N 103°43'E, 4.vii.1984, B. Zakharov. *Zabaykalsky Krai*: Nature Reserve "Sokhondinskii", 1 female, Verkhonii Bukukun cordon, valley of Bukukun River, ~ 49°36'N 111°06'E, 1540 m, 7.viii.1991, V. Pekin, 1 female, 16 km NW Bukukun village, confluence of the Ernisty [=Ernichnyi] Klyuch stream and Bukukun River, 1200–1300 m, ~ 49°34'N 111°00'E, 22.06.1991, B. Zakharov. *Magadanskaya Oblast*: 1 female, upper part of Kolyma River, 11.viii.1986, V. Dubatolov.

Remarks. A full description of both sexes is given by Hennig (1962a: 667–669). Females are abundant and persistent sweat flies.

Distribution. Widespread throughout the Palaearctic region.

Acknowledgements

We thank an anonymous referee for a number of positive suggestions for the improvement of this paper. We would also like to thank Nikita E. Vihkrev (Moscow, Russia) for valuable comments on our manuscript. The research presented in this paper was partially supported by the Russian Foundation of Basic Research (No 13-04-00202a) and the Federal Fundamental Scientific Research Programme for 2013-2020 under Grant № VI.51.1.7.

References

- Becker, T., Dziedzicki, H., Schnabl, J. & Villeneuve, J. (1915) Résultats scientifiques de l'Expédition des frères Kuznecov (Kouznetsov) à l'Oural Arctique en 1909, sous la direction de H. Backlund. *Diptera. Zapiski imperatorskoi Akademii Nauk (VIII), cl. phys-math.*, 28 (7), 1–67. [+ 4]
- Danks, H.V. (1981) Arctic arthropods. A review of systematics and ecology with particular reference to the North American fauna. Ottawa: Entomological Society of Canada, 605 pp.
- Fallén, C.F. (1823) *Monographia Muscidum Sveciae*. Part.VI. Berlingianis, Lundae [= Lund], pp. 57–64.
- Fallén, C.F. (1824) *Monographia Muscidum Sveciae*. Part.VII. Berlingianis, Lundae [= Lund], pp. 65–72.
- Fan, Zide (Ed.), (2008) *Fauna Sinica. Insecta Vol. 49. Diptera Muscidae (1)*. Science Press, Beijing, xvi + 1186 pp.
- Harris, M. (1780) *An Exposition of English Insects, with curious observations and remarks, wherein each insect is particularly described; its parts and properties considered; the different sexes distinguished, and the natural history faithfully related. The whole illustrated with copper plates, drawn, engraved, and coloured, by the author*. Decad 5, "Printed for the author", London, pp. 139–166.
- Hennig, W. (1962a) Muscidae. [Part, Lieferung 225.] In: Lindner, E. (Ed.), *Die Fliegen der palaearktischen Region*, Schweizerbart, Stuttgart, 63 (b), 625–672.
- Hennig, W. (1962b) Muscidae. [Part, Lieferung 227.] In: Lindner, E. (Ed.), *Die Fliegen der palaearktischen Region*, Schweizerbart, Stuttgart, 63 (b), 673–720.
- Hennig, W. (1963) Zwei neue paläarktische Arten aus der Familie Muscidae (Dipt.). *Stuttgarter Beiträge zur Naturkunde*, 101, 1–3.
- Holmgren, A.E. (1883) Insecta a viris doctissimis Nordenskiöld illum ducem sequentibus in Insulis Waigatsch et Novaja Semlia anno 1875 collecta. *Diptera. Entomologisk Tidskrift*, 4, 162–190.
- Huckett, H.C. (1965a) The Muscidae of Northern Canada, Alaska and Greenland (Diptera). *Memoirs of the Entomological Society of Canada*, 42, 1–370.
<http://dx.doi.org/10.4039/entm9742fv>
- Huckett, H.C. (1965b) Family Muscidae. In: Stone, A., Sabrosky, C.W., Wirth, W.W., Foote, R.H. & Coulson, J.R. (Eds), *A Catalog of the Diptera of America North of Mexico. Agricultural Handbook of the United States Department of Agriculture*, 276, 869–915. [Washington, D.C.]
- Huckett, H.C. (1966) New species of Anthomyiidae and Muscidae from California (Diptera). *Proceedings of the California Academy of Sciences*, 34, 235–305.
- Huckett, H.C. & Vockeroth, J.R. (1987) 105. Muscidae. In: McAlpine, J.F. (co-ordinator), *Manual of Nearctic Diptera. Volume 2. Research Branch, Agriculture Canada, Monograph*, 28, pp. 1115–1131.
- Kutty, S.N., Pont, A.C., Meier, R. & Pape, T. (2014) Complete tribal sampling reveals basal split in Muscidae (Diptera), confirms saprophagy as ancestral feeding mode, and reveals an evolutionary correlation between instar numbers and carnivory. *Molecular Phylogenetics and Evolution*, 78, 349–364.
<http://dx.doi.org/10.1016/j.ympev.2014.05.027>
- Lavčev, V. (1971) Faunistische und taxonomische Bemerkungen über einige Musciden (Diptera, Muscidae) aus UdSSR nebst Beschreibungen der neuen Arten. [Russian, with German summary.] *Entomologicheskoe Obozrenie*, 50, 215–226. [English translation in *Entomological Review Washington*, 50 (1), 125–131.]
- Lundbeck, W. (1901) *Diptera groenlandica. Videnskabelige Meddelelser fra Dansk naturhistorisk Forening* (6), 2 (1900), 281–316.
- Malloch, J.R. (1918) Diptera from the Southwestern United States. Paper IV. Anthomyiidae. *Transactions of the American entomological Society*, 44, 263–319.
- Malloch, J.R. (1919) The Diptera collected by the Canadian Expedition, 1913–1918. (Excluding the Tipulidae and Culicidae.) In: Anderson, R.M. (Ed.), *Report of the Canadian Arctic Expedition 1913–18. III: Insects. Part C: Diptera*. pp. 34–90. [90 pp.]
- Malloch, J.R. (1921) Insects of the Pribilof Islands, Alaska. Dipterous insects of the family Anthomyiidae from the Pribilof Islands, Alaska. *Proceedings of the California Academy of Sciences*, 11 (4), 178–182.
- Malloch, J.R. (1922) A new European anthomyiid (Diptera). *Notulae entomologicae*, 2, 81–82.
- Meigen, J.W. (1826) *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*. Fünfter Theil. Schultz, Hamm, xii + 412 pp.
- Michelsen, V. (2011) A new European species of *Drymeia* Meigen (Diptera: Muscidae) near *D. brumalis* (Rondani), with observations of a unique prestomal teeth structure. *Zootaxa*, 3023, 51–60.
- Pont, A.C. (1981) Himalayan Muscidae. III. The genus *Pogonomyia* Rondani (Diptera). *Spixiana*, 4, 121–142.
- Pont, A.C. (1986) Family Muscidae. In: Soós, Á & L. Papp. (Eds.), *Catalogue of Palaearctic Diptera. Volume 11. Scathophagidae – Hypodermatidae*. Akadémiai Kiadó, Budapest, pp. 57–215.
- Pont, A.C. (2004) Notes on types of Fanniidae and Muscidae (Diptera) in the Zoological Institute of the Russian Academy of Sciences, St Petersburg. *International Journal of Dipterological Research*, 15, 73–98.
- Rondani, C. (1866) Anthomyiinae Italicae collectae distinctae et in ordinem dispositae [a prof. Camillo Rondani]. *Atti della Società italiana di Scienze naturali*, 9, 68–217.
- Rondani, C. (1877) *Dipterologiae Italicae Prodromus. 6. Species italicae ordinis Dipteriorum ordinatim dispositae, methodo analitica distinctae, et novis vel minus cognitis descriptis. Pars Quinta. Stirps XVII – Anthomyiinae*. Soc. Typograph.,

Parmae [= Parma], 304 pp.

- Savage, J. & Wheeler, T.A. (2004) Phylogeny of the Azeliini (Diptera: Muscidae). *Studia dipterologica*, 11, 259–299.
- Shinonaga, S. (2007) Muscidae from Pakistan (Diptera). *Japanese Journal of Systematic Entomology*, 13, 267–311.
- Shinonaga, S. & Singh, M.M. (1994) Muscidae of Nepal (Diptera). I. Muscinae, Stomoxyinae and Phanoniinae. *Japanese Journal of Sanitary Zoology*, 45 (Suppl.), 99–177.
- Snyder, F.M. (1949) Nearctic *Helina* Robineau-Desvoidy (Diptera: Muscidae). *Bulletin of the American Museum of natural History*, 94, 107–160.
- Sorokina, V.S. (2012a) The Muscidae (Diptera) of the Russian tundra zones. Report 1. *Caucasian Entomological Bulletin*, 8 (2), 328–332. [In Russian, with English summary.]
- Sorokina, V.S. (2012b) Fauna of Muscidae (Diptera) of the Altai Mountains. *Proceedings of the Russian Entomological Society*, 83, 193–222. [In Russian, with English summary.]
- Sorokina, V.S. & Khruleva, O.A. (2012) Details of species composition and distribution of house-flies (Diptera, Muscidae) of the Wrangel Island, Russia. *Euroasian Entomological Journal*, 11, 553–564. [In Russian, with English summary and species list.]
- Sorokina, V.S. & Pont, A.C. (2010) An annotated catalogue of the Muscidae (Diptera) of Siberia. *Zootaxa*, 2597, 1–87.
- Sorokina, V.S. & Pont, A.C. (2011) Fanniidae and Muscidae (Insecta, Diptera) associated with burrows of the Altai Mountains Marmot (*Marmota baibacina baibacina* Kastschenko, 1899) in Siberia, with the description of new species. *Zootaxa*, 3118, 31–44.
- Stein, P. (1916) Die Anthomyiden Europas. Tabellen zur Bestimmung der Gattungen und aller mir bekannten Arten, nebst mehr oder weniger ausführlichen Beschreibungen. *Archiv für Naturgeschichte*, 81 A, 10 (1915), 1–224.
- Stuckenberg, B.R. (1999) Antennal evolution in the Brachycera (Diptera), with a reassessment of terminology relating to the flagellum. *Studia dipterologica*, 6, 33–48.
- Xue, W.Q., Pont, A.C. & Wang, M.F. (2008) A study of the genus *Drymeia* Meigen (Diptera: Muscidae) from the Tibetan Plateau and surrounding regions of P.R. China, with descriptions of three new species. *Proceedings of the Entomological Society of Washington*, 110, 493–503.
<http://dx.doi.org/10.4289/07-040.1>
- Xue, W.Q., Wang, D.D. & Wang, M.F. (2009) Three new species of the genus *Drymeia* Meigen (Diptera: Muscidae) from the Qinghai-Xizang (Tibet) Plateau, China. *Entomologica fennica*, 20, 84–93.
- Xue, W.Q., Wang, D.D., Zhang, X.Z. & Xiang, C.Q. (2007) Five new species of *Drymeia* Meigen from the Tibet Plateau, China (Diptera: Muscidae). *Zootaxa*, 1444, 35–51.