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A NEW SPECIES AND NEW SYNONYMY OF FRUIT FLIES (DIPTERA, TEPHRITIDAE) FROM PALAEARCTIC REGION

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Acidiella sol **sp. n.** is described from Russia (Primorskii krai). New synonymy are proposed: *Oxyaciura* Hendel, 1927 = *Tephrelalis* Korneyev, 1993, **syn. n.**; *Campiglossa* Rondani, 1870 = *Oxyparna* Korneyev, 1990, **syn. n.**; *Myopites tenellus* Frauentfeld, 1863 = *M. orientalis* Korneyev, 1987, **syn. n.**; *Icticodes depunctus* Hering, 1936 = *I. changhyoi* Kwon, 1985, **syn. n.**; *C. defasciata* (Hering, 1936) = *Paroxyna medora* Hering, 1936, **syn. n.** = *P. communis* Chen, 1938, **syn. n.**; *C. scedelloides* Korneyev, 1990 = *C. ornalibera* Wang, 1990, **syn. n.**; *C. misella* (Loew, 1869) = *Tephritis coei* Hardy, 1964, **syn. n.** = *T. pishanica* Wang, 1996, **syn. n.**; *C. melanochroa* (Hering, 1941) = *P. dorema* Hering, 1941, **syn. n.**; *Oxyyna guttatofasciata* (Loew, 1850) = *O. parva* Chen, 1938, **syn. n.** = *O. fasciata* Wang, 1996, **syn. n.** New combinations are proposed: *Oxyaciura sexincisa* (Korneyev, 1993), **comb. n.**; *C. diluta* (Becker, 1908), **comb. n.**; *C. melanostigmata* (Korneyev, 1990), **comb. n.** *C. evanescens* (Becker, 1908), *C. lederi* (Hendel, 1927), and *C. melanochroa* (Hering, 1941) are considered as valid species.

KEY WORDS: Diptera, Tephritidae, fruit flies, taxonomy, Palearctic Region.

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Из Приморского края описан *Acidiella sol* **sp. n.**. Установлена новая синонимия: *Oxyaciura* Hendel, 1927 = *Tephrelalis* Korneyev, 1993, **syn. n.**; *Campiglossa* Ron-

dani, 1870 = *Oxyparna* Korneyev, 1990, **syn. n.**; *Myopites tenellus* Frauenfeld, 1863 = *M. orientalis* Korneyev, 1987, **syn. n.**; *Ictericodes depunctus* Hering, 1936 = *I. changhyoi* Kwon, 1985, **syn. n.**; *C. defasciata* (Hering, 1936) = *Paroxyna medora* Hering, 1936, **syn. n.** = *P. communis* Chen, 1938, **syn. n.**; *C. scedelloides* Korneyev, 1990 = *C. ornalibera* Wang, 1990, **syn. n.**; *C. misella* (Loew, 1869) = *Tephritis coei* Hardy, 1964, **syn. n.** = *T. pishanica* Wang, 1996, **syn. n.**; *C. melanothroa* (Hering, 1941) = *P. dorema* Hering, 1941, **syn. n.**; *Oxyna guttatofasciata* (Loew, 1850) = *O. parva* Chen, 1938, **syn. n.** = *O. fasciata* Wang, 1996, **syn. n.** Предложены новые комбинации: *Oxyaciura sexincisa* (Korneyev, 1993), **comb. n.**; *C. diluta* (Becker, 1908), **comb. n.**; *C. melanostigmata* (Korneyev, 1990), **comb. n.** *C. evanescens* (Becker, 1908), *C. lederi* (Hendel, 1927) и *C. melanothroa* (Hering, 1941) рассматриваются в качестве валидных видов.

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INTRODUCTION

While preparing the Tephritidae section for the "Keys to Insects of the Russian Far East" material deposited in the collections of the Natural History Museum, London (BMNH), Muséum d'Histoire Naturelle, Genève (MHNG), Naturhistorisches Museum, Wien (NHMW), I.I. Schmalhausen Institute of Zoology, Kiev (SIZK), Zoological Institute of Russian Academy of Sciences, St. Petersburg (ZISP), Zoologische Museum der Humboldt-Universität, Berlin (ZMHB) and Zoological Museum of the Moscow University (ZMUM) have been examined. It has revealed one new species, numerous new records from the Russian Far East and China, and new synonymies based on the study of type specimens. Morphological terminology follows White et al. (2000); ratios of measurements follow Han (1996).

Acidiella sol Korneyev, sp. n.

Figs 1-4

Acidiella sp. (near *sepulcralis*): Korneyev, 1997b: 41.

MATERIAL. Holotype – ♂: Russia, Primorskii krai, Bikin River 22 km upstream Svetlovodnaya River mouth, V. Zlobin (ZISP).

DESCRIPTION. MALE. Body almost entirely yellow with black and yellow setae and setulae.

Head (Fig. 1) yellow to dark yellow on vertex and occiput to whitish yellow on face. Length : height : width ratio 1 : 1.16 : 1.42; frontal-head ratio 0.48; eye ratio 0.86; genal-eye ratio 0.45; medial vertical setae broken out in holotype; lateral vertical seta 0.52 of longest eye diameter; ocellar and postocellar seta each 0.35 as long as lateral vertical seta, postvertical seta 0.75 as long as postocellar seta. Ocellar triangle black; 2 reclinate ocellar setae; 3 pro- and inclinate frontal setae; distance between anterior and middle setae equal to distance between orbital setae and almost half distance between middle and posterior frontal setae. Frontal vitta with

brown, mostly reclinate setulae, fronto-orbital plate with fine, yellowish-white proclinate setulae. Antenna yellow: scape and pedicel light brown setulose; flagellomere 1 ratio 2.3; aristo-antennal ratio 1.5; arista yellow in basal 0.25 of its length, brown in the rest, short pubescent, with longest rays slightly longer than basal aristomere. Face, facialium and parafacialium matt white to creamy in holotype, face flat; facialium at vibrissal angle as wide as flagellomere 1, with fine yellowish-brown setulae. Postgena moderately swollen, with fine, moderately long yellowish-brown setae; genal seta indistinguishable among them. Occiput with 8–9 postocular setae. Palpus whitish, slightly wider than flagellomere 1, with a few short light brown setulae. Proboscis fleshy, yellow, 2 times as long as flagellomere 1.

Thorax subshiny, entirely yellow with black setae and brown setulae; dorsocentral seta about 0.8 distance from level of intra-alar setae to postsutural supra-alar setae; scutellum with basal setae 1.9 as long as scutellum and apical seta 1.8 as long as scutellum. Prosternum in the holotype destroyed by pin. Proepisternum with short and fine yellowish setulae and one fine black seta twice as long as other setulae; anepisternum with one long and one shorter black setae plus shorter brown setulae ventrally; anepimeron with one long seta and shorter brown setulae; katepisternum with one long black seta posterodorsally and brown setae ventrally; mediotergum shiny yellow.

Legs entirely yellow brown; fore femur with 4-5 yellow posteroventral setae, yellow setulose in basal half; mid and hind legs with brown setae and setulae.

Wing (Fig 2) predominantly yellow, with blurred pale spots in front of R_1 apex (extending as two unclear bands into r_{2+3} and r_{4+5} cells), in m cell and in basal half of cua_1 cell. Wing-thorax ratio 2.5, vein R_{4+5} ratio 1.7, vein M ratio 0.5, subcostal-costal ratio 1.7; R_{4+5} with about 5–6 setulae between node and $r-m$, no setulae beyond $r-m$; bc and c pale yellow.

Male abdomen 1.2 times as long as wide, entirely matt yellow, with brown setae and setulae; tergum 6 with 2 faint brownish areas antero-laterally. Preabdominal sterna yellow, not widened. Sternum 5 with dense short setulae on anterior half. Synsternum 7+8 brown and epandrium dark brown with brown setae; surstylus yellow, apically truncated in lateral view; medial (inner) surstylus with medial (subapical) prensiseta conspicuously smaller than lateral (apical) prensiseta; anterior lobe of surstylus long, mesally directed (Fig. 3); phallus glans with distinct apicodorsal rod; median granulate sclerite approximately elliptic in outline, about 0.3x as long as distiphallus; lower 1/3 of dorsal sclerite with granulate sculpture (Fig. 4).

MEASUREMENTS. Body length 5.3 mm. Wing length 5.0 mm; wing width 2.0 mm (measured on dry specimen).

FEMALE unknown.

DIAGNOSIS. This species related to *Acidiella sepulcralis* Hering, 1938 from northern Myanmar by the wing pattern broadly ochreous and by the mediotergum yellow, but differing by the frons wider (frons length : width ratio 0.9; frons : eye ratio 1.9) and by gena higher (almost half eye height).

ETYMOLOGY. The specific name is a noun and originates from Latin sol – sun, with reference to yellow coloration of species.

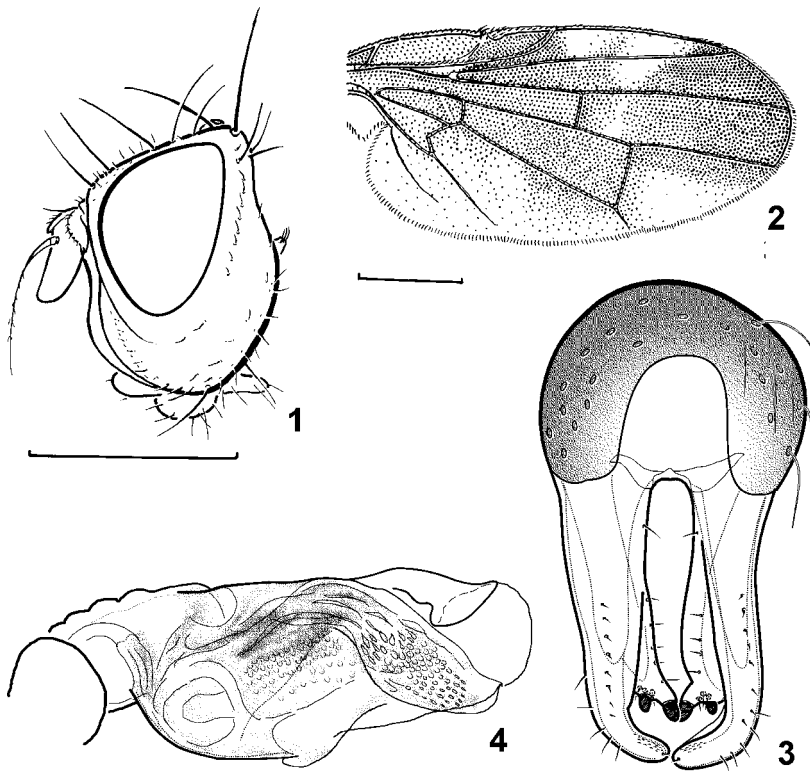


Fig. 1-4. *Acidiella sol* sp. n., male (holotype): 1) head, 2) wing, 3) epandrium, posterior (cerci removed), 4) phallus glans. Scale line - 1 mm. (A and B from Korneyev, 1987, with changes).

COMMENTS. Apex of right wing broken off and mounted on the label; abdomen detached and placed in a microvial with glycerol pinned underneath the specimen.

***Myopites tenellus* Frauenfeld, 1863**

Myopites tenella Frauenfeld, 1863: 220. – *Myopites tenellus*: Norrbom et al., 1999: 170.
– *Myopites orientalis* Korneyev, 1987: 127, **syn. n.**

COMMENTS. The type series of *M. orientalis*, from Mirnyi, Primorskii krai, was erroneously stated to be reared from dry flowerheads of *Senecio*. Further taxonomical study in the genus *Myopites* and comparison with the syntypes of *M. tenella* have shown them to be conspecific. It is believed that *M. tenellus* was introduced to the Russian Far East with its host plant, *Inula britannica*, in the first half of XX century or earlier in hay by colonists, similarly to *Terellia tussilaginis* (Fabricius, 1775) and some other species.

***Ictericodes depunctus* Hering, 1936**

Ictericodes depunctus Hering, 1936: 184. – *Acinia depuncta*: Zia et Chen, 1938: 107; Foote, 1984: 70; Wang, 1998: 249. – *Ictericodes depuncta*: Korneyev, 1995: 117. – *Ictericodes changhyoi* Kwon, 1985: 87; Wang, 1998: 317, **syn. n.**

COMMENTS. Based on rather detailed descriptions and examination of non-type material, there are no differences between the two nominal species, described from China (Heilongjiang) and South Korea. Kwon (1985), while describing *I. changhyoi* omitted the other Far East species for comparison merely because at that time *I. depuncta* was placed in the genus *Acinia*. Therefore I consider both names synonyms.

Genus *Oxyaciura* Hendel, 1927

Oxyaciura Hendel, 1927: 111 (type species *Acitura tibialis* Robineau-Desvoidy, by original designation); Wang, 1998: 243; Norrbom et al., 1999: 178.

Tephrelalis Korneyev, 1993: 142 (type species *Tephrelalis sexincisa* Korneyev, 1993, by original designation), **syn. n.**; Wang, 1998: 246; Norrbom et al., 1999: 213.

COMMENTS. Diagnosis of *Tephrelalis* fits the current concept of the genus *Oxyaciura*, which includes also *O. formosae* (Hendel, 1915) from Taiwan and Ryukyus, *O. monochaeta* Bezzi, 1913 from India, Nepal, Sri Lanka, and southern China, *O. tibialis* Robineau-Desvoidy, 1830 from southern Europe, Middle East, Middle Asia, North Africa and Ethiopia, and *O. xanthotricha* (Bezzi, 1913) from India, Sri Lanka, southern China, Myanmar, Thailand, Vietnam, and Indonesia.

***Oxyaciura sexincisa* (Korneyev, 1993), comb. n.**

Tephrelalis sexincisa Korneyev, 1993: 142; Wang, 1998: 246; Norrbom et al., 1999: 214.

Genus *Campiglossa* Rondani, 1870

Campiglossa Rondani, 1870: 121 (type species *Tephritis irrorata* Fallén, 1814, by original designation); Wang, 1998: 252; Norrbom et al., 1999: 107.

Gonioxyyna Hendel, 1927: 23 (type species *Gonioxyyna magniceps* Hendel, 1927, by subsequent designation by Hendel, 1927: 160).

Sinotephritis Chen in: Zia et Chen, 1938: 148 (type species *Sinotephritis propria* Chen, 1938, by original designation).

Aliniana Hering 1951: 12 (type species *Aliniana aliena* Hering, 1951: 12, junior synonym of *Paroxyyna quadriguttata* Hendel, 1927, by original designation).

Oxyparna Korneyev 1990: 458 (type species *Oxyyna diluta* Becker, 1908, by original designation), **syn. n.**; Wang, 1998: 284; Norrbom et al., 1999: 180.

COMMENTS. Korneyev (1990) transferred most Palaearctic species assigned to *Paroxyyna* Hendel, 1927, *Gonioxyyna*, *Sinotephritis*, and *Aliniana* into *Campiglossa*, *Whiteina*, Korneyev 1990, and *Pseudacinia* Korneyev 1990. Later, Merz (1992) proposed to lump three latter genera, because the differences between them are faint in non-Palaearctic faunas. This synonymy was then formally published by Merz (1994), Wang (1998) and Norrbom et al. (1999). In the keys to Far East species

Campiglossa, *Paroxyna*, *Whiteina*, and *Pseudacinia* are used as subgenera those facilitate grouping species in the genus *Campiglossa* into monophyletic groups with reliable diagnostic characters.

Additional materials, which have become available since the latest publications (Korneyev, 1990; 1997a) allow us to recognize some Far East species previously known by incomplete and vague descriptions only.

Our detailed study of phallic glans structures in species assigned to *Oxyparna* has shown that the structure we interpreted as a simple tubular acrophallus similar to that in *Oxyna* Robineau-Desvoidy, 1830 species, is not homologous to the latter. The simple tubular acrophallus belongs to the ground plan of the tribe Tephritini, and its presence would mean that *Oxyparna* belongs to basic lineages of the *Campiglossa*-*Oxyna* group of genera. However, in species assigned to *Oxyparna*, this tubular structure includes sclerites associated with other parts of the preputium wall and, therefore, is homologous to the rostrum of other *Campiglossa* (Fig. 9). As a result, both species previously placed in *Oxyparna*, are transferred into *Campiglossa* (*Whiteina*), as *C. diluta* (Becker, 1908), **comb. n.**, and *C. melanostigmata* (Korneyev, 1990), **comb. n.**

***Campiglossa* (*Campiglossa*) *luxorientis* (Hering, 1940)**

Figs 14–17

Paroxyna luxorientis Hering, 1940a: 16 (new name for *Paroxyna oxynoides* Hering, 1936). – *Paroxyna oxynoides* Hering, 1936: 186 (nom. praeocc., non Bezzi, 1924); Chen in: Zia & Chen, 1938: 130. – *Campiglossa luxorientis*: Korneyev, 1990: 443; 1995: 119; Wang, 1998: 267; Norrbom et al., 1999: 112.

MATERIAL. Russia: Primorskii krai: Kamenushka 45 km SE of Ussuriysk, 16.VII 1984, 4♂, A. Shatalkin (ZMUM; SIZK).

COMMENTS. The specimens of *C. luxorientis* can be readily distinguished from specimens of *C. melanochroa* by postocular setae all white, aculeus 4.56 times as long as wide. See discussion under *C. melanochroa*.

***Campiglossa* (*Campiglossa*) *melaena* (Hering, 1941)**

Sinotephritis melaena Hering, 1941: 27. – *Campiglossa melaena*: Korneyev, 1990: 443; Wang, 1998: 267; Norrbom et al., 1999: 112.

MATERIAL (additional to published). China: Heilongjiang: Charbin, Chandaochezsy, VII 1954, 3♂, ♀, W. Alin (BMNH).

***Campiglossa* (*Campiglossa*) *melanochroa* (Hering, 1941)**

Figs 10–16

Paroxyna melanochroa Hering, 1941: 30; Korneyev, 1990: 456. – *Campiglossa melanochroa*: Wang, 1998: 266. – *Campiglossa luxorientis* (part.): Korneyev, 1995: 119; Norrbom et al., 1999: 112. – *Paroxyna dorema* Hering, 1941: 29, **syn. n.** – *Campiglossa dorema*: Korneyev, 1990: 456; 1995: 119; Wang, 1998: 258; Norrbom et al., 1999: 110.

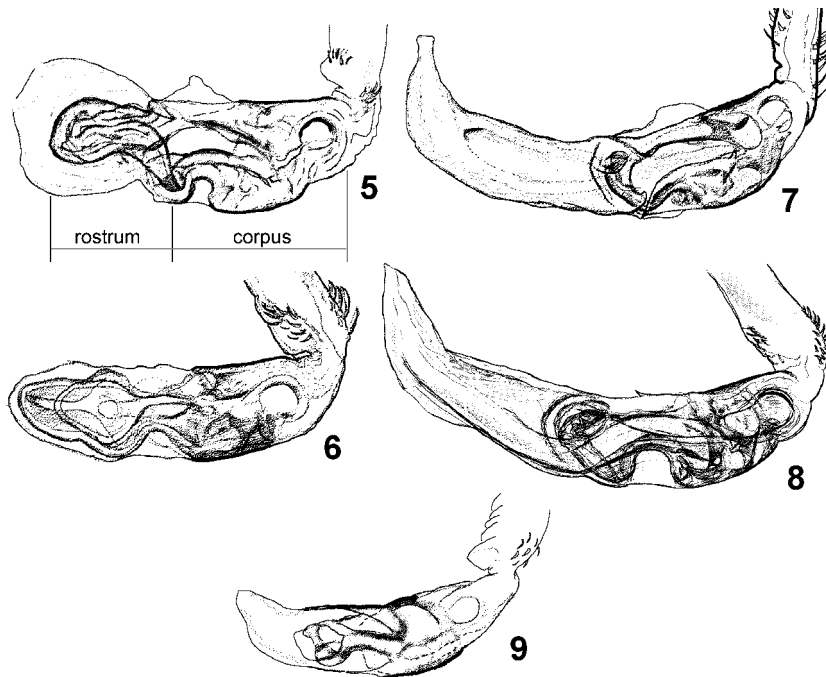


Fig. 5-9. Phallus glans: 5) *Campiglossa defasciata*, 6) *C. solidaginis* (from Switzerland), 7) *C. evanescens*, 8) *C. contingens*, 9) *C. diluta*.

MATERIAL. Type. Holotype – ♀ of *P. melanochoa*: Charbin, 18.IX 1940, W. Alin, *Paroxyna melanochoa* m. Type Hering det. 1940 (BMNH). Holotype – ♂ of *P. dorema*: Charbin, 22.IX 1940, W. Alin, *Paroxyna dorema* m. Type Hering det. 1940 (BMNH). Additional specimens. Russia: Primorskii krai: Kamenushka 45 km SE of Ussuriysk, 16.VII 1984, ♂, A. Shatalkin (ZMUM); Yakovlevka, ex flower heads of *Heteropappus hispidus*, 16.IX 1986 – exit 23.X 1986-4.IV 1987, 18♂, 15♀ (SIZK).

DIAGNOSIS. Rather small (wing length 3.5–3.7 mm) flies with dark brown occiput, thorax and abdomen and yellow legs. Frontal vitta without setulae, with gray microtrichose median stripe. Postocular setae black, except 2 longer white setulae. Posterior notopleural, anepisternal and anepisternal setae black; anepimeral seta white; apical scutellar seta short, black. Mesonotum with wide brown vittae; scutellum brown. Wing dark brown, pterostigma with hyaline or yellow spot, crossvein *r-m* surrounded with 2–4 dots; spots under R_{2+3} apex either round and separate, or joined forming of 8 or longitudinal oval spot; cell r_{4+5} brown at basal fork; 1st large spot in r_{4+5} cell longitudinal or round, as long as cell wide; anal lobe with brown pattern. General tinge of the wing yellowish-brown. Male pattern with numerous pale brown, usually partly confluent, small dots, as figured for *Paroxyna melanochoa* (Hering, 1941: Abb. 21); female pattern solid brown, with a few sharp

hyaline spots, as figured for *Paroxyna dorema* (Hering, 1941: Abb. 22). Femora yellow, rarely pale brown, fore femur with brown or white postero-dorsal setae and white ventral setae. Abdomen dark brown microtrichose, except tergal margins gray microtrichose. Male terminalia: phallus: glans like in *C. luxorientis* (Fig. 10). Female terminalia: oviscape black dorsally, slightly shorter than terga 5 and 6 together, reddish ventrally; aculeus less than 4 times (3.5–3.7) as long as wide at base (Fig. 11), with elongate tip as long as distance between subapical steps (Fig. 12); in *C. luxorientis* aculeus more than 4 times (4.4–4.7) as long as wide at base, with tip shorter than distance between subapical steps (Figs. 15, 16).

COMMENTS. Korneyev (1995: 119) suggested that *C. melanochoa* a junior synonym of *C. luxorientis* representing an autumnal melanistic form. This hypothesis has not been rigorously proven, but further materials show that it may be wrong.

First, in the series previously determined as *C. luxorientis* (Kamenushka, 16.VII 1984) contains typical specimens of *C. luxorientis* and one male, which is smaller, dark brown with predominantly black postocular setulae and represents the morphotype of *melanochoa*, which was assumed to be an autumnal form. Then, one female of *C. luxorientis* collected in September has yellow body and wing coloration and larger size typical for that species.

The types of *Paroxyna melanochoa* and *P. dorema* are different sexes of the same sexually dimorphic species, which is represent with quite a large reared series in our material now. Herewith, I consider *melanochoa* a senior synonym.

***Campiglossa (Campiglossa) messalina* (Hering, 1937)**

MATERIAL (additional to published). China: Heilongjiang: Charbin, Chandaochezsy, VII 1954, 19♂, 23♀, W. Alin (BMNH).

***Campiglossa (Campiglossa) misella* (Loew, 1869)**

Oxya misella Loew, 1869: 19. – *Paroxyna misella*: Hendel, 1927: 155; Foote, 1984: 115. – *Campiglossa* (s. str.) *misella*: Korneyev, 1990: 443; Wang, 1998: 267; Norrbom et al., 1999: 112. – *Tephritis coei* Hardy, 1964: 164, **syn. n.**; Wang, 1998: 294. – *Campiglossa coei*: Korneyev, 1990: 444; Wang, 1998: 268; Norrbom et al., 1999: 109. – *Tephritis pishanica* Wang, 1996: 188, **syn. n.**; 1998: 300. – *Paroxyna kunlunica* Wang, 1996: 185.

COMMENTS. The description and picture of wing of both *Tephritis coei* and *T. pishanica* fit the dark morph of *C. misella* males with the first hyaline spot reduced or absent, which is known to me from series of specimens reared in Central Asia at middle altitudes (1.000–2.500m). They clearly belong to *Campiglossa*, despite 2 hyaline spots in r_1 cell. I consider both names to be synonyms of *C. misella*.

***Campiglossa (Campiglossa) scedelloides* Korneyev, 1990**

Campiglossa scedelloides Korneyev, 1990(Jan.): 444; Norrbom et al., 1999: 113. – *Campiglossa ornalibera* Wang, 1990(Sept.): 291, **syn. n.**; 1998: 268; Norrbom et al., 1999: 113.

COMMENTS. The description and picture of wing of *C. ornalibera* fit well the description of *C. scedelloides*.

***Campiglossa (Paroxyna) producta* (Loew, 1844)**

MATERIAL (additional to published). China: Heilongjiang: Chandaochezsy, 28.VII 1952, 1 ♂ (phallus exposed); Charbin, 1954, 1 ♂, W. Alin (BMNH).

COMMENTS. This is the first reliable record from Asia East of Kazakhstan and Middle Asia. Larvae feed in flower heads of *Sonchus* spp. and some other related plants. *C. producta* probably has been introduced with hay or other plant material to the Far East, but nothing is known about current occurrence of this species in China. No specimens from Russian Far East are known to me.

***Campiglossa (Whiteina) contingens* (Becker, 1908)**

Fig. 8

Oxya contingens Becker, 1908: 288. – *Paroxyna contingens*: Hendel, 1927: 151; Foote, 1984: 114. – *Whiteina contingens*: Korneyev, 1990: 462. – *Campiglossa contingens*: Wang, 1998: 257; Norrbom et al., 1999: 109. – *Oxya evanescens* Becker, 1908: 289. – *Paroxyna evanescens*: Hendel, 1927: 151. – *major* (part.): Foote, 1984: 114; Korneyev, 1990: 462; Wang, 1998: 284; Norrbom et al., 1999: 109.

MATERIAL. Syntypes of *Oxya contingens*: China: ♂: "Kurlyk on Bain-Gol River, E Tsaidam, Rob.[orovsky] Kozlov 31/V 95" (ZISP), ♂: "Mitt. Asien // 51911. VI." "Khibirga – Bagatsadamin Lake, E Tsaid.[am] // 3-11.VI 95 Rob.[orovsky] Kozlov" (ZMHB). Syntypes of *Oxya evanescens*: ♂: "Kurlyk on Bain-Gol River, E Tsaidam, Rob.[orovsky] Kozlov 31/V 95" (ZISP), ♂: "Dan'khe River S Satchzhou // Gashun Gobi // Rob.[orovsky] Kozlov 24-27/VII 95" (ZISP); Additional specimens: ♂ "Mitt. Asien // 51911. VI", "Khibirga – Bagatsadamin Lake, E Tsaid.[am] // 3-11.VI 95 Rob.[orovsky] Kozlov" (ZMHB).

COMMENTS. All the examined syntypes of both species are conspecific except one syntype of *O. evanescens* remained unstudied. See also the comments on *C. evanescens* below.

***Campiglossa (Whiteina) defasciata* (Hering, 1936)**

Fig. 5

Paroxyna defasciata Hering, 1936: 185. – *Whiteina defasciata*: Korneyev, 1990: 461; *Campiglossa defasciata*: Korneyev, 1990. – *Paroxyna medora* Hering, 1936: 186, **syn. n.** – *Paroxyna communis* Chen, in: Zia & Chen, 1938 140, **syn. n.**

MATERIAL. Type. Holotype – ♀ *Paroxyna defasciata*: Charbin, 10.VII 1935, W. Alin, *Paroxyna defasciata* m. Type Hering det. 1936 (BMNH). Holotype – ♂ *Paroxyna medora*: Charbin, 10.VII 1935, W. Alin (BMNH). Additional specimens: China: Heilongjiang: Charbin, Gaolinsy, 2-8.VII 1939, ♀ ("Paratype"); Charbin, Sjaolin 14-25.V 1939, ♀ ("Paratype") (ZMHB); Charbin, Sjaolin, VIII, Maoershan, 7.VII 1940, 2 ♀ (*P. medora* Hering det.), Gaolinsy, 2-18.VII 1949, ♂; Chandaochezsy, 22-27.VII 1951 ♀, Sjaolin, VIII, ♂, ♀, Charbin, VIII, ♀ (*P. defasciata* Hering det.); Chandaochezsy, VII 1954, 33 ♂, 38 ♀; Gaolinsy, 2-18.VI 1954, ♀; idem,

VIII 1954, ♀ and ♂ (Charbin, 31. VII, Maoershan), 3 ♂, 2 ♀ (Charbin, 8.VII 1952) (BMNH); [label in Chinese], 28.VI 1935, ♀, (*Paroxyna communis* det. Chen) (BMNH); Russia: "Grossen Uri, Sayan-Berge, Russland, 3.9.[1992]", ex capitulum *Heteropappus tataricus*, ♀, R. Abraham (SIZK).

DIAGNOSIS. Posterior notopleural seta white, anepiternal and anepisternal setae black; apical scutellar seta short, black. Legs yellow. Wing moderately wide; the spots under R_{2+3} apex either round and separate, or joined forming of 8 or longitudinal oval spot; cell r_{4+5} hyaline at basal fork; 1st large spot in r_{4+5} cell usually longitudinal. $r-m$ crossvein with 1-3 dots around it or without. General tinge of the wing yellowish-brown. Male phallus: tip of glans (rostrum) partly asymmetrical, slightly longer than remaining part (corpus) of glans (Fig. 5). Host plants: MNHG materials from Sayan are reared from *Heteropappus tataricus*, and those from South Korea from *Aster ageratoides*.

Specimens from ZMHB were collected and designated as "paratypes" of *P. defasciata* and *P. medora* after original description, and do not belong to type series.

Judging from original description of *Paroxyna communis*, at least some syntypes belong to this species; the male depicted on Fig. 34 (Zia & Chen, 1938) may belong to a different species; and, if the type series of *P. communis* is heterogeneous, it is necessary to designate the lectotype.

***Campiglossa (Whiteina) evanescens* (Becker, 1908)**

Fig. 7

Oxya evanescens Becker, 1908: 289. – *Whiteina evanescens*: Korneyev, Peck, 1996: 298.

MATERIAL. Type. Syntype – ♀ of *Oxya evanescens*: China: "Kurlyk on Bain-Gol River, E Tsaidam, Rob.[orovsky] Kozlov 31/V 95" or "Dan'khe River S Satchzhou // Gashun Gobi // Rob. Kozlov 24-27/VII 95" [not examined] (probably in ZISP). Additional specimens: 25 ♂, 20 ♀ from Kyrgyzstan (SIZK, MHNG).

COMMENTS. The name "*evanescens*" usually considered a synonym of *C. contingens*, has been recently applied to the sister-species, which was found to occur sympatrically with the latter, but is associated with semi-shrubs of the genus *Asterothamnus* rather than with stands of perennial grass *Artemisia dracunculus* (possible host of *C. contingens*).

However, such an application is found out to be not rigorously justified. Despite both syntypes of *O. evanescens* and specimens associated with *Asterothamnus*, have wing pattern striate rather than spotted (unlike typical *contingens*), all the *Asterothamnus*-associated flies have the subbasal crossband unbroken from costal cell to vein A_2 and the discal crossband reaching from pterostigma to posterior margin of wing unbroken, and widened at its posterior end. All examined syntypes of *O. evanescens* have the subbasal crossband broken to spots – in costal cell and at crossvein $bm-cu$ and not reaching vein A_2 and the discal crossband sometimes broken at M vein or narrowed at its posterior end.

Thus, there are no evidences that the name *evanescens* can be applied to the *Asterothamnus*-associated flies. However, until the third syntype of *O. evanescens* is located and lectotype is designated, this name is used.

Campiglossa (Whiteina) helveola (Ito, 1984)

Paroxyna helveola Ito, 1984: 265. – *Whiteina helveola*: Korneyev, 1990: 461. – *Campiglossa contingens*: Wang, 1998: 261; Norrbom et al., 1999: 111.

COMMENTS. According to original description, posterior notopleural seta white, anepisternal and katepisternal setae black. Femora uniformly yellow. Male genitalia not examined. Possibly, a synonym of *C. defasciata*.

Campiglossa (Whiteina) jugosa (Ito, 1984)

Fig. 6

Paroxyna jugosa Ito, 1984: 268; Korneyev, 1990: 466. – *Campiglossa jugosa*: Wang, 1998: 263; Norrbom et al., 1999: 111; Sueyoshi, 2000: 29.

COMMENTS. This species is very similar or identical to *C. solidaginis* (White, 1986) occurring in West Europe in the combination of such characters as setulose frons, black posterior notopleural seta and strongly modified (curved and swollen) rostrum of the phallus glans, as figured by White (1986), Merz (1994) and Sueyoshi (2000). Quite probable that this species is transpalaeartic, but further material has not been available yet to solve this problem.

Campiglossa (Whiteina) lederi (Hendel, 1927)

Paroxyna lederi Hendel, 1927: 153. – *Whiteina contingens*: Korneyev, 1990: 462. – *Campiglossa contingens*: Wang, 1998: 257; Norrbom et al., 1999: 109.

COMMENTS. Our recent studies show that *P. lederi* which I previously considered as synonym of *C. contingens* now are believed to represent separate species. Most of them occur in mountain steppes of Middle Asia and are out of scope of this paper. *C. lederi* is a smaller species, which looks more similar to *C. virgata* from Heilongjiang than to *C. contingens*.

Campiglossa (Whiteina) virgata (Hering, 1940)

Paroxyna virgata Hering, 1940b: 13; Korneyev, 1990: 466. – *Campiglossa virgata*: Wang, 1998: 272; Norrbom et al., 1999: 114.

MATERIAL. Type. Holotype – ♂: Charbin, 3.VIII 1940, W. Alin, *Paroxyna virgata* m. Type Hering det. 1940 (BMNH). Non-type. China: Heilongjiang: Charbin, 13.VII 1952, ♀ (BMNH).

COMMENTS. Small species (wing length 2.6-3.0 mm). Posterior notopleural seta white, anepisternal, anepimeral and apical scutellar setae black. Legs yellow. Wing moderately narrow, the spot under R_{2+3} apex and the 1st large spot in r_{4+5} cell

transverse or subsquare; crossvein *r-m* without dots around. General tinge of the wing dark grey. Tip of rostrum long and membranous, similarly to *C. contingens* (Fig. 8) or *C. punctella* Fallén.

The phallus of the holotype lost after study and the one pinned in the microvial with the specimen apparently belonged to a wrong specimen.

***Campiglossa binotata* Wang, 1990**

Campiglossa binotata Wang, 1990: 292; 1998: 256; Norrbom et al., 1999: 109.

COMMENTS. According to original description, posterior notopleural seta black. Oviscape as long as terga 4–6 together. Known from rather incomplete description based on a single female. Judging from wing pattern, belongs to genus *Homoeotricha* Hering, 1944 and is closely related or identical to *H. procusa* (Dirlbek et Dirlbeková, 1971).

***Campiglossa deserta* (Hering, 1939)**

Paroxyna deserta Hering, 1939: 183. – *Campiglossa deserta*: Wang, 1998: 258; Norrbom et al., 1999: 109.

COMMENTS. Description is based on a single female. Both posterior notopleural setae broken off in the holotype (and color not mentioned in the original description); anepisternal and katepisternal setae black; all femora widely darkened (I. M. White, pers. comm.). Oviscape as long as terga 5 and 6 together. Species identity and subgeneric position unclear. Synonymy of *C. iriomotoensis* (Shiraki, 1968) and *C. sada* Dirlbek et Dirlbeková, 1974 with *C. deserta* (Wang, 1998) therefore unjustified. Records of *C. deserta* и *C. iriomotoensis* from Japan (Ito, 1984), apparently belong to *C. producta*.

***Campiglossa kangdingensis* Wang, 1998**

Campiglossa kangdingensis Wang, 1998: 263.

COMMENTS. According to original description, posterior notopleural seta black; legs yellow. Oviscape as long as terga 4–6 together. Known from rather incomplete description based on a single female from the highlands of Sichuan. Judging from wing pattern, apparently belongs to genus *Homoeotricha*.

***Campiglossa longicauda* Wang, 1998**

Campiglossa longicauda Wang, 1998: 264.

COMMENTS. According to original description, posterior notopleural seta black; legs yellow. Oviscape as long as all preabdominal terga together. Judging from wing pattern, belongs to genus *Homoeotricha*; some type specimens apparently belong to *H. brevicornis* (Chen, 1938) or (all or part) to *H. leporis* Korneyev, 1993.

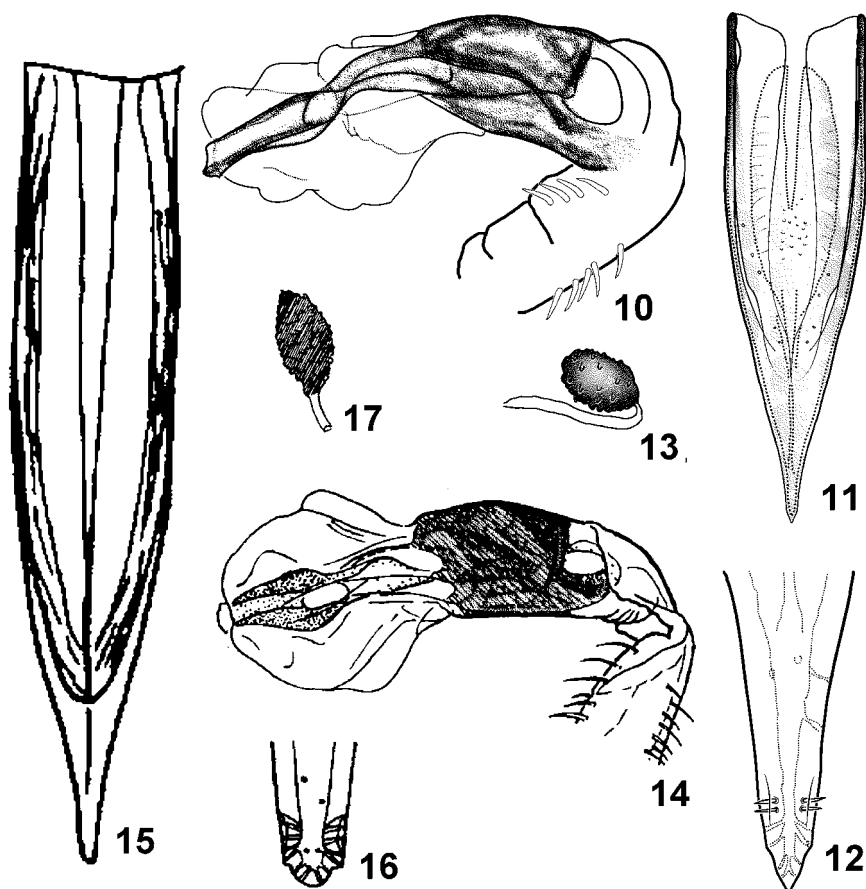


Fig. 10-17. *Campiglossa melanochroa* (10-13) and *C. luxorientis* (14-17): 10, 14) phallus glans, 11, 15) aculeus, 12, 16) aculeus apex, enlarged), 13, 17) spermatheca. (14-17 from Korneyev, 1990).

***Campiglossa wolongensis* Wang, 1998**

Campiglossa wolongensis Wang, 1998: 272.

COMMENTS. According to original description, posterior notopleural seta black; legs brown; cell r_1 with 4 hyaline spots. Oviscape as long as 2 preabdominal terga together. Subgeneric position unclear. Possibly, belongs to genus *Homoeotricha*.

***Dioxya bidentis* (Robineau-Desvoidy, 1830)**

MATERIAL (additional to published). China: Chandaochezsy, VII 1954 1 ♀; Charbin, VI 1954, 3 ♀; idem, 28.VII 1954, 1 ♂, W. Alin (BMNH).

***Oxya guttatofasciata* (Loew, 1850)**

Trypeta guttato-faciata Loew, 1850: 55. – *Oxya guttatofasciata*: Hendel, 1927: 166; Korneyev, 1990: 416; Wang, 1998: 282; Norrbom et al., 1999: 179. – *Oxya parva* Chen in: Zia, Chen, 1938: 101, **syn. n.**; Korneyev, 1990: 416; Wang, 1998: 283; Norrbom et al., 1999: 179. – *Oxya fasciata* Wang, 1996: 184, **syn. n.**; 1998: 281.

COMMENTS. Descriptions and figures of both *Oxya parva* and *O. fasciata* fit the concept of *O. guttatofasciata* completely, with only size and wing pattern details assigned to be the differences of these nominal species. Wing pattern and size very variable, and large series of *O. guttatofasciata* from eastern Kyrgyzstan, Kazakhstan and Mongolia represent numerous small specimens with characters typical for both *O. parva* and *O. fasciata*, with intermediate forms, and I consider them synonyms.

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