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GENERA OF PALAEARCTIC PYRGOTIDAE (DIPTERA, ACALYPTRATA), WITH NOMENCLATURAL NOTES AND A KEY

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Genera of Palaearctic Pyrgotidae (Diptera, Acalyptrata), with Nomenclatural Notes and a Key. Korneyev V. A. — Based upon the study of the type specimens described by J. A. Portschinsky, F. Hendel, G. Enderlein and E. Hering, the following synonymy is established. *Adapsilia* Waga, 1842 = *Teliophleps* Hering, 1940, syn. n. *Adapsilia coarctata* Waga, 1842 = *Adapsilia alini* Hering, 1940, syn. n. *Adapsilia mandschurica* (Hering, 1940), comb. n. (= *Teliophleps mandschurica* Hering) = *Adapsilia breviantenna* Kim et Han, 2001, syn. n. *Adapsilia microcera* (Portschinsky, 1892) (= *Pyrgota microcera* Portschinsky, *Epicerella microcera*: Hendel, 1933, Soós, 1984) = *Adapsilia tenebrosa* Kim et Han, 2001, syn. n. *Adapsilia verrucifer* Hendel, 1933 = *Adapsilia cornugaster* Kim et Han, 2001, syn. n. *Campylocera* Macquart, 1843 = *Teliophleps* Enderlein, 1942, syn. n. (non *Teliophleps* Hering) = *Dicrostira* Enderlein, 1942, syn. n. *Campylocera apicalis* (Enderlein, 1842), comb. n. (= *Teliophleps apicalis* Enderlein). *Campylocera partitigena* (Enderlein, 1942), comb. n. (= *Dicrostira partitigena* Enderlein). *Eupyrgota facialis* (Hendel, 1934), comb. n. (= *Adapsilia facialis* Hendel; ? = *E. tigrina* Kim et Han, 2000). *Eupyrgota griseipennis* (Hendel, 1933), comb. n. (= *Adapsilia griseipennis* Hendel). *Eupyrgota wagae* (Bigot, 1880), comb. n. (= *Adapsilia wagae* Bigot). *Parageloemyia* Hendel, 1934 = *Dicranostira* Enderlein, 1942, syn. n. *Parageloemyia nigrofasciata* (Hendel, 1933), comb. n. (= *Geloemyia nigrofasciata* Hendel) = *Parageloemyia ornata* Hering, 1940, syn. n. *Porpomastix* Enderlein, 1942 = *Paradapsilia* Chen, 1947, syn. n. *Porpomastix fasciolata* Enderlein, 1942 = *Paradapsilia trinotata* Chen, 1947, syn. n. *Adapsilia hirtoscutellaris* Hendel is an unavailable name (incorrect original spelling). The genus *Cardiacera* Macquart (= *Epicerella* Macquart) is excluded from the list of genera occurring in Palaearctic Region. An improved key to and a review of genera of the Pyrgotidae known to occur in Palaearctic Region are provided.

Key words: Diptera, Cyclorrhapha, Acalyptrata, Tephritoidea, Pyrgotidae, Palaearctic Region, fauna, taxonomy, new taxa, synonymy.

Роды палеарктических Pyrgotidae (Diptera, Acalyptrata), с заметками о номенклатуре и таблицей для определения. Корнеев В. А. — На основании изучения типовых материалов, описанных И. А. Порчинским, Ф. Генделем, Г. Эндерляйном и Э. Герингом, установлена следующая синонимия: *Adapsilia* Waga, 1842 = *Teliophleps* Hering, 1940, syn. n. *Adapsilia coarctata* Waga, 1842 = *Adapsilia alini* Hering, 1940, syn. n. *Adapsilia mandschurica* (Hering, 1940), comb. n. (= *Teliophleps mandschurica* Hering) = *Adapsilia breviantenna* Kim et Han, 2001, syn. n. *Adapsilia microcera* (Portschinsky, 1892) (= *Pyrgota microcera* Portschinsky, *Epicerella microcera*: Hendel, 1933, Soós, 1984) = *Adapsilia tenebrosa* Kim et Han, 2001, syn. n. *Adapsilia verrucifer* Hendel, 1933 = *Adapsilia cornugaster* Kim et Han, 2001, syn. n. *Campylocera* Macquart, 1843 = *Teliophleps* Enderlein, 1942, syn. n. (non *Teliophleps* Hering) = *Dicrostira* Enderlein, 1942, syn. n. *Campylocera apicalis* (Enderlein, 1842), comb. n. (= *Teliophleps apicalis* Enderlein). *Campylocera partitigena* (Enderlein, 1942), comb. n. (= *Dicrostira partitigena* Enderlein). *Eupyrgota facialis* (Hendel, 1934), comb. n. (= *Adapsilia facialis* Hendel; ?= *E. tigrina* Kim et Han, 2000). *Eupyrgota griseipennis* (Hendel, 1933), comb. n. (= *Adapsilia griseipennis* Hendel). *Eupyrgota wagae* (Bigot, 1880), comb. n. (= *Adapsilia wagae* Bigot). *Parageloemyia* Hendel, 1934 = *Dicranostira* Enderlein, 1942, syn. n. *Parageloemyia nigrofasciata* (Hendel, 1933), comb. n. (= *Geloemyia nigrofasciata* Hendel) = *Parageloemyia ornata* Hering, 1940, syn. n. *Porpomastix* Enderlein, 1942 = *Paradapsilia* Chen, 1947, syn. n. *Porpomastix fasciolata* Enderlein, 1942 = *Paradapsilia trinotata* Chen, 1947, syn. n. *Adapsilia hirtoscutellaris* Hendel — непригодное название (неправильное первоначальное написание). Род *Cardiacera* Macquart (= *Epicerella* Macquart) исключен из числа встречающихся в Палеарктике родов. Представлены переработанная таблица для определения и обзор родов Pyrgotidae Палеарктической области.

Ключевые слова: Diptera, Cyclorrhapha, Acalyptrata, Tephritoidea, Pyrgotidae, Палеарктика, фауна, таксономия, новые таксоны, синонимия.

Introduction

Pyrgotidae are medium to large-sized (4–18 mm) acalyptrate flies usually with pictured wings, rather slender body, oblique face, short lobate cell bcu and stiletto-like aculeus that is much shorter than the oviscape. The list of the World fauna includes about 365 valid species names in ca. 55 genera, with the greatest number of species in tropics (Korneyev, unpublished data). Up to now, 29 nominal species of 8 genera were recorded from the Palaearctic Region (Hendel, 1933, 1934; Malloch, 1934; Hering, 1940; Enderlein, 1942; Chen, 1947; Kim, Han, 2000, 2001), but synonymy of some names is highly probable. Two papers (Malloch, 1934; Chen, 1947) had remained out of the scope of the most recent catalogue of Palaearctic Pyrgotidae (Soós, 1984).

The papers by H.-Y. Kim and S.-K. Han (2000, 2001) are the most comprehensive reviews of Eastern Palaearctic Pyrgotidae, insomuch they were based upon the most extensive material, and took into consideration numerous additional morphological (including genitalic) characters. In these papers, which aimed to consider only the local fauna, none of the species described by Hering and Enderlein from China and Japan and apparently occurring in Korea, were mentioned. In Enderlein's and Hering's descriptions, some important characters are lacking, and the concepts of described taxa could hardly be interpreted without study of the type specimens.

While preparing the Pyrgotidae chapter for the Keys to Insects of Far East Russia and a catalogue of Pyrgotidae of the World, the material originated from Palaearctic Asia and other regions, now deposited in several European and American collections, was examined. This study has shown that some genus and species names are actually synonyms. Other species were found to need correct generic placement. As the result, 5 genera with 22 species are shown to occur in Palaearctic Region.

Material

The specimens examined in this study, are deposited in the following collections:

CVK — V. Korneyev collection, Kyiv; DEI — Deutsche Entomologisches Institut, Eberswalde; HMNH – Hungarian Museum of Natural History (Természettudományi Muzeum), Budapest; MHNG — Muséum d'histoire naturelle, Genève; NHMW — Naturhistorisches Museum Wien, SIZK — Schmalhausen Institute of Zoology, Kyiv; SMNK — Staatliches Museum für Naturkunde Karlsruhe; SMNS — Staatliches Museum für Naturkunde Stuttgart; USNM — U. S. National Museum of Natural History, Washington; ZMHB — Museum für Naturkunde der Humboldt- Universität zu Berlin; ZMUM — Zoological Museum of Moscow University.

Classification of Pyrgotidae

M. Aczél (1956) proposed the most detailed classification of the family. He subdivided it into three subfamilies, Pyrgotinae, with 2 tribes, Teretrurini (with 2 South American genera) and Pyrgotini (with vast majority of genera of the family), Toxurinae (with 9–10 Australasian genera) and Lochmostyliinae with 6 genera (in Neotropical, Oriental and Afrotropical Regions). Later, D. K. McAlpine (1990) modified it by rising the rank of Lochmostyliinae to family (as Ctenostylidae), and Teretrurini to subfamily (as Teretrurinae). Toxurinae was shown to have fused abdominal sternites 1 and 2, the synapomorphy with Pyrgotini, and transferred in the subfamily Pyrgotinae as the tribe Toxurini. G. C. Steyskal (1972) suggested that details of the structure of the postabdomen (especially in the female) could be expected to show the way to a firm classification of the family. These morphological details remained almost wholly lacking until H.-Y. Kim and S.-K. Han (2000, 2001) figured and described terminalia of Korean pyrgotids. The further study of terminalia of Pyrgotidae (Korneyev, unpublished data) has the following taxonomic and phylogenetic implications.

All Pyrgotidae examined, except *Descoleia* Aczél and *Toxopyrgota* Hendel, have no prensisetae on medial surstylus. This character appears to be a synapomorphy of the subfamilies Teretrurinae and Pyrgotinae, the lineage that includes the vast majority of genera of the family. In *Descoleia* the structure of male postabdomen is similar to that in Tephritidae Tachiniscinae, which is the sister group to the other Tephritidae. Such a structure of terminalia may be considered a primitive state for both Tephritidae and Pyrgotidae, which have been shown to be sister groups (Korneyev, 1999). The absence of prensisetae opposes the rest of Pyrgotidae to *Descoleia*. The taxonomic position of the latter genus needs further consideration.

In the case of *Toxopyrgota*, a single tooth-like structure on the apex of each medial surstylus must be treated with caution as homologous to that in *Descoleia* and Tephritidae. I leave the position of this afrotropical genus pending until a wider revision of the family is done.

In all examined Pyrgotini, the epandrium and lateral surstylus are completely devoid of setulae (at most, structures reminiscent of trichoid sensilla are developed). *Toxopyrgota*, a few Australian genera of Toxurini that were studied (*Cardiacera* Macquart and *Neotoxura* Hendel), and Teretrurinae have setulose epandrium, as in other Tephritoidea. The absence of epandrial setulae is evidently universal for the palaearctic, oriental, afrotropical and New World Pyrgotini, but remains unstudied in australasian species assigned to this tribe.

Oriental and eastern palaearctic pyrgotids show high diversity of chaetotaxy, wing pattern and venation, and structure of terminalia, whereas both the faunas of the Afrotropical Region and New World are apparently formed by descendants of a few lineages. Even a preliminary phylogenetic analysis (Kim, Han, 2001) has shown that some large genera like *Adapsilia* Waga, recognized mostly from the absence of advanced states of external characters, may actually be non-monophyletic. Further phylogenetic analysis involving characters of terminalia is needed to arrange Pyrgotini into more reliable generic classification. This task needs more paleotropical material to be involved, which is out of scope of the present paper.

In this paper, I generally follow Kim and Han (2001) concepts of palaearctic genera, with a few exceptions discussed below. Morphological terminology for the parts of female terminalia is accepted from White et al. (1999), rather than Steyskal (1972). The tergosternite 7 forms a large oviscape, which is flat in Teretrurinae and most Higher Tephritoidea; its antero-ventral apodeme often is an unusually large flap reaching the dorsal side and able to close up the whole anterior opening of the oviscape. In the distal, or posterior margin of the oviscape bordering the eversible membrane, some sclerotized lobes can be recognized (fig. 10, *4*). Two medio-apical lobes, the ventral (ventro-medial lobe) and often the dorsal (dorso-medial lobe) are extended onto the eversible membrane medially on each ventral and dorsal side; in rest, they are inverted inside the oviscape; in *Campylocera* Macquart they are rigid and long, and easily visible on the membrane, which is usually semi-everted in dry specimens of that genus (fig. 13, *4*). In *Tephritopyrgota* Hendel, the ventro-medial lobe forms an unpaired hook- or nail-like sclerotized projection (fig. 14, *4*). Two lateral lobes, symmetrical and usually displaced to the ventral side (fig. 5, *1*) , as a rule consist of a darker and softer field of mechanoreceptive sensilla, visible even when the membrane is completely inverted and an elongate, taenia-like stripe, which extends on the membrane latero-ventrally and bears no sensilla. The eversible membrane in some cases has paired fields of short acanthi forming a rasper-like structure posterior and between the ventro-medial and lateral lobes (fig. 5, *1, 3*); from their topology, these structures may be homologous to taeniae of other Tephritoidea. In *Eupyrgota* Coquillett they are modified into paired hook-like structures (ovipositungui sensu Steyskal, 1972), superficially similar to the unpaired hook-like structure of *Tephritopyrgota*, but obviously unhomologous to it. The aculeus is unusually short compared with the oviscape, and very acute, with the cercal unit completely integrated into its apex without a trace of fusion, and the 8th sternite (or the ventral lobes) indistinguishable even on SEM pictures.

Subfamily Pyrgotinae

Diagnosis. Medium to large-sized (5.5–18.0 mm) flies with hyaline or greyish wings and yellow to brown spots at wing apex, on pterostigma and crossveins. Head variously shaped, with or, usually without ocelli; pedicel of antenna with or, usually,

without dorso-apical notch. Costal vein with 2 constrictions (distally of humeral vein and at apex of subcostal vein); R_{4+5} setulose or, usually, bare; cell bcu with short but distinctive postero-apical lobe (except in afrotropical genus *Toxopyrota* Hendel). Sternites 1 and 2 fused. Epandrium elliptic, without prensisetae or (in *Toxopyrota*) with one prensiseta.

Remarks. The subfamily includes almost all the genera of the family, except three South American genera: *Teretrura* Bigot and *Pyrgotosoma* Malloch, which represent a separate subfamily Teretrurinae, and *Descoleia* Aczél, which differs from all the Pyrgotidae in the presence of two well-developed prensisetae (Norrbom, unpublished data) and either belongs to a separate subfamily or to Tephritidae.

Adapsilia Waga, 1842

Type species: *Adapsilia coarctata* Waga, 1842: 280 (by monotypy).
Teliophleps Hering, 1940: 288, syn. n. (non *Teliophleps* Enderlein, 1942).
Type species: *Teliophleps mandschurica* Hering, 1940: 288 (by monotypy).
Adapsilea: Enderlein, 1942: 106, error or emendation.
Adapsila: Soós, 1984: 36–37, unjustified emendation.

Remarks. The genus includes about 36 species, Old World in distribution. Fourteen of them occur in the Palaearctic Region, but only 4 were catalogued by Soós (1984). Sixteen species were listed in the Catalogue of Oriental Region (Steyskal, 1977); many of them are believed to belong in *Eupyrgota* Coquillett, which was considered a subgenus of *Adapsilia* for a long time. Three species are listed in each Afrotropical and Australasian Catalogues (Steyskal, 1980; Pitkin, 1989), but their taxonomic position is not clear. Chen (1947) keyed Chinese species and has separated *Adapsilia* from *Eupyrgota* Coquillett. The concept of the genus was recently reconsidered by Kim and Han (2001), who also provided detailed descriptions and a key to Korean species. Some of species described by Portschinsky (1892), Malloch (1934), Hering (1940) and Enderlein (1942) from Far East Russia and China were, however, not considered.

The preliminary phylogenetic analysis provided by Kim and Han (2001) shows that *Adapsilia* is not a monophyletic genus, defined by plesiomorphic characters.

Comprehensive keys to Palaearctic species will be provided in our forthcoming papers (Korneyev, in press; Korneyev, Nartshuk, in press).

Adapsilia biseta Shi, 1996

Shi, 1996: 587. — ? *Adapsilia hispida* Kim & Han, 2001: 271 (possible synonym).

Diagnosis (after Shi). Eye large, gena without subocular spot. Antenna as long as face, flagellomere 1 elongate oval, as long as pedicel. Face yellow without brown spots. Proboscis large, palpus longer than flagellomere 1. All head setae, including oc, poc and vte long and well-developed. Thorax with brownish-black pattern on mesonotum, with 1 prst sa, 2 dc, 1 ac and 3 pairs of sctl, whereas prsc ac were not clearly shown on the figure (it may be a notopleural seta also) and kepst not mentioned. Scutellum with erect setulae on sides and apex. Wing without spur vein. Abdomen yellow, stained with brown or black. Oviscape as long as preabdomen, with hump on middle of ventral side.

Remarks. Known from the holotype female (type locality: Beijing, China) described in Chinese with a brief diagnosis and rather schematic figures.

This species concurs with *A. hispida* Kim et Han in the head, antenna and palpus shape, coloration and chaetotaxy of mesonotum, wing without a spur vein, and oviscape with a hump on its ventral side; it differs in having the wing with brown pattern. The absence of katepisternal seta, bare area on mid femur and other characters of

A. hispida not mentioned in English diagnosis. It is possible that *A. hispida* is a junior synonym of *A. biseta*, based on a specimen with poorly developed wing pattern.

Adapsilia brevispina Malloch, 1934 (fig. 1)

Malloch, 1934: 263; Chen, 1947: 68.

Material. Type. Holotype ♀ "Shin KaiSi / Mt. Omei / Szechuen China / 4400 ft", "DCGraham / Collector", July 1–30 –1929", "Type No / 50606 / USNM", "Adapsilia / breviseta [sic!] / Type / det. JRMalloch" (USNM).

Diagnosis. Female. Eyes high, gena low, 0.16 times as high as eye, with brown subocular spot and 0.4 times as low as flagellomere 1 long. Antenna longer than half face height, flagellomere 1 rounded and slightly narrowed apically, twice as long as pedicel. Palpus approximately as long as flagellomere 1; not very broad, labellum large. All head setae moderately long and well-developed, including oc, poc, vti, and g; vte short. Thorax yellow with brown vittae on mesonotum and anepisternum, 1 ppn, 2 dc, 2 pairs of sctl, 1 anepst and 1 kepst, but prst sa and ac absent. Scutellum with a few setulae on sides. Wing as in fig. 1, *1*, R_{2+3} with spur vein, R_{4+5} bare. Mid and hind coxae and apicoventral portions of femora with short, sparse but thickened setulae; femora brown, without long setae (proximal ventral setae 0.3 times as long as femur wide); mid femur without bare area. Abdomen blackish-brown. Oviscape approximately as long as preabdomen and mesonotum, narrowly conical, with apex curved ventrally.

Remarks. This species shares affinities with *Adapsilia coarctata* Waga in head and body shape and chaetotaxy, R_{2+3} with spur vein and mid femur without the bare area; differing by the flagellomere 1 twice as long as pedicel, anepisternum with black spot and coxae and femora with short thickened setae. *A. verrucifer* Hendel, which has similar shape and coloration of antenna, head and thorax, as well as wing with and simi-

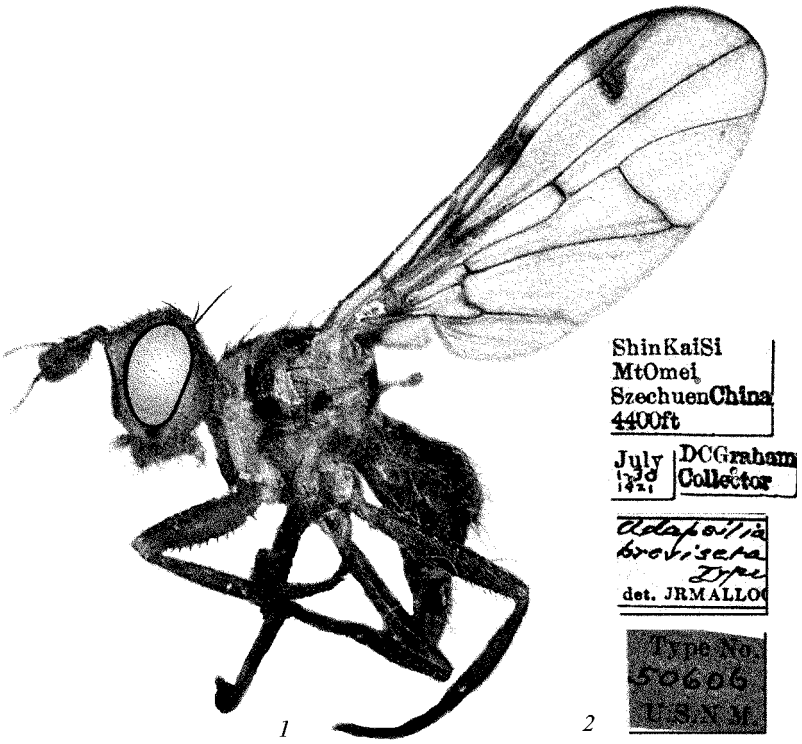

Fig. 1. *Adapsilia brevispina*, holotype ♀: *1* — total view; lateral; *2* — labels.

Рис. 1. *Adapsilia brevispina*, голотип ♀: *1* — общий вид; сбоку; *2* — этикетки.

lar venation and pattern, may be differentiated by the mid femur with a large bare area, moderately long setulose mid and hind coxae and the oviscape often with a dorsocaudal projection.

A. brevispina was omitted in both Oriental and Palaearctic Diptera Catalogues (Steyskal, 1977; Soós, 1984).

Adapsilia coarctata Waga, 1842 (fig. 2–3)

Waga, 1842: 261; Becker, 1905: 92; Hendel, 1908: 14; 1933: 8; Stackelberg, 1970: 20; Zimina, 1985: 150 (*Adapsilia*). — Soós, 1984: 36 (*Adapsila*). — *Adapsilia alini* Hering, 1940: 289, syn. n.; Soós, 1984: 36 (*Adapsila*).

Material. Type. Holotype ♀ Adapsilia alini: [China:] "Charbin, Manchukuo / leg. W. Alin 18.9.1940", "Adapsilia alini m. ♀ Type / det Hering 1940", "Holotypus" [red paper label] (DEI). Non-type. Italy: "Bozen" [Bolzano], ♀ (Gries) (SMNS); Switzerland: Tessin, Maggia, 17.09.1964, ♂, 3 ♀ (SMNS); Far East Russia: Amur Oblast'? / Khabarovskiy Kray: "Amur", ♀ (MTD); Primorskiy Kray, Gorno-Tayozhnoe SE of Ussuriysk, light trap, 3 ♂ (K. Zinovyeva) (ZMUM), "Tshengauz", ♂ (SMNS); China: Heilongjiang, "Sjaolin, Manchukuo", 22.08.1948, ♀ (Alin) ("*Adapsilia alini* Hering") (SMNS).

Diagnosis. Head (fig. 2, *1*) with moderately large eye, gena 0.6–0.75 times as high as eye, with or without brown subocular spot and 1–3 times as high as flagellomere 1 long. Pedicel 2–2.5 times as long as flagellomere 1. Head setae moderately long and well-developed, including 1 or, vti, and g; vte very short or lacking, oc present, but often reduced or lacking in male, poc absent in both sexes. Thoracic setae well-developed, except prst sa, prsc ac and, in some males, ppn absent. Scutellum with 2 pairs of sctl and sparse, short setulae. Wing (fig. 2, *2*): R_{2+3} usually with spur vein; R_{4+5} bare. Coxae unmodified in both sexes. Fore femur with ventral row of setae, mid femur without bare area. Male tergites 2 and 3 laterally with long thickened setae. Epandrium (fig. 3, *1–2*) short, with very short, truncate surstyli; proctiger dorso-ventrally flattened, but not bilobate; hypandrium as in fig. 3, *3–4*, with well-developed phallic guide (fig. 3, *4*) and small, button-like parameres (fig. 3, *5*). Phallus glans as in fig. 2, *6*. Oviscape as long as mesonotum and longer than preabdomen, without apico-ventral hooks; aculeus moderately long, stiletto-like (fig. 3, *7*).

Remarks. The holotype *A. alini* completely fits the diagnosis of the species based on both European and Asian specimens, which show no differences exceeding certain variability of gena height and coloration, presence or absence of certain setae (oc, vte, ppn) and spur vein on R_{2+3}. The shape of aculeus (fig. 3, *7*) and the ratio of pedicel and flagellomere 1 lengths are the most consistent characters of this species.

A. coarctata fits very close *A. verrucifer* Hendel, *A. longifacies* Kim et Han and *A. ochrosoma* Kim et Han in having pedicel and palpus long, antennal grooves almost reaching ventral margin of face and separate by carina ventrally bifurcated, mid femur without long ventral setae (except the long proximal ventral seta) and sternites 2–3 of male with long erected lateral setae. *A. brevispina* Malloch and *A. scutellaris* Chen may also belong in this group, but males are unknown.

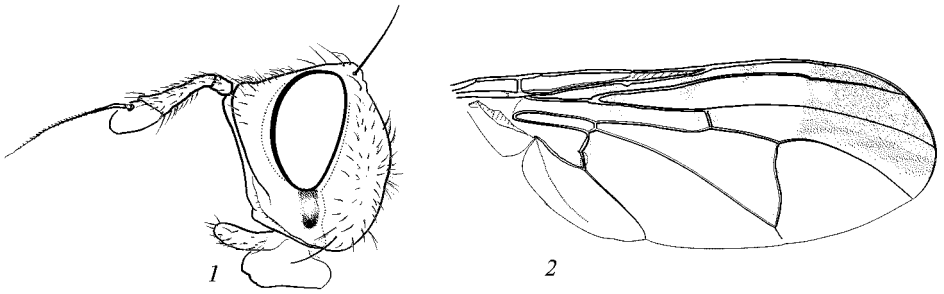

Fig. 2. *Adapsilia coarctata*, holotype ♀ of *Adapsilia alini* Hering: *1* — head, lateral; *2* — wing.

Рис. 2. *Adapsilia coarctata*, голотип ♀ *Adapsilia alini* Hering: *1* — голова, сбоку; *2* — крыло.

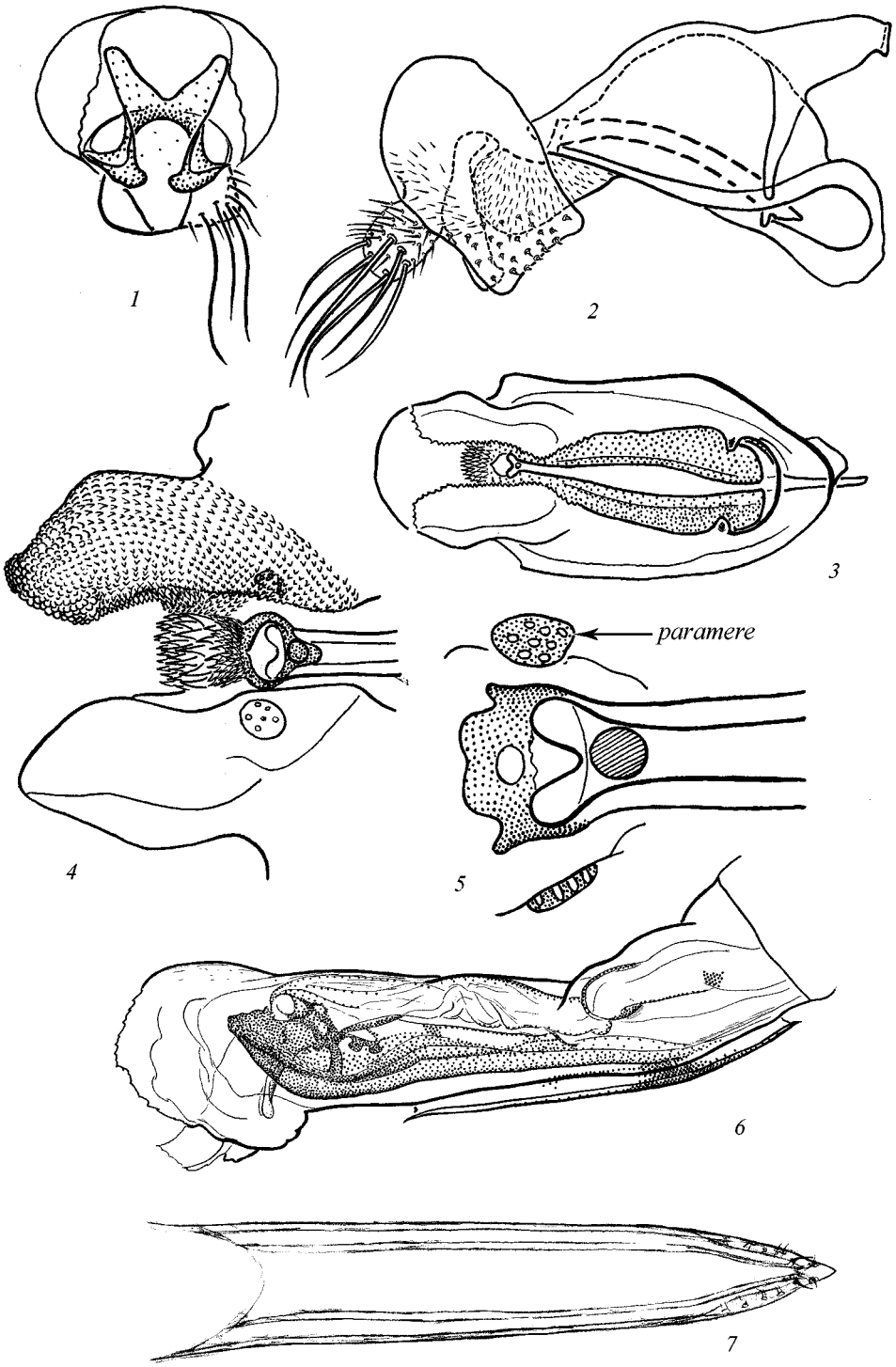

Fig. 3. *Adapsilia coarctata*: *1* — epandrium and proctiger, posterior; *2* — epandrium and hypandrium, right; *3* — hypandrium, ventral; *4* — posterior phallic guide (modified gonites?), parameres and basiphallus, ventral; *5* — basiphallus and parameres, dorsal; *6* — phallus glans, right; *7* — aculeus, ventral.

Рис. 3. *Adapsilia coarctata*: *1* — эпандрий и проктигер, сзади; *2* — эпандрий и гипандрий, справа; *3* — гипандрий, вентрально; *4* — задняя часть направителя фаллюса (видоизмененные гониты?), парамеры и базифалл, вентрально; *5* — базифалл и парамеры, дорсально; *6* — гланс фаллюса, справа; *7* — акулеус, вентрально.

Adapsilia dorsocentralis Hering, 1940 (fig. 4–5)

Hering, 1940: 291 (*Adapsilia*); Soós, 1984: 36 (*Adapsila*).

Material. Type. Holotype ♂: "Charbin 5.VII / Maoershan / W. Alin", "Type" [red paper, printed], "Adapsilia / dorsocentralis /m. Type / det. M. Hering 1940" (ZMHB). Paratype ♀: China, Heilongjiang: "Chandaochezsy / 1.–10.8.1937", "Mandschukuo", "W. Alin ed.", "Adapsilia / dorsocentralis ♀. P. T. / Hering 1940", "Paratypus" [red paper printed] (DEI). Non-type. "Charbin Mandsch. / W. Alin VIII", "Adapsilia / dorsocentralis /m. ♀ Type / det. M. Hering 193..." (ZMHB); Russia: S of Primorskiy Kray, Gorno-Tayozhnoe [SE of Ussuriysk], light trap, 20.07.1994, ♀ (A. Belov) (SIZK); Kamenushka 45 km SE of Ussuriysk, 29.07.1984, ♀ (Shatalkin) (ZMUM).

Diagnosis. Eye small, gena 0.8 times as high as eye, without subocular spot, twice as high as length of flagellomere 1. Antenna scarcely longer than half face height, flagellomere 1 narrowed towards apex, rounded apically, 1.4 times as long as pedicel. Face yellow, with antennal grooves reaching lower 1/4, and rather high, receding epistomal margin. Palpus moderately large, about as long and wide as antenna; labellum moderately developed. All head setae well-developed, except vte 0.3 as long as vti (fig. 4, *1*). Thorax orange yellow, except postnotum brown, with 3 dc, 2 pairs of sctl, and well-developed prst sa, prsc ac and kepst) (fig. 4, *4*). Prosternum with 4–5 long setulae on each side. Scutellum with 1–3 short setulae on each postero-lateral side. Wing as in fig. 4, *2*. Costal vein conspicuously reaching apex of M. R_{2+3} without spur vein, R_{4+5} bare. Vein DM-Cu 2.1.5–1.7 times as long as cell r_{4+5} in front of it. Coxae without thickened setae, but mid and hind coxae with numerous moderately fine and long black setulae. Femora yellow, setulose, with ventral row setae; fore femur (fig. 4, *3*) with 2 rows of postero-dorsal setae in apical half, hind femur with 2 dorsal subapical setae; mid femur without bare area. Abdomen yellow, with moderately long black setulae. Male genitalia (in situ): epandrium oval, with elongate surstyli; proctiger dorsoventrally flattened, apically very slightly lobate, but not split (fig. 4, *5–6*). Oviscape (fig. 5, *1*) wide and long, as long as mesonotum and 1.2–1.4 times as long as preabdomen, directed postero-ventrally, with ventral apodeme rather short and weakly scle-

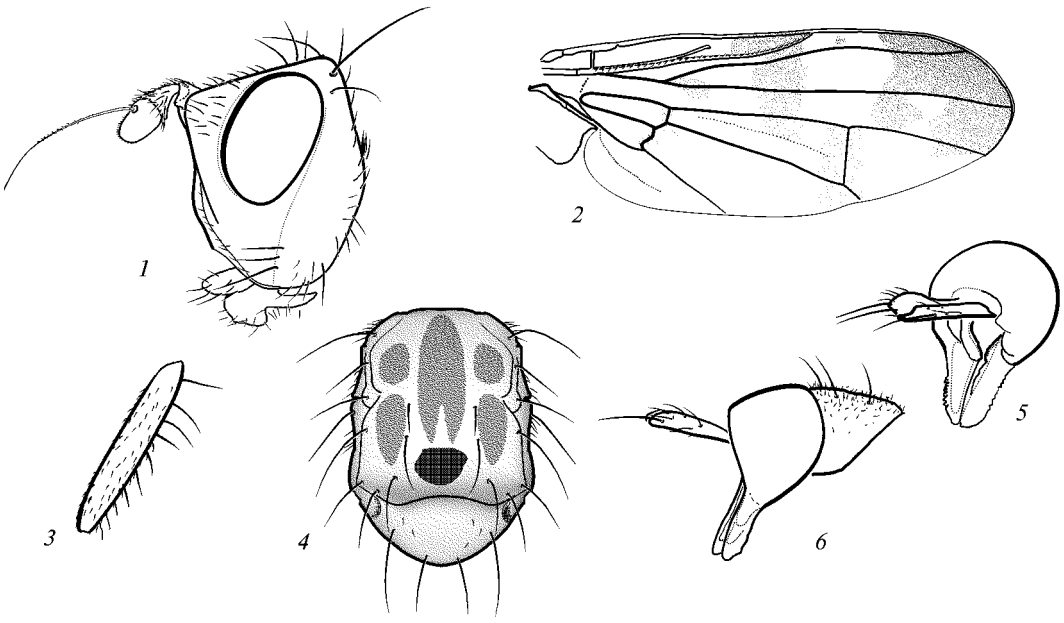

Fig. 4. *Adapsilia dorsocentralis* Hering, holotype ♂: *1* — head, lateral; *2* — wing; *3* — fore femur, left; *4* — mesonotum, dorsal; *5*, *6* — epandrium and proctiger, posterior right and lateral right.

Рис. 4. *Adapsilia dorsocentralis* Hering, голотип ♂: *1* — голова, сбоку; *2* — крыло; *3* — переднее бедро, слева; *4* — среднеспинка, дорсально; *5*, *6* — эпандрий и проктигер, справа сзади и справа.

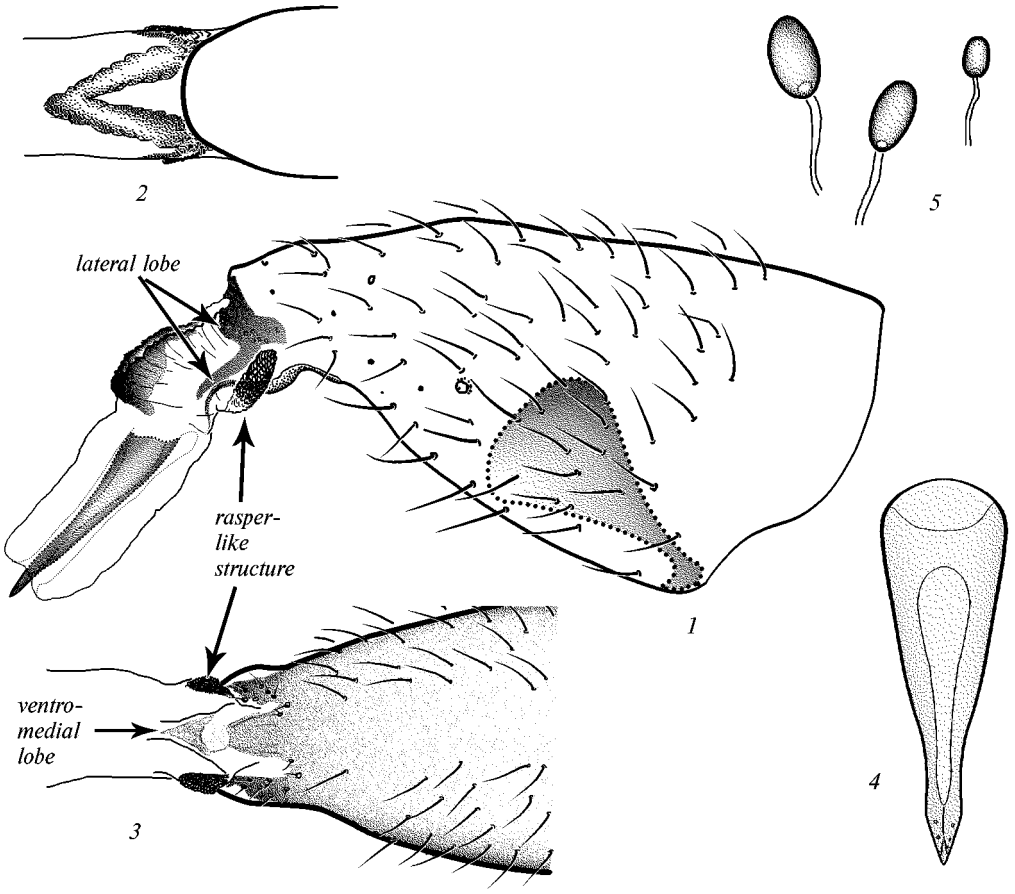

Fig. 5. *Adapsilia dorsocentralis* Hering, ♀: *1* — female terminalia, lateral; *2* — eversible membrane, dorsal; *3* — apex of oviscape and eversible membrane, ventral; *4* — aculeus; *5* — spermathecae.

Рис. 5. *Adapsilia dorsocentralis* Hering, ♀: *1* — терминалии самки, сбоку; *2* — выворачиваемая мембрана, дорсально; *3* — вершина основного членика яйцеклада и выворачиваемая мембрана, вентрально; *4* — акулеус; *5* — сперматеки.

rotized, apical portion of oviscape with ventral lobe moderately wide and short, ending with flat triangular plate (fig. 5, *3*), dorsal medial lobe absent, two wrinkled, taenium-like carinae in basal half of dorsal side of eversible membrane (modified taenia?) running into each other medially (fig. 5, *2*), paired lateral lobes slightly shorter than ventral lobe, two rasper-like kidney-shaped or irregular-oval sclerites (modified ventral taeniae) between medial and lateral sclerites well separated from each other and oviscape (fig. 5, *1*). Aculeus as in fig. 5, *4*. Three separate spermathecae, one smaller than other two (fig. 5, *5*).

Remarks. This species differs from the concept of the genus *Adapsilia*, as defined by Kim and Han (2001), first of all, in the presence of 3 pairs of dorsocentral setae and elongate surstyli, similarly to *Parageloemyia* Hendel. However, it has neither bare scutellum, nor setulose R_{4+5} vein, nor oviscape directed posteriorly, the characters, which differentiate *Parageloemyia* spp. from other Palaearctic pyrgotids. *A. dorsocentralis* has conspicuous facial carina and a complete set of setae, which are believed to be plesiomorphies, but the presence of additional dc and elongate surstyli is apparently a synapomorphy with *Parageloemyia* Hendel; this species may be a sister-group to the latter genus; further phylogenetic analysis on a wider base is needed to determine its taxonomic position; herein, this species is placed to *Adapsilia*, following Kim and Han (2001) and taking this genus as non-monophyletic.

Adapsilia hirtoscutellata Hendel, 1933 (fig. 6–7)

Hendel, 1933: 9 (*Adapsilia*); Soós, 1984: 36 (*Adapsila*). — *Adapsilia hirtoscutellaris* Hendel, 1933: 5; Malloch, 1934: 263; Chen, 1947: 65, 66, incorrect original and subsequent spelling.

Material. Type. Syntypes: ♀: China: “Suifu / Szechuen / China”, “DCGraham / coll”, “Adapsilia / hirtoscutellata / Hend.”, ”Type No. / 41870” [red paper label] (USNM); ♂, ♀: China: “Foot of Washan / Szechuen, China / Jul. 27–29.1925”, “DCGraham / coll”, “Adapsilia / hirtoscutellata H. / Type ♂”and dark red glance paper label (male) or “Adapsilia / hirtoscutellata Hend.” [yellowish paper label] (female), “coll. / Hendel” (NHMW).

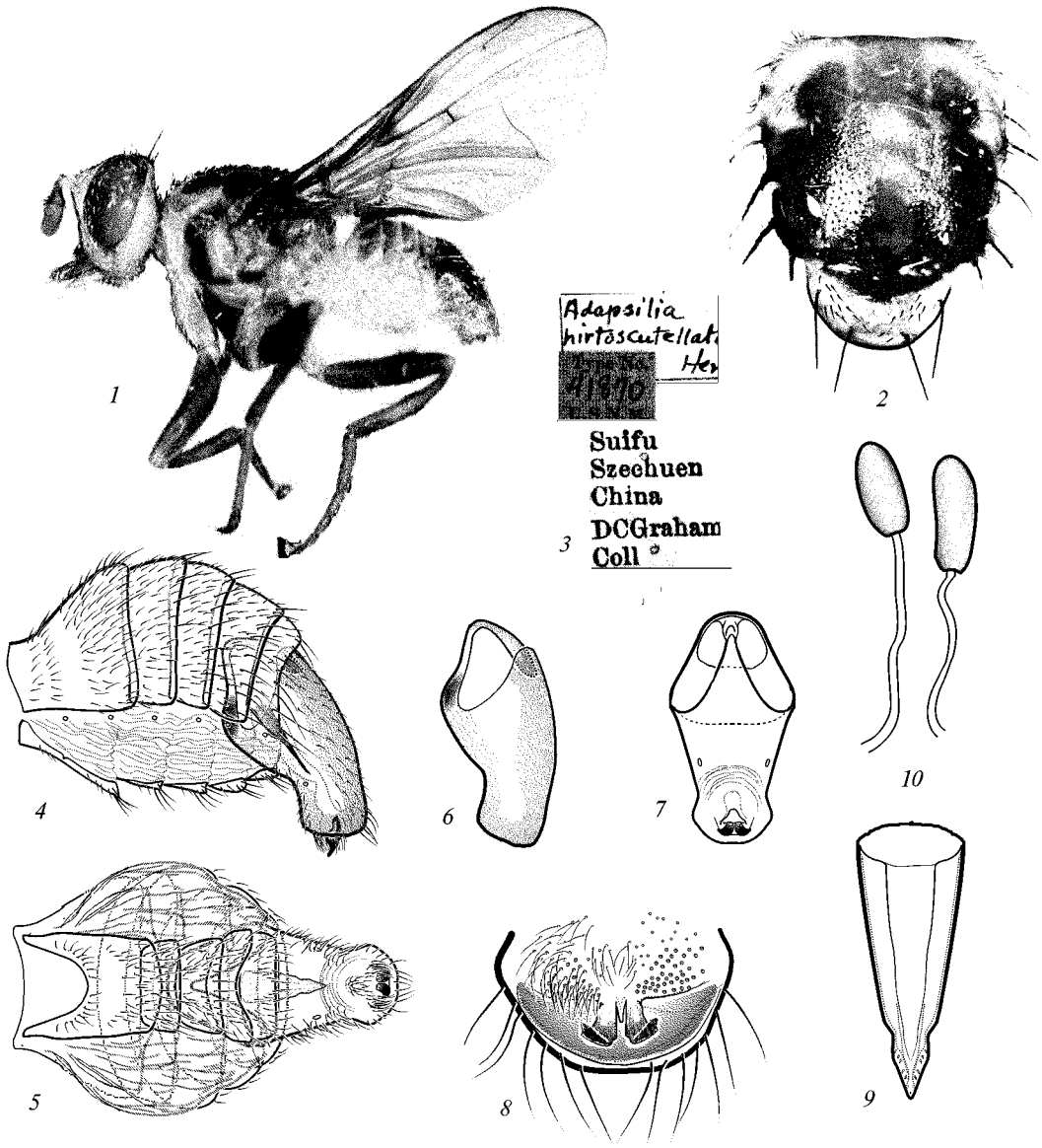

Fig. 6. *Adapsilia hirtoscutellata*, syntype ♀: *1* — total view, lateral; *2* — mesonotum, dorsal; *3* — labels; *4* — abdomen, lateral (preabdomen compressed laterally); *5* — same, ventral; *6* — oviscape, lateral (setulae not shown); *7* — same, ventral; *8* — apex of oviscape, enlarged; *9* — aculeus; *10* — spermathecae.

Рис. 6. *Adapsilia hirtoscutellata*, синтип ♀: *1* — общий вид, сбоку; *2* — среднеспинка, дорсально; *3* — этикетки; *4* — брюшко, сбоку (преабдомен сжат с боков); *5* — то же, вентрально; *6* — основной членик яйцеклада, сбоку (волоски не показаны); *7* — то же, вентрально; *8* — вершина основного членика яйцеклада, увеличено; *9* — акулеус; *10* — сперматеки.

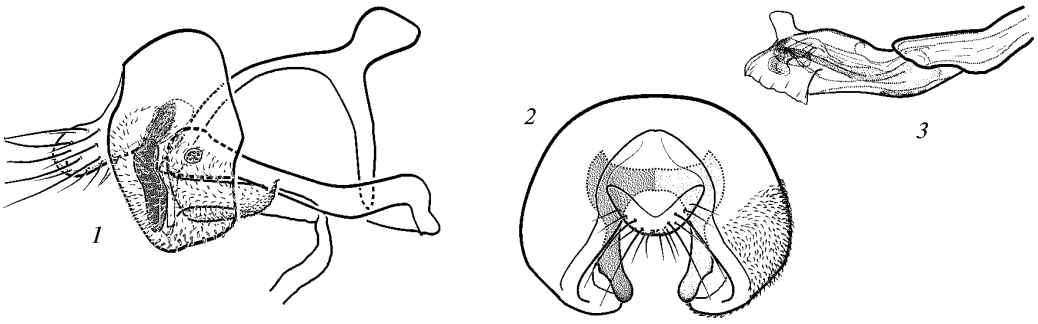

Fig. 7. *Adapsilia hirtoscutellata*, syntype ♂: *1* — epandrium and hypandrium, lateral right; *2* — epandrium and proctiger, posterior; *3* — glans of phallus, lateral right.

Рис. 7. *Adapsilia hirtoscutellata*, синтип ♂: *1* — эпандрий и гипандрий, сбоку справа; *2* — эпандрий и проктигер, сзади; *3* — glans of phallus, сбоку справа.

Diagnosis. Eye large, gena 0.3 times as high as eye in male and 0.15–0.2 in female, with subocular spot (in male) or without it (in 2 examined females), as high as or lower than flagellomere 1 high. Antenna longer than half face height, flagellomere 1 bluntly rounded apically, about as long as pedicel. Face brown, with very shallow medial keel and long antennal grooves reaching lower margin, with almost linear epistomal margin, which is slightly produced in profile. Palpus large, almost as long and wide as antenna; labellum large (fig. 6, *1*). All head setae moderately long and well-developed, except vte 0.3 as long as vti. Thorax with brownish-black pattern on mesonotum and pleura (inconspicuous in one teneral female), with 1 dc, 2 pairs of sctl, and without prst sa, prsc ac and kepst) (fig. 6, *2*). Prosternum small, without setae. Scutellum with 12–15 moderately short setulae on each postero-lateral side. Wing, short and wide, with faint brown pattern in females (fig. 6, *1*) and dark brown spots in male. Costal vein conspicuously thinned after R_{4+5} apex, but reaching apex of M. R_{2+3} with (in 1 ♀ syntype) or without spur vein (in ♂ and ♀ syntypes), R_{4+5} bare. Vein DM-Cu 2.9–3 (♀♀) or 2 times (♂) as long as cell r_{4+5} in front of it. Coxae without stiff setae, but mid and hind coxae covered by moderately fine and long black setulae. Trochanters finely setulose. Femora brown to dark brown, densely and rather short setulose, without outstanding row of ventral setae, except proximal ventral setae longer than distal ones; hind femur with 2–3 dorsal subapical setae; mid femur without bare area. Abdomen blackish-brown (in male) or yellow-brown (in females). Male sternites 4 and 5 with 2 lateral groups of setulae separated by bare areas. Epandrium oval, with short surstyli; proctiger simple, apically undivided (fig. 7, *1–2*); posterior half of hypandrium with unsclerotised phallic guide (fig. 7, *1*). Glans of phallus narrow and simple (fig. 7, *3*). Oviscape shorter than abdomen, wide, directed postero-ventrally, short setulose (fig. 6, *4*), on apical ventral portion with dense and fine setulae and 2 hook-like processes (fig. 6, *5, 7–8*); its basal apodeme large, with dorsal flap inserted underneath oviscape dorsal surface (fig. 6, *6–7*); aculeus as in fig. 6, *9*; 2 spermathecae (fig. 6, *10*).

Remarks. This species resembles *A. myopoides* Chen and *A. hispida* Kim et Han in the absence of katepisternal seta and oviscape shorter than mesonotum, almost cylindrical (not narrowed apically), differing from both in the absence of prosternal setulae and presutural supraalar setae, as well as the face dark brown and produced in profile, with the carina very low, and the oviscape dorsally with large dark brown spot.

From the species of *Eupyrgota* Coquillett, which also have paired hooks on ventro-basal part of eversible membrane, *A. hirtoscutellata* differs by the absence of the finger-like, ventral, apically setulose projections of the prosternum.

Two spellings of the name, *hirtoscutellaris* (in the key to species) and *hirtoscutellata* (with the description) were originally published by Hendel (1933) for this species;

both names were primarily available, and each was cited only once in subsequent papers, but they have never been mentioned together since the publication. Herewith, I follow the Principle of the First Reviser (ICZN, 1999: Article 24.2) to fix the name *hirtoscutellata*, which was mentioned in the original description and then repeated on all the determination labels of syntypes and in the Catalogue of Palaearctic Diptera (Soós, 1984), as the correct original spelling. The name *hirtoscutellaris*, which was repeated only in a less known paper and is therefore less preferable, is considered an incorrect original spelling and unavailable name.

Adapsilia longicaudata Kim et Han, 2001

Kim, Han, 2001: 273.

Diagnosis (after Kim and Han). Facial carina high. Gena without subocular spot. Antenna, palpus and proboscis moderately large. All head setae present, incl. 2 or, 1 oc, 1 poc, vti and vte, the latter half as long as vti. Thorax with brown pattern on mesonotum and pleuron, rather complete set of setae (incl. prst sa, 2 dc, 1 ac), except kepst reduced; 3 pairs of sctl. Scutellum sparsely setulose. R_{2+3} without spur vein, R_{4+5} bare. Mid femur without bare area. Oviscape twice as long as mesonotum and preabdomen.

Remarks. This species has an isolated position in *Adapsilia* (Kim, Han, 2001); and may actually belong in *Tephritopyrgota* Hendel, because of the reticulate wing pattern, which was considered by Hendel (1933) the diagnostic character that genus. However, the pattern itself hardly is of generic value, because there are similarly reticulate wing patterns in several distant genera of Pyrgotidae, e. g., *Cardiacera* Macquart, *Sphecomyiella* Hendel; *Pyrgotella* Curran, *Boreothrinax* Steyskal, etc. The unpaired ventro-medial hook- or nail-like sclerotized projection, which is another character of *Tephritopyrgota*, has not been reported to be present in *A. longicaudata*. Its generic position is unclear pending the further material is examined. See also remarks to *Tephritopyrgota* below.

Adapsilia longifasciata Kim et Han, 2001

Kim, Han, 2001: 275.

Diagnosis (after Kim and Han). Facial carina high. Gena without subocular spot. Antenna, palpus and proboscis moderately large; pedicel 1.5–1.9 times as long as flagellomere 1. Head setae moderately long and well-developed, including 1 or vti, and g; vte very short, oc present in female only, reduced in male, poc absent in both sexes. Thorax brownish yellow, often with brown pattern on mesonotum and pleuron, and with brown postnotum. Thoracic setae well-developed, except prst sa, prsc ac absent and, in males, ppn weak; 1–2 dc. Scutellum with 2 pairs of sctl and sparse, short setulae. R_{2+3} with spur vein, R_{4+5} bare. Mid femur of female with bare area. Male epandrium short, with truncate surstylus, like in *A. coarctata*. Oviscape as long as mesonotum and preabdomen.

Remarks. This species appears to be very closely related to *A. coarctata*, especially in head shape and chaetotaxy, long pedicel, spurious vein R_{2+3} and very short, truncate surstylus. It differs mostly by the presence of the bare area on mid femur, slightly shorter pedicel and lighter body coloration. Aculei, as figured by Kim and Han (2001), also have different shape.

Dr. H.-Y. Han (pers. comm.) kindly confirmed that there is an error in the key to species: the mid femur of female was stated to have no bare area (Kim, Han, 2001: 261), but actually it is present, as indicated in the description (idem, 2001: 275, Fig. 10).

Males of this species, which have no bare spot on the mid femur, may be indistinguishable from males of *A. coarctata*.

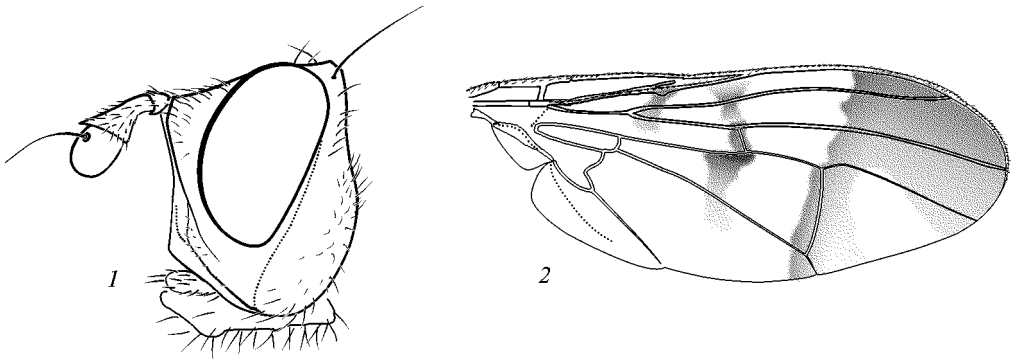

Fig. 8. *Adapsilia mandschurica*, holotype ♀: *1* — head, lateral; *2* — wing.

Рис. 8. *Adapsilia mandschurica*, голотип ♀: *1* — голова, сбоку; *2* — крыло.

Adapsilia mandschurica (Hering, 1940), **comb. n.** (fig. 8)

Teliophleps mandschurica Hering, 1940: 288; Soós, 1984: 38. — *Adapsilia breviantenna* Kim et Han, 2001: 261, syn. n.

Material. Type. Holotype ♀ *Teliophleps mandschurica*: [China, Heilongjiang:] Weischaiche ["Weihhache" in orig. description] / 15–20.8.38", "W. Alin. ded.", "Teliophleps / mandschurica m. / ♀ Type / M. Hering det. 1940", "Holotypus \ 1972" [red paper], "Typus" [pale red paper, strikethrough] (DEI).

Diagnosis. Facial carina high. Gena 0.35 times as high as eye, without subocular spot. Antenna, palpus and proboscis rather short. All head setae present, incl. 2 or, 1 oc, 1 poc, vti and vte, the latter half as long as vti (fig. 8, *1*). Thorax with brown pattern on mesonotum and pleuron, rather complete set of setae (incl. prst sa, 1–2 dc, 2 pairs of sctl), except prsc ac reduced. Scutellum sparsely setulose. R_{2+3} without spur vein, R_{4+5} bare (fig. 8, *2*). Mid femur without bare area. Male: abdominal sternites 2–3 without dense lateral setulae, surstylus with finger-like postero-dorsal lobe. Oviscape slightly longer than mesonotum and preabdomen.

Remarks. The holotype of *Teliophleps mandschurica* fits the description of *A. breviantenna* very closely, and I consider the two names synonyms.

This species agrees with the most recent concept of the genus *Adapsilia*, as defined by Kim and Han (2001), and I consider its original genus name *Teliophleps* a junior subjective synonym of the first name. *Teliophleps* Hering, 1940 is an available name, and if *Adapsilia* is split into several genera, it could be used as a valid one. However, *Teliophleps* Enderlein, 1942, which has another type species, from the Oriental Region, is an unavailable name (junior homonym) (see discussion below, under *Campylocera* Macquart.

Adapsilia megophthalma Malloch, 1934 (fig. 9)

Adapsilia megophthalma Malloch, 1934: 264; Chen, 1947: 68.

Material. Type. Holotype ♀ "Szechwan China / DCGraham / V – 1–20 – zit./ 1700 ft." "Chengtu / 1933", "Type No / 50607 / USNM", "Adapsilia / megophthalma / Type / det. JRMalloch" (USNM).

Diagnosis. Female. Eyes large, gena very low, ca. 1/7–1/8 as high as eye, without subocular spot and conspicuously lower than flagellomere 1 high. Antenna longer than half face height, flagellomere 1 bluntly rounded apically, slightly longer than pedicel. Face with long antennal grooves reaching lower 1/5 of frons and separated with facial keel bifurcated in ventral 1/3 of face. Palpus longer than flagellomere 1; labellum large. All head setae moderately long and well-developed, including 2 or, oc, poc, vti, vte and g (fig. 9, *1*). Mesonotum and scutellum dark brown, pleuron yellow, anepimeron with shiny dark brown stripe in anterior part, katatergite and mediotergite of postnotum brown. All setae developed (incl. prst sa, 2 dc, 1 ac, 2 sctl, 1 kepst). Scutellum fine, short and rather sparsely setulose over whole its dorsal surface. Wing as in fig. 9, *1*.

2 1

Fig. 9. *Adapsilia megophthalma*, holotype ♀: *1* — total view, lateral; *2* — labels.
Рис. 9. *Adapsilia megophthalma*, голотип ♀: *1* — общий вид, сбоку; *2* — этикетки.

Costa conspicuously thinned after R_{4+5} apex, but reaching apex of M. R_{2+3} without spur vein, R_{4+5} bare. Vein DM-Cu 2.9 times long as cell r_{4+5} in front of it. Femora with rather long, unthickened ventral setae. Mid coxa without thickened setae. Mid femur without bare area. Abdomen blackish-brown. Oviscape approximately as long as preabdomen, narrowly conical, short setulose.

Remarks. The type specimen is compressed and shrivelled, which makes certain measurements of head, thorax and abdomen impossible. This species resembles *Adapsilia hispida* in brown body coloration, head shape and wing venation (cell r_{4+5} narrow and cell dm very broad), differing in the wing patterned, katepisternal seta present and scutellum more uniformly and short setulose. Oviscape shape in the holotype of *A. megophthalma* cannot be compared, as it is strongly deformed.

This species was omitted in both Oriental and Palaearctic Diptera Catalogues (Steyskal, 1977; Soós, 1984).

Adapsilia microcera (Portschinsky, 1892) (fig. 10–11)

Portschinsky, 1892: 212; Hendel, 1914: 10 (*Pyrgota*); Becker, 1905: 92 (*Adapsilia*); Hendel, 1933: 15; Chen, 1947: 52; Soós, 1984: 37 (*Epicerella*). — *Adapsilia tenebrosa* Kim et Han, 2001: 279, syn. n.

Material. Type. Holotype ♂ *Pyrgota microcera*: [green paper square], "Pyrgota microcera" [Portschinsky's hand], "Амур, Владивосток / Epicerella microcera Portsh." [collection curator's label; modern orthography] [Far East Russia, Primorsky Kray: "Amur (Wladiwostok)"], "Holotypus ♂ / Pyrgota / microcera / Portsch. 1892" [red paper label, curator's hand] (ZISP). Non-type. N. Korea: prov. Kangwon, Mt. Kum-gang san, 9.08.1971, ♀ (J. Papp & Horvatovich) (HMNH).

Description. Female (previously unknown). Fits description and figures of *Adapsilia tenebrosa* holotype male (Kim, Han, 2001), with the following features deserving redescription.

Head yellow, with brown frontal vitta. antennal and genal groove, and dorsal margin of occiput. Ocelli absent. Setae as described for *A. tenebrosa* male, 1–2 or and vte 0.25 as long as vti, oc moderately short, 0.3 as long as vti, poc absent; genal seta indistinct. Palpus 0.8 as long as gena high; labellum shorter than eye horizontal diameter.

Mesonotum with 4 partly fused dark brown vittae (lateral pair broken by transverse suture) and darkened supraalar area; all pleural sclerites brown, with yellowish margins.

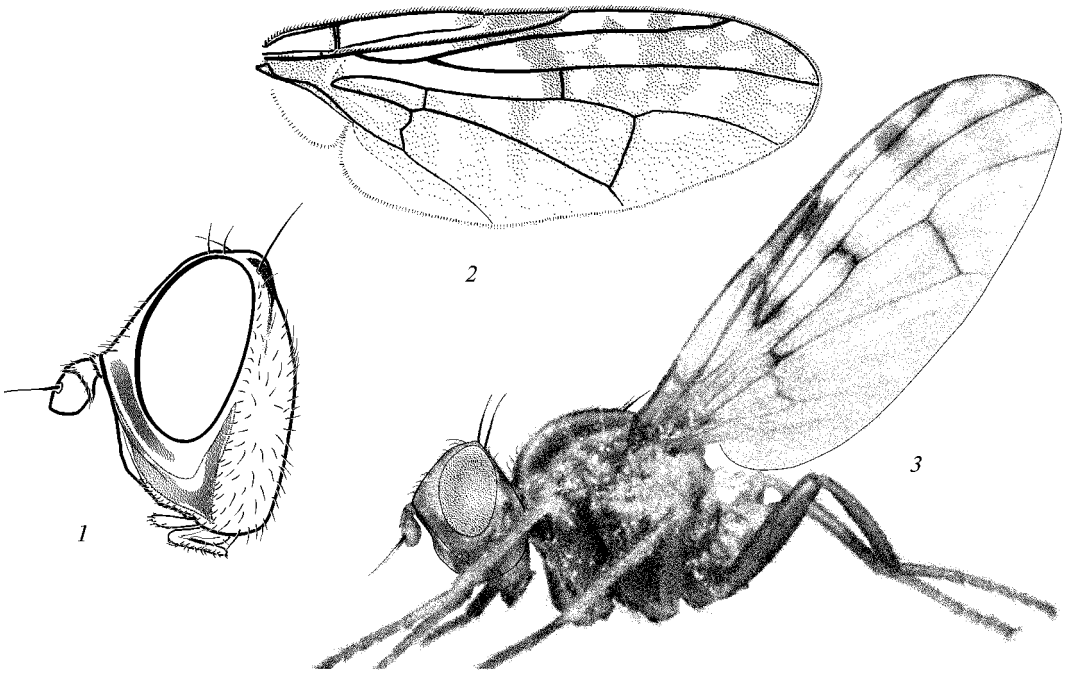

Fig. 10. *Adapsilia microcera* (*1–2* — holotype ♂ of *Pyrgota microcera*; *3* — holotype ♂ of *Adapsilia tenebrosa*): *1* — head, lateral; *2* — wing; *3* — total view, lateral.

Рис. 10. *Adapsilia microcera* (*1–2* — голотип ♂ *Pyrgota microcera*; *3* — голотип ♂ of *Adapsilia tenebrosa*): *1* — голова, сбоку; *2* — крыло; *3* — общий вид, сбоку.

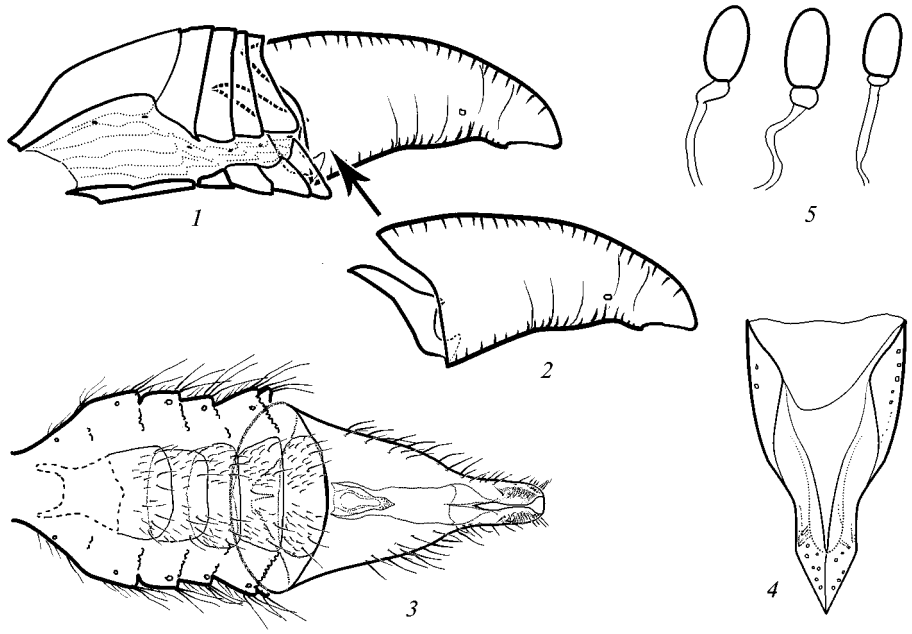

Fig. 11. *Adapsilia microcera*, ♀: *1* — abdomen, lateral (setulae not shown); *2* — oviscape, lateral; *3* — abdomen, ventral; *4* — aculeus; *5* — spermathecae.

Рис. 11. *Adapsilia microcera*, ♀: *1* — брюшко, сбоку (волоски не показаны); *2* — основной членик яйцеклада, сбоку; *3* — брюшко, вентрально; *4* — акулеус; *5* — сперматеки.

Scutellum yellow, with 2 pairs of setae and 5–6 setulae on each side. Metanotum dark brown. Legs brownish yellow. Fore coxa with 3 strong antero-lateral setae and a row of 10–12 shorter setae at antero-ventral margin; fore trochanter unmodified; fore femur very slightly swollen, with subbasal ventral seta and ventro-apical row of rather short setae, as shown in fig. 13 E (Kim, Han, 2001) for male. Fore tibia latero-dorsal and two latero-ventral apical setulae rather distinctive among shorter and thinner other setulae; subapical medio-ventral area with denser and shorter brownish setulae forming brush. 5th tarsal joint 1.4 times as long as and conspicuously wider than 4th. Mid coxa with one very dense row of black thick setae on antero-ventral margin, which form postero-ventrally directed comb. Mid femur with 6–8 setae ventro-basally, without bare area. Mid tibia with 3 closely inserted subequal, thickened apico-ventral setae. Mid tarsus unmodified, except 5th joint large. Hind coxa unmodified, with 2 setae on lateral surface and 6–7 short setulae medio-ventrally.

Wing (fig. 10, *2–3*) with very pale grey reticulate pattern, slightly darker and brownish at anterior margin. Costal vein reaching apex of medial vein; with 2 constrictions: distal to humeral vein and at apex of subcostal vein. Sc indistinct at very apex. R_1 with 35–38 setulae on dorsal surface. R_{4+5} bare. Wing length 6.9 mm. Length of cell c 1.7 mm. Ratio of medial vein sections $m_1 : m_2 : m_3 : m_4 = 1.0 : 1.35 : 0.7 : 1.65$.

Abdomen wide, not petiolate, brown, tergites with yellowish median area and posterior margins, black setulose. Syntergite 1+2 1.8 times as long as tergites 3–6 combined. Oviscape brownish yellow, broad, conical, 1.2 times as long as preabdominal tergites combined, very slightly bowed ventrally, without humps or projections; aperture ventral (fig. 10, *1–2*); eversible membrane inverted and poorly visible in specimen on hands: ventro-medial lobe moderately long, lateral lobes and paired rasper-like plates similar to those in *A. dorsocentralis* (fig. 10, *3*). Aculeus as in fig. 11, *4*. Three spermathecae (fig. 11, *5*)

Remarks. Hendel (1933) assigned this species to the Australasian genus *Epicerella* Macquart (now considered a junior synonym of *Cardiacera* Macquart) based on the reticulate wing pattern and slightly pointed apex of the flagellomere 1 only, but he had never seen any material on this species. The holotype of *P. microcera* actually has neither ocelli, pedicellar notch, subcostal vein broken at right angle, nor setulose epandrium, which are characteristic of *Cardiacera* species. This species agrees very closely with the description of *Adapsilia tenebrosa*, having the gena high, proboscis small and antenna small with dorsal margin of flagellomere 1 almost straight and the apex almost bluntly angulate, as well as by the body coloration, structure of epandrium and surstyli and absence of postocellar seta. Original drawing of the holotype of *A. tenebrosa* (Kim, Han, 2001) gives a wrong impression that its wing pattern is paler or more reduced, but the photograph, kindly sent by Dr. H.-Y. Han (fig. 10, *3*) clearly shows no significant differences, and I consider these specimens conspecific, and synonymize the two names. This species is not closely related to *Tephritopyrgota*, because the head shape of *A. tenebrosa* is not common in *Tephritopyrgota*, and the unpaired ventro-medial hook- or nail-like sclerotized projection, which is another character of *Tephritopyrgota*, are absent in *A. microcera*.

This species does not belong to *Cardiacera* (= *Epicerella*), and the latter genus must be excluded from the list of genera occurring in Palaearctic Region.

Adapsilia myopoides Chen, 1947

Chen, 1947: 66.

Diagnosis (after Chen). Eye large, gena without subocular spot. Antenna shorter than face, flagellomere 1 subquadrate, as long as pedicel. Face yellow, with long antennal grooves almost reaching lower margin. All head setae long and well-developed.

Thorax with brownish-black pattern on mesonotum, with 1 dc, 2 pairs of sctl, and 1 prst sa, whereas prsc ac and kepst absent. Prosternum without 4–6 setae on each lobe. Scutellum with dense setulae on sides and apex. Wing with brownish marks posterior of R_1 and R_{2+3} apices and on R-M and DM-Cu crossveins. Mid coxa with very stiff setulae. Femora densely and rather long setulose, fore and hind femora with dorsal subapical setae; mid femur with conspicuous bare area. Abdomen yellow, stained with brown or black. Oviscape slightly shorter than preabdomen, narrowly conical, with cone-like protuberance at each side of its apex.

Remarks. Known from the holotype female from Kirin (= Jilin, north-eastern China).

This species resembles *A. hirtoscutellata* Hendel and *A. hispida* Kim et Han in the absence of katepisternal seta and oviscape shorter than mesonotum, differing from both in the presence of thickened short setulae on mid coxa and bare area on the mid femur of female.

Adapsilia ochrosoma Kim et Han, 2001

Kim, Han, 2001: 278.

Diagnosis (after Kim and Han). Facial carina high. Gena without subocular spot. Antenna, palpus and proboscis moderately large; pedicel 0,8 times as long as flagellomere 1. Head setae moderately long and well-developed, including 1 or vti, and g; vte, oc and poc short. Thorax yellow, without dark marks. Thoracic setae well-developed, except prst sa, prsc ac absent and, in males, ppn weak; 1 dc. Scutellum with 2 pairs of sctl and sparse, short setulae. R_{2+3} with spur vein, R_{4+5} bare. Mid femur with bare area. Male unknown. Oviscape as long as mesonotum and preabdomen.

Remarks. This species fits near *A. coarctata* and *A. longifasciata* in head shape and chaetotaxy and spurious vein R_{2+3}. It differs from them by the pedicel short and body coloration light, and from *A. coarctata* also by the presence of the bare area on mid femur.

Adapsilia trypetoides Chen, 1947

Chen, 1947: 66.

Diagnosis (after Chen). Gena 0.25 as high as eye, with brown subocular spot. Flagellomere 1 subquadrate, slightly shorter than pedicel. All head setae well-developed, oc, poc and vte short. Thorax with faint brownish pattern on mesonotum, 2 pairs of sctl, whereas ppn, prst sa, dc and prsc ac absent. Scutellum with sparse setulae on sides. Wing with spur vein, pattern similar to that of *A. coarctata* and *A. longifacies*. Abdomen brownish. Female unknown.

Remarks. Known from the holotype male from Szechwan (Peipeh).

This species resembles *A. coarctata* and *A. longifacies* by the head and antenna shape, and by wing venation and pattern, differing in thoracic setae much reduced. *A. verrucifer* Hendel has similar wing pattern and venation, differing by femora and tibiae and medial portion of scutellum brown, and abdominal tergites blackish-brown.

Adapsilia verrucifer Hendel, 1933 (fig. 12)

Hendel, 1933: 9; Soós, 1984: 37. — *Adapsilia cornugaster* Kim, Han, 2001: 267, syn. n.

Material. Type. Holotype ♀ *A. verrucifer*: China: "Szechuen / China / DCGraham", "near Tatsienlu", "Altitude 5000 ft to 8500", "June 18—/ VII—12—23" (USNM). Non-type. China: Sichuan: Graham "9 mi SW of / Tatsienlu / Jun. 25—7'23 / 8500–13000 ft", "Adapsilia / verrucifer H." [Hendel's h/w], ♀ (Graham) (NHMW); Fujian, "Kwangtseh [=Hangchuan]-Fukien / J. Klapperich /27.9.37", 1 ♂ (ZMFK); Guandung: "Drachenkopf / Nord-Kuantung / 23.IV.17", "leg. Dr. Mey", ♀ (dissected) (ZMHB); Thailand: Chieng Mai Province, Doi Suthep, summit, light catch, 30.09.1981, ♂ (ZMUC).

Remarks. The holotype female of *A. verrucifer* (fig. 12, *1*) fits well the detailed description and figures of the holotype female of *A. cornugaster,* except the base of scutellum is destroyed by the pin, and the body is compressed laterally, giving somewhat slender appearance to the specimen. I consider the specimens conspecific and synonymize these names. This species is redescribed in details by Kim and Han (2001) (as *A. cornugaster*), and only the following remark must be added. The dorso-caudal projection of oviscape (shown by the arrow in fig. 12, *1*), found in two females from Sichuan and figured for *A. cornugaster* (Kim, Han, 2001), is absent in the female from "Drakenkopf", but the structure of aculeus and other characters of that specimen fit well *A. verrucifer.*

This species is recorded from the Oriental Region for the first time.

Campylocera Macquart, 1843

Type species: *Campylocera ferruginea* Macquart, 1843: 377 (by original designation).
Prosyrogaster Rondani, 1875: 438.
Type species: *Prosyrogaster chelyonothus* Rondani, 1875: 438 (by monotypy).
Teliophleps Enderlein, 1942: 128, syn. n. (non *Teliophleps* Hering, 1940).
Type species: *Teliophleps apicalis* Enderlein, 1942: 128 (by original designation).
Hexamerinx Enderlein, 1942: 131.
Type species: *Campylocera latigenis* Hendel, 1914: 98 (by original designation).
Dicrostira Enderlein, 1942: 125, syn. n.
Type species: *Dicrostira partitigena* Enderlein, 1942: 126 (by original designation).
Campilocera: Shi, 1996: 575, 581, unjustified emendation.

Diagnosis. R_{2+3} without or (in subgenus *Stypina*) with spur vein, costal vein posteriorly to R_{4+5} vein disappearing (fig. 13, *2*), femora without spine-like setulae, oviscape apex without hook-like ventro-apical sclerites, both dorso- and ventro-medial sclerites long and narrow, rigid and well visible on semi-everted membrane, usually as long or longer than diameter of oviscape apex (fig. 13, *4*). Scutellum setulose, often densely, with 2 or 3 pairs of setae.

Remarks. The genus includes 42 nominal species in Oriental, Australasian and Afrotropical Regions. Most of them were described from single specimens of only one sex and are hardly recognizable from minor differences of body coloration and sizes of face, facialia and gena. The reduced apical portion of costal vein is a synapomorphy of *Campylocera* Macquart, *Congopyrgota* Aczél, *Diasteneura* Hendel, *Hypotyphla* Loew, *Prohypotyphla* Hendel, *Hypotyphlina* Enderlein and some other genera, mostly afrotropical. Their

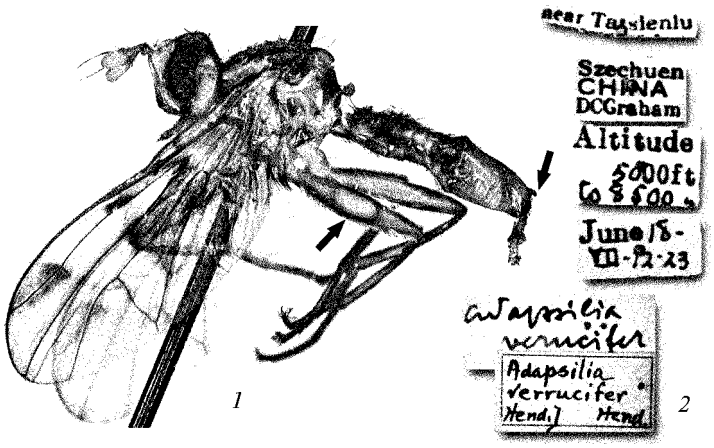

Fig. 12. *Adapsilia verrucifer*, holotype ♀: *1* — total view, lateral; *2* — labels.
Рис. 12. *Adapsilia verrucifer*, голотип ♀: *1* — общий вид, сбоку; *2* — этикетки.

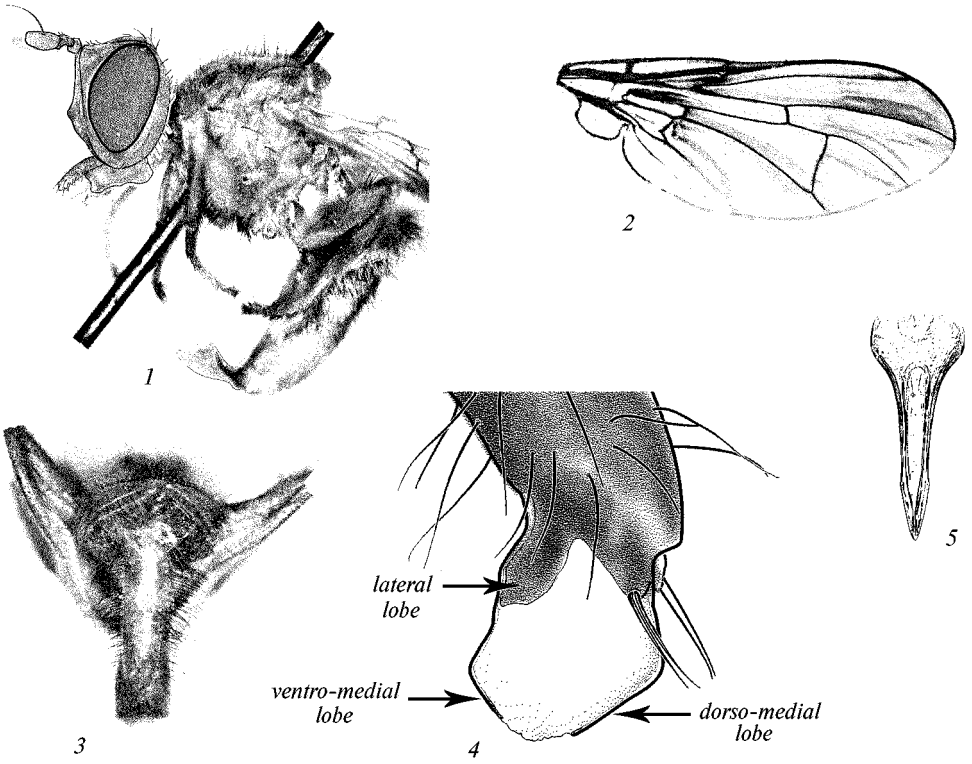

Fig. 13. *Campylocera*, females (*1–3* — *C. hirsuta* Aldrich, oriental; *4–5* — *C. ferruginea* Macquart, afrotropical): *1* — total view, lateral (wings not shown); *2* — wing; *3* —abdomen, posterior; *4* — oviscape, lateral; *5* — aculeus.

Рис. 13. *Campylocera*, самки (*1–3* — *C. hirsuta* Aldrich (Ориентальная область); *4–5* — *C. ferruginea* Macquart (Афротропическая область): *1* — общий вид, сбоку (крылья не показаны); *2* — крыло; *3* — брюшко, сзади; *4* — основной членик яйцеклада, сбоку; *5* — акулеус.

relationships are poorly understood and need further study. Oriental species of *Campylocera* are heavily and long setose, including scutellum and oviscape (fig. 13, *1, 3–4*).

Several species of *Campylocera*, including *C. hirsuta* Aldrich (fig. 13, *1–3*) occur in Taiwan and southern Mainland China, but none has been recorded yet from the Palaearctic Region.

Enderlein (1942) originally noted two differences of *Teliophleps*, the M vein not reaching the wing margin, and the scutellum with 6 setae. From the study of the type specimens of *T. apicalis* and a wide range of *Campylocera* species, it becomes evident that both characters are represented in many species including both type species of the two nominal genera. The type species of *Teliophleps* is quite a typical representative of *Campylocera*, and must be transferred to that genus, as *Campylocera apicalis* (Enderlein), comb. n. I therefore consider *Teliophleps* a junior subjective synonym of *Campylocera*. Furthermore, the name *Teliophleps* Enderlein is a junior homonym of *Teliophleps* Hering, 1940 and thus unavailable.

Dicrostira was established to separate a species, which has antennal groves shorter than in the other *Campylocera*, the character actually widely varying among examined species. The type species of *Dicrostira*, which has no other considerable differences from *Campylocera*, is transferred to that genus, as *Campylocera partitigena* (Enderlein), comb. n., and *Dicrostira* is a junior subjective synonym of *Campylocera*.

Aczél (1958) has synonymized *Hexamerinx* Enderlein and *Stypina* Enderlein with *Campylocera* and decreased the rank of *Stypina* to subgenus. Study of the type species of these two genera shows there are no considerable differences to distinguish them, except

Hexamerinx has 6 scutellar setae and *Stypina* possesses the spur vein on R_{2+3} (Korneyev, unpublished data); both characters are variable in some species of Pyrgotidae.

Examined species of *Campylocera* also have long and rigid lateral, medial dorso-apical and ventro-apical lobes of the oviscape, and the eversible membrane is very often semi-everted in collection specimens (fig. 13, *3–4*).

Tephritopyrgota Hendel 1914

Type species: *Tephritopyrgota passerina* Hendel 1914: 104 (by original designation).
Stypina Enderlein, 1942: 105.
Type species: *Tephritopyrgota vesicatoria* Hendel, 1914: 100 (by original designation).
Euthioza Enderlein, 1942: 117.
Type species: *Euthioza madagascariensis* Enderlein, 1942: 128 (by original designation).
Tephrilopyrgota: Shi, 1996: 591, unjustified emendation

Diagnosis. R_{2+3} with or without spur vein, costal vein posteriorly of R_{4+5} vein distinctive, wing grey with numerous hyaline spots (fig. 14, *1, 3*), femora without spine-like setulae, oviscape ventro-medially with unpaired hook-like projection (derivative of apical ventro-medial lobe of oviscape) (fig. 14, *4*). Scutellum short and sparsely setulose, with 2 pairs of setae.

Remarks. The genus includes 35 species in Afrotropical (of them, 19 in Madagascar), 2 in Oriental and 1 in Palaearctic Regions. While there are considerable hiatuses between afrotropical *Tephritopyrgota* and other genera occurring in the Afrotropical Region, Asian *Tephritopyrgota* hardly can be differentiated only from their reticulate grey wing pattern, without study male and especially female genitalia. At least, there is a reticulate wing pattern in two species currently assigned to *Adapsilia* (namely, *A. longicauda* and *A. microcera*). However, such a pattern is widespread in various unrelated genera of Pyrgotidae (Australasian *Cardiacera*, some New World genera, etc.) being either plesiomorphic or subject to homoplasy, and cannot serve evidence that *A. longicauda* and *A. microcera* belong to *Tephritopyrgota*, until the structures of the apex of oviscape are examined.

Tephritopyrgota miliaria Hendel, 1933 (fig. 14, *1–2*)

Hendel, 1933: 12; Soós, 1984: 38. — *Tephritopyrgota yunnanensis* Shi, 1996: 591, 595, possible synonym.
Material. Type. Syntype ♀ *T. miliaria*: China: “Szechuen / Suifu / China”, “DCGraham / Collector”, “Type No / 41874”, “Tephritopyrgota / miliaria / Hend.] Hend. [det.]” (USNM).

Diagnosis. Gena with faint subocular spot. All head setae present, incl. 2 or, 1 oc, 1 poc, vti and vte. Thorax with brown pattern on mesonotum and pleuron, complete set of setae (incl. prst sa, 2 dc, 1 ac, 2 pairs of sctl, 1 kepst). Scutellum setulose. R_{2+3} without spur vein, R_{4+5} bare. Mid femur without bare area.

Remarks. The examined syntype specimen was rather adequately described by Hendel (1933) and needs no redescription. It is closely related to the group of afrotropical species, which includes the type species, *Tephritopyrgota passerina* Hendel, sharing the fronto-facial angle acute and strongly produced anteriorly (fig. 14, *1, 3*).

Judging from original English diagnosis and figures (Shi, 1996: 595, fig. 91), *T. yunnanensis* does not differ conspicuously from the holotype of *T. miliaria* (all the characters given as differences of *T. yunnanensis* are virtually present in *A. miliaria*), and the two species are very probably synonyms. Additional material must be examined to justify their synonymy.

Eupyrgota Coquillett, 1898

Type species: *Eupyrgota luteola* Coquillett, 1898 (by monotypy).

Diagnosis. R_{2+3} with spur vein, femora with 2 rows of spine-like setulae on apico-ventral portion, apico-ventral part of oviscape with 2 hook-like sclerites. At least the first and the last characters may serve the synapomorphies proving monophyly of the genus.

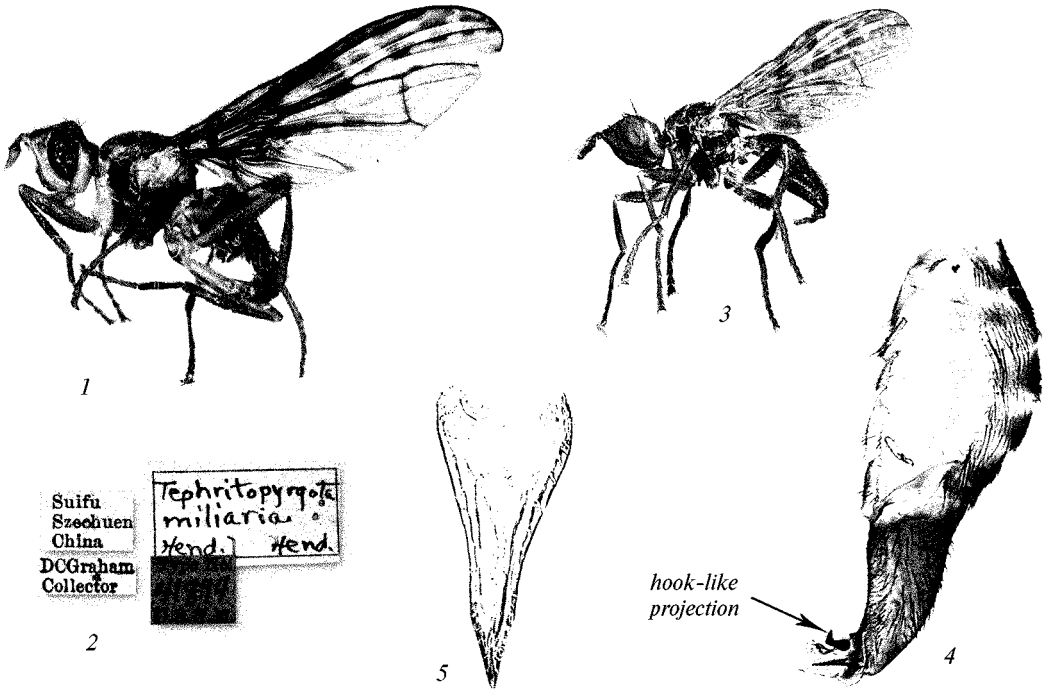

Fig. 14. *Tephritopyrgota*, females (*1–2* — *T. miliaria*, palaearctic; *3–5* — *T.* sp. probably *passerina* (afrotropical): *1*, *3* — total view, lateral; *2* — labels; *4* — abdomen, lateral; *5* — aculeus.

Рис. 14. *Tephritopyrgota*, самки (*1–2* — *T. miliaria* (Палеарктическая область); *3–5* — *T.* sp., возможно *passerina* (Афротропическая область): *1*, *3* — общий вид, сбоку; *2* — этикетки; *4* — брюшко, сбоку; *5* — акулеус.

Remarks. Ten species occur in the Palaearctic Region, of them only 7 were listed by Soós (1984) in the Catalogue of Palaearctic Diptera under the name *Adapsilia*. Steyskal (1977) listed one species under the subgenus *Eupyrgota*, but some oriental species assigned to *Adapsilia* s. str., may actually belong here. Three species of afrotropical *Adapsilia* (see Steyskal, 1980) have 2 hooks on oviscape, but the femoral spines are expressed either poorly or not expressed at all. Taxonomic position of Australasian species assigned to *Adapsilia* (Pitkin, 1989) is also unclear. Chen (1947) keyed Chinese species and has partly separated *Eupyrgota* from *Adapsilia* Coquillett. The concept of the genus was recently reconsidered by Kim and Han (2001). Most species remain inadequately described; the characters used for identification are mostly head and body pattern and chaetotaxy. Most species were keyed by Hendel (1914, 1934) under *Adapsilia*. Chen (1947) provided a key to 7 Chinese, and Kim and Han (2000, 2001) to 3 Korean species. A key to eastern palaearctic species is compiled by Korneyev and Nartshuk (in press).

Only 3 species were available in this study, and further material is needed to be examined. Judging from descriptions, I am assuming that some species names may appear synonyms.

Palearctic species included. *Eupyrgota facialis* (Hendel, 1934) comb. n. (?= *E. tigrina* Kim et Han, 2000); *E. flavopilosa* (Hendel, 1914); *E. fusca* Hendel, 1914; *E. griseipennis* (Hendel, 1933), comb. n.; *E. luteola* Coquillett, 1898 (= *E. omorii* Matsumura, 1916); *E. pekinensis* Chen, 1947; *E. pieli* Chen, 1947; *E. rufosetosa* Chen, 1947; *E. similis* Chen, 1947; *E. wagae* (Bigot, 1880), comb. n.

Eupyrgota griseipennis (Hendel, 1933), **comb. n.** (fig. 15)

Hendel, 1933: 9; Malloch, 1934: 262; Chen, 1947: 68 (*Adapsilia*); Soós, 1984: 36 (*Adapsila*).

Material. Type. Holotype ♀. “Shin Kai Si / Mt Omei / Szechuen China / 4400 ft”, “July 1–30 / 1921”, “DCGraham / Collector” (USNM).

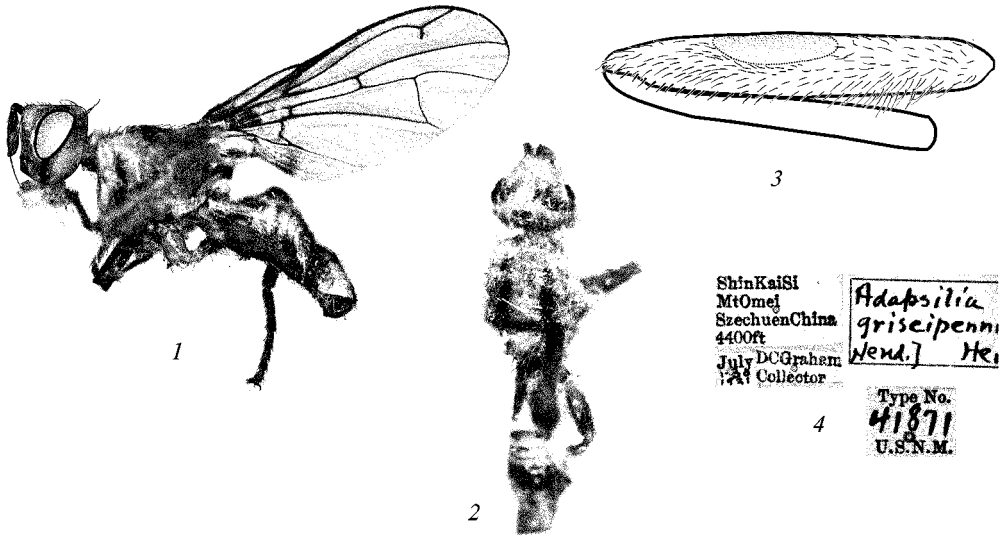

Fig. 15. *Eupyrgota griseipennis*, holotype ♀: *1* — total view, lateral; *2* — same, dorsal, wings not shown; *3* — mid femur and tibia; *4* — labels.

Рис. 15. *Eupyrgota griseipennis*, голотип ♀: *1* — общий вид, сбоку; *2* — то же, дорсально, крылья не показаны; *3* — среднее бедро и голень; *4* — этикетки.

Diagnosis. Ventral portions of antennal grooves and medial spot at ventral margin of face, gena and latero-dorsal areas of occiput with black or brown spots; vte seta reduced; mesonotum with black vittae and chaetotaxy as figured for *E. luteola* Coquillett (Kim, Han, 2000), except scutellum with 2 pairs of setae (fig. 15, *1–2*). Thoracic setae and femoral setulae long and black. Femora with 2 rows of thickened setulae. Mid femur with large bare area (fig. 15, *3*). Abdomen yellow, syntergite 1+2 with 2 large longitudinal spots; oviscape without dark markings, as long as or slightly longer than preabdomen.

Remarks. Oviscape strongly shrivelled in the holotype, so preapical hooks are not visible. However, head and body coloration, shape of antenna and palpus and wing pattern and venation, in combination with spinulose femora, clearly show that this species belongs to *Eupyrgota*, differing from all eastern Palaearctic species by having 4 scutellar setae. The only other Palaearctic species with 4 sctl, *E. wagae* (Bigot) occurs in the Near East and Middle Asia and differs by very short setae on head and legs.

Eupyrgota tigrina Kim et Han, 2000

Kim, Han, 2000: 227. — *facialis* Hendel, 1934: 148; Chen, 1947: 66; Steyskal, 1977: 38 (*Adapsilia*) (possible senior synonym).

Remarks. *A. facialis* from Taiwan is known to me from its original short diagnosis (in the key); it is characterized by 2 pairs of sctl setae, ventral part of antennal groove and gena with brownish black spots, femora ventrally spinulose, and the prosternum setulose. These characters coincide with those of the only species *E. tigrina* from Korea, which was described in details recently; no further details were provided by Hendel. However, the key characters of *A. facialis* also fit all species of *Euphya* Wulp, 1885, the genus, which differs by the face concave, without medial carina. H.-Y. Han and S.-K. Kim (pers. comm.) examined some specimens superficially resembling *E. tigrina* and determined as *Euphya tripunctata* Doleschall in USNM collection (Steyskal det.). Females of that species have the bare mid-femoral spot located in the basal third, which is another character, found in all hitherto examined species of *Euphya* (Korne-

yev, personal observation), whereas in *E. tigrina* the bare spot is in the apical third of mid femur. To confirm or disprove possible synonymy of *E. tigrina* and *A. facialis*, the type material of *A. facialis* is needs to be re-examined.

Eupyrgota luteola Coquillett, 1898

Coquillett, 1898: 337; Matsumura, 1916: 409; Chen, 1947: 62; Kim, Han, 2000: 220 (*Eupyrgota*); Hendel, 1914: 83 (*Adapsilia*); Hendel, 1933: 7 (*Adapsilia* (*Eupyrgota*)); Soós, 1984: 37 (*Adapsila*).

Material. Type. Syntype ♀. "Japan / Mitsukuri", "Type No / 4012 / U.S.N.M."[red paper], "Adapsilia / luteola Coq." (USNM). Non-type. China: "Schanghai / [unreadible: ?1100] / Kiangsu / H. Höhne [sic!] /// 24.I.[19]35 [yellow h/w]", "Schanghai, (China) / Provinz Kiangsu [= Jiangsu] / 24.4[sic!].1935. H. Höne [blue printed label]", ♂ (ZMHB)

Remarks. The species is adequately redescribed by Kim and Han (2000).

Coquillett (1898) mentioned a male or males in his description, however, it literally says that "...the hypopyg... almost as long as the first abdominal segment"; however, male hypopygium is much smaller in this species; also, Coquillett mentioned five visible tergites (i. e., 1+2 syntergite and 3–6 tergites), which means that the examined specimen certainly was a female. Coquillett merely took its oviscape with two apical hooks as male genitalia and have erred in thinking this specimen to be a male. I therefore consider the female specimen a syntype of *E. luteola*. There is another female with same labels except the red type label in the collection of USNM (A. Norrbom, pers. comm.), but certainly no males.

Eupyrgota wagae (Bigot, 1880), **comb. n.** (fig. 16)

Pyrgota vagae Bigot, 1880: 152. — *Adapsilia wagae*: Becker, 1905: 92; Hendel, 1908: 14; 1933: 11; Stackelberg, 1970: 121; Zimina, 1985: 150. — *Adapsila wagai*: Soós, 1984: 37. — *Adapsilia picta* Portschinsky, 1881: 37; Becker, 1905: 92; Soós, 1984: 37.

Material. Non-type. SE Kazakhstan, Aksu-Dzhabagly [Natural Reserve, 88 km ENE of Shymkent], 25.06.1966, ♂, ♀ (Zimina) (ZMUM); Tadjikistan: Ganishou, 1500–2100 m, meadow, 15.06.1987, 2 ♂ (Pljushch) (SIZK); Iraq: Samarra, 06.1965, ♀ (Moussli) (CVK); Afghanistan: Gulbahar, 1700 m, 15.08.1956, ♀; Pol-i-Charchi 18 km E of Kabul, 1700 m, 25.06–3.07.1966, ♀ (Amsel); SE Afghanistan, Safed Koh Range, S side of Kotkal, 2350 m, 14–23.06.1966, 3 ♀ (Elbert) (SMNK).

Diagnosis. Head with high and short eye, gena 0.5 times as high as eye, with brown subocular spot and as low as flagellomere 1 long. Pedicel as long as flagellomere 1. Head setae very short or reduced, only very short or, poc and vti present. Thoracic setae very short, prst sa, dc and prsc ac completely reduced, ppn, anepst and kepst very short, seta-like. Prosternum with pair of postero-ventral processes bearing 1–2 fine setulae at apices. Scutellum bare, with 2 pairs of short sctl. R_{2+3} with spur vein; R_{4+5} bare. Coxae unmodified in both sexes, mid coxa with long seta on dorsal portion of eucoxite and disticoxite with brush of moderately thick setulae directed poster-ventrally. Femora with 2 ventral rows of short thickened setae, mid femur with bare area. Epandrium short, with moderately elongate surstyli (fig. 16, *1*); proctiger large, dorso-ventrally flattened, with cerci separated by membrane, but not bilobate; glans of phallus as in fig. 16, *4*. Oviscape 0.7 times as long as mesonotum and preabdomen, with 2 apico-ventral hooks; aculeus short, subtriangular, as shown for *E. rufosetosa* (Kim, Han, 2000: fig. 4B).

Remarks. This species agrees with the diagnosis of *Eupyrgota*, differing from other Palaearctic species of the genus by the combination of yellow and black body pattern, short black setae (including 4 sctl), both black and yellow setulae, mid femur of female with bare area and very complex structure of glans in male. It is the only species of the family known so far in the Middle East of the Palaearctic Region.

T. Becker (1905) intentionally changed the original spelling to "*wagae*", and Soós (1984) modified it to "*wagai*", to reflect the original spelling of Michal Waga's name and the fact that he was a man. Both these spellings are, in the terms of the Code (ICZN,

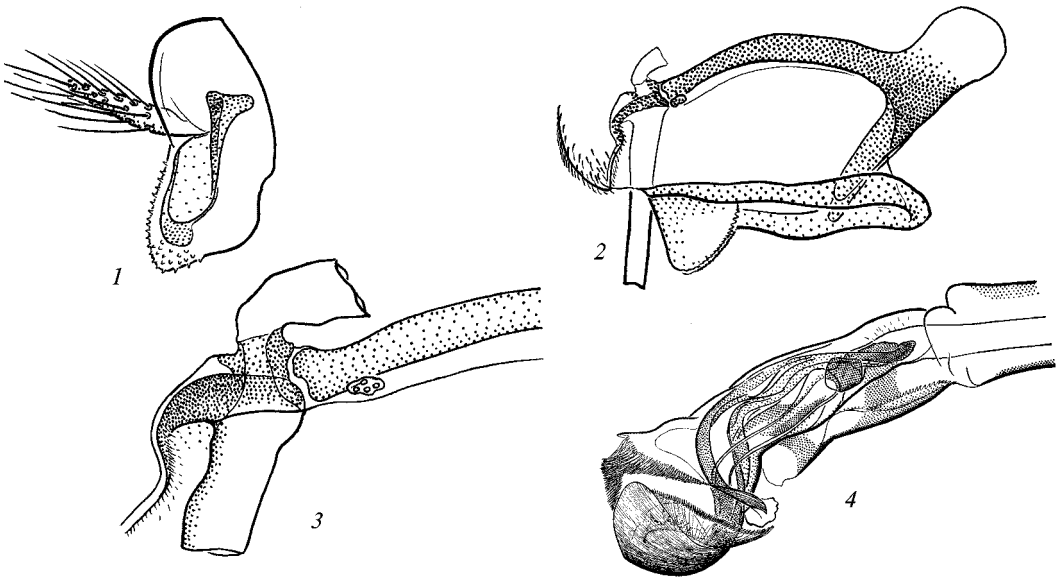

Fig. 16. *Eupyrgota wagae*, ♂ (lateral right): *1* — epandrium and proctiger; *2* — hypandrium; *3* — basiphallus, right paramere and apex of phallapodeme; *4* — glans of phallus.

Рис. 16. *Eupyrgota wagae*, ♂ (сбоку справа): *1* — эпандрий и проктигер; *2* — гипандрий; *3* — базифалл, справа, парамер и вершина фаллаподемы; *4* — гланс фаллюса.

1999), unjustified emendations. However, the spelling "*wagae*" is in the prevailing use and must be deemed a justified emendation, according to the Article 33.2.3.1 (ICZN, 1999), but the emendation to "*wagai*" remains unjustified, as the original name "*vagae*", derived from a latinized personal name, met the requirements of the Article 31.1.1.

Parageloemyia Hendel, 1934

Hendel, 1934: 142; Soós, 1984: 37; Kim, Han, 2001: 281.
Type species: *Geloemyia nigrofasciata* Hendel, 1933: 13 (by original designation).
Dicranostira Enderlein, 1942: 111; Soós, 1984: 37, syn. n.
Type species: *Parageloemyia ornata* Hering, 1940: 293 (by original designation, as *"D. ornata* (Hering)").

Diagnosis. Set of head and body setae complete; 3–4 dc and 2 pairs of sctl present; femora with ventral setae, but unspinulose; mid femur with or without bare area in females; antenna half as long as face; facial carina and antennal grooves poorly expressed; scutellum bare; R_{4+5} usually setulose, sometimes bare; epandrium with elongate triangular, postero-ventrally directed surstyli and dorso-ventrally flattened cerci; oviscape apex posteriorly directed, with postero-ventral, almost apical, opening; aculeus 2.5 times as long as wide, distinctly barbed apically; 3 oval spermathecae.

Remarks. When Enderlein (1942) described *Dicranostira*, he apparently had seen only the type specimen or an early draft of Hering's manuscript, but not the published paper by Hering (1940). The specimens mentioned in Enderlein's paper, were determined in 1934, before the date of publication of Hering's paper. Hering had already published *ornata* under the genus name *Parageloemyia*, not *Geloemyia*, as was suggested by Enderlein, who compared *Dicranostyra* with *Geloemyia*, not with *Parageloemyia*. Enderlein (loc. cit.: 98), also noted that *Dicranostyra* and *Parageloemyia* differ in the presence of facial fork. Actually, *P. nigrofasciata* has a smoothed carina with a low, almost inconspicuous fork, as in some specimens of *P. quadriseta*.

Currently, *Parageloemyia* includes 3 species occurring in the Far East of Palaearctic Region: *P. nigrofasciata* (Hendel, 1933), *P. quadriseta* (Hendel, 1933) and *P. wonjuensis* Kim et Han, 2001, and the fourth, *P. globa* Shi, 1996 in Oriental Region (China:

Yunnan). A key to 3 Palaearctic species is provided by the author (Korneyev, Nartshuk, in press). The monotypic genus *Geloemyia* Hendel, 1908 is known only from the type locality of *G. stylata* Hendel (type species), Tongking (Vietnam), and must be excluded from the list of genera occurring in the Palaearctic Region.

Parageloemyia is closely related to *Trichempodia trifasciata* Enderlein, 1942 from Madagascar (Korneyev, unpublished data). They share R-M crossvein situated proximally of R_1 apex, R_{4+5} setulose, terminalia structure (unknown for *Trichempodia cockerelli* Malloch), and probably form a monophyletic group, differing mainly by details of chaetotaxy and head shape.

Parageloemyia nigrofasciata (Hendel, 1933) (fig. 17, *1–2*)

Hendel, 1933: 13; Soós, 1984: 37 (*Geloemyia*); Kim et Han, 2001: 281 (*Parageloemyia*). — *Parageloemyia ornata* Hering, 1940: 293, syn. n. — *Dicranostira ornata*: Enderlein, 1942: 111; Soós, 1984: 37.

Material. Type. Holotype *Geloemyia nigrofasciata* ♂: "Suifu / Szechuen / China", "DC Graham / coll.", "Type No / 41873 / U.S.N.M." (red paper rectangle), "Geloemyia / nigrofasciata / Hend." (USNM). Holotype *Parageloemyia ornata* ♀: "Chandaoche / Manchukuo, VIII. 1938 / W Alin", "Type", "*Parageloemyia ornata* m. Type ♀ / Hering det." (DEI). Non-type. Far East Russia, Primorskiy Kray: "Ussuri-Gebiet, Sutschan", ♀ (ZMHB); Gornotayozhnoe, light trap, 10–20.07.1994, ♀ (heavily damaged by dermestids; one wing and remainders of oviscape left) (A. Belov) (CVK).

Parageloemyia quadriseta (Hendel, 1933) (fig. 17, *3–4*)

Hendel, 1933: 13; Soós, 1984: 37 (*Geloemyia*). — *quadriseta* Hendel, 1934: 142; Chen, 1947: 55 (*Parageloemyia*). — *Parageloemyia nigrofasciata*: Chen, 1947: 55; Kim, Han, 2001: 281 (misidentification).

Material. Type. Syntype *Geloemyia quadriseta* ♀: "Shin Kai Si [not Li, as in original description] / Mt. Omei / Szechuen China", "1000 [not 4000, as in original description] feet / alt", "DCGraham / collector", "Geloemyia / quadrisetosa [sic!] / Hend. Hend. [det.]" (red paper rectangle) (USNM).

Pictures of wings of *Geloemyia nigrofasciata* and *G. quadriseta* (Hendel, 1933: Taf. 1) originally had captions confused and not corresponding to their descriptions; this has been noted already by Hering (1940), but Chen (1947) and Kim and Han (2001) erroneously applied the name "*P. nigrofasciata*" to *Paragelomyia quadriseta*.

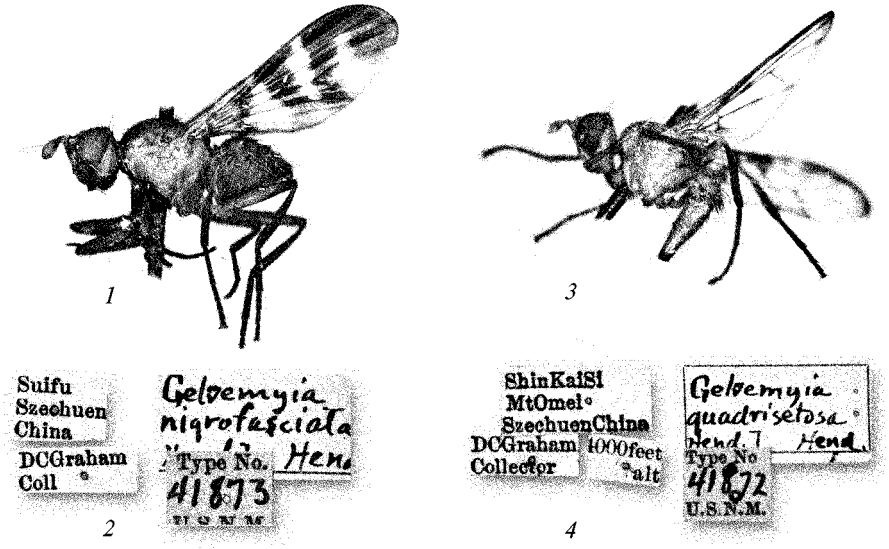

Fig. 17. *Paragelomyia nigrofasciata,* holotype ♀ (*1, 2*) and *P. quadriseta,* holotype ♀ (*3, 4*): *1, 3* — total view, lateral; *2, 4* — labels.

Рис. 17. *Paragelomyia nigrofasciata,* голотип ♀ (*1, 2*) и *P. quadriseta,* голотип ♀ (*3, 4*): *1, 3* — общий вид, сбоку; *2, 4* — этикетки.

Judging from illustrations, specimens recorded from Korea and China (Kirin) in these papers actually belong in *P. quadriseta*.

Wing pattern in species determined as *P. nigrofasciata* or *P. quadriseta* is variable, and they might actually be synonyms, if more specimens are available.

Porpomastix Enderlein, 1942

Type species: *Porpomastix fasciolata* Enderlein, 1942: 123 (by original designation).
Paradapsilia Chen, 1947: 53; Shi, 1996: 575; Kim, Han, 2000: 230, syn. n.
Type species: *Paradapsilia trinotata* Chen, 1947: 53 (by original designation).

The two genera names are based on type species, which are synonyms. Chen was certainly unaware of Enderlein's paper. S.-K. Kim and H.-Y. Han (2000) recently provided a detailed redescription of *Paradapsilia*.

Porpomastix fasciolata Enderlein, 1942

Enderlein, 1942: 123; Soós, 1984: 38. — *Paradapsilia trinotata* Chen, 1947: 53; Shi, 1996: 575; Kim, Han, 2000: 230, syn. n.

Material. Type. Syntypes *P. fasciolata* 2 ♀: Japan: Hokkaido, "N.-Japan (Morioka). Ohmorin", ♀: Far East Russia, Primorskiy Kray: "NO.-Asien (Ussuri-Gebiet) aus Kasakewitsch; 1907" (ZMHB). Non-type. S Korea: Wonju-si: Yonsei University campus, 27.05.1996, ♀ (Byun) (MHNG).

Examined types of *P. fasciolata* fit the description and figures of *P. trinotata* (Chen, 1947; Kim, Han, 2000) in all the details, and the two names are synonyms.

Key to Genera of Palaearctic Pyrgotidae
Таблица для определения родов палеарктических Pyrgotidae

1. Femora in apical part with a row (usually 2 rows) of short spinulae or thickened short setulae. Prosternum with 2 ventral finger-like projections bearing setulae. Apex of oviscape with 2 medio-ventral hooks. ..... *Eupyrgota* Coquillett
– Femora not spinulose. Apex of oviscape at most with unpaired medio-ventral hook-like projection, or without it, and if with 2 hooks, then prosternum without projections, bare. 2
2. 3–4 pairs of dc; scutellum bare, R_{2+3} without spur vein; R_{4+5} setulose; 4 scut. .... *Parageloemyia* Hendel
– Usually 1–2 pairs of dc, if 3–5 pairs of dc (in *Adapsilia dorsocentralis* and *Porpomastix fasciolata*), then either R_{4+5} bare and scutellum with setulae, or R_{2+3} with spur vein and scutellum bare. Other characters variable. 3
3. Costal vein reaching at most slightly beyond R_{2+3} apex. Medial vein usually not reaching wing margin or very thinned in apical portion. Dorso- and ventro-medial lobes of oviscape longer than lateral lobes or oviscape opening, spring-like. ..... *Campylocera* Macquart
– Costal vein reaching M apex. Medial vein complete, reaching wing margin, not very thinned apically Dorso- and ventro-medial lobes of oviscape shorter or absent. 4
4. Pedicel with finger-like projection dorsally; arista 3-segmented: basal aristal segment clearly visible. Ocellar and basal scutellar seta reduced. ..... *Porpomastix* Enderlein
– Pedicel without finger-like projection dorsally; arista 2-segmented: basal aristal segment indistinct or absent. Ocellar and/or basal scutellar seta present. 5
5. Wing grey, with hyaline spots. Ventro-medial lobe of oviscape forming unpaired nail- or hook-like projection. ..... *Tephritopyrgota* Hendel
– Wing hyaline, often with brown or grey areas around stigma, crossveins and on apex. Ventro-medial lobe of oviscape not forming projections. ..... *Adapsilia* Waga

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