

Notes on taxonomy and nomenclature of Palaearctic Miridae (Heteroptera)

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The paper includes new synonymies, new combinations, and some notes on nomenclature of Palaearctic Miridae.

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Specimens used in this study are kept in the Zoological Institute, St.Petersburg (ZISP).

On some fixations of type species

Kerzhner (1993) stated that the type species of *Pachypterna*, *Cyphodema*, *Xenocoris*, *Auchenocrepis* and *Macrotylus* were fixed by subsequent monotypy. This statement is incorrect. According to the Art. 12b(6) of the International Code of Zoological Nomenclature, the names of respective type species became available simultaneously with the names of genera and hence these type species were fixed by monotypy.

Subfamily BRYOCORINAE

Michailocoris josifovi Stys, 1985 = *M. josifovi koreanus* Stys, 1985, *syn. n.* The species was described from the extreme south of the Primorsk Territory, its subspecies from environs of Pyongyang. Judging from the extensive additional material collected later from the Primorsk Terr., the differences between these nominal taxa are within the individual variability.

Tupiocoris annulifer (Lindberg, 1927), *comb. n.* (*Dicyphus*). The species was transferred by Kerzhner (1988a, 1988b) to *Neodicyphus* McGavin, 1982, the latter synonymized with *Tupiocoris* China & Carvalho, 1952 by Cassis (1986).

Subfamily DERAEOCORINAE

Stethoconus praefectus (Distant, 1909). Kerzhner (1970: fig. 11a, 11b) figured the male genitalia of a specimen from S China (Nanjing) as "*Stethoconus japonicus*". The specimen belongs actually to *S. praefectus*.

Deraeocoris subg. *Plexaris* Kirkaldy, 1902, *stat. n.* = subg. *Phaeocapsus* Wagner, 1963, *syn. n.* *Plexaris* was described as a genus, then placed in synonymy with *Camptobrochis*, which in turn was reduced to subgenus of *Deraeocoris*. The type species of

Plexaris, *P. saturnides* Kirkaldy, 1902, is a junior synonym of *Deraeocoris ostentans* (Stål, 1855). Linnavuori (1975) placed the latter species in the subgenus *Phaeocapsus*. Accordingly, *Plexaris* should be restored as a valid subgeneric name and *Phaeocapsus* synonymized with it.

Deraeocoris ater (Jakovlev, 1889) = *D. bicolor* Miyamoto & al., 1994, *syn. n.* The name given by Miyamoto & al. (1994) is a junior primary homonym of *D. ruber* var. *bicolor* Knight, 1921. The colour form described by them is known as var. *limbicollis* Reuter, 1901.

Deraeocoris ventralis megophthalmus Josifov & Kerzhner, 1972 = *D. (Knihtocapsus) izjaslavi* Miyamoto & al., 1994, *syn. n.* The species does not belong to the subgenus *Knihtocapsus*.

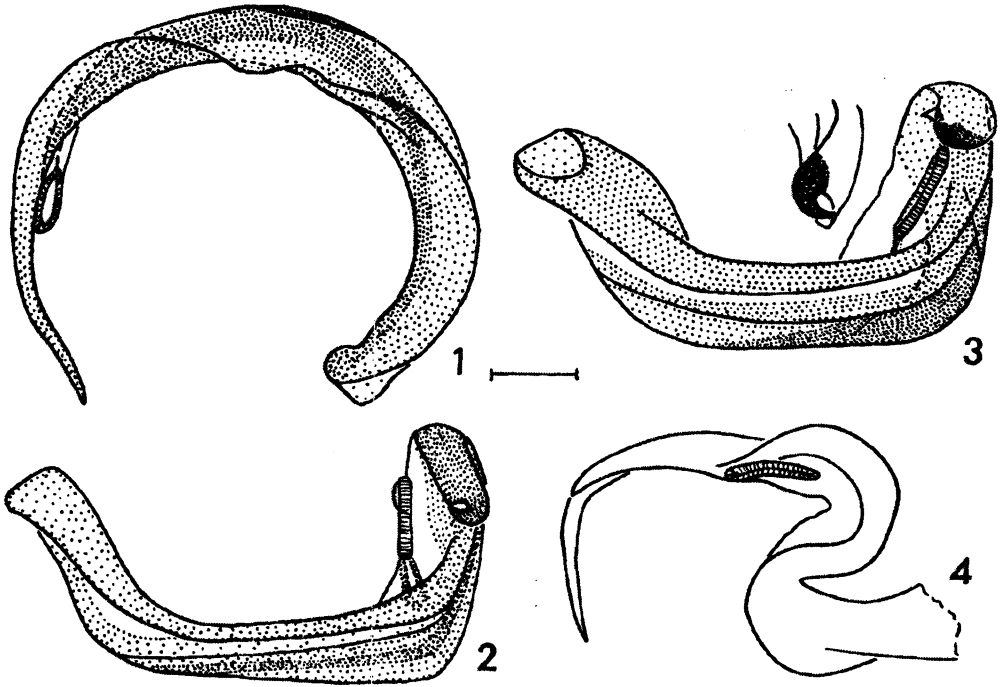
Deraeocoris ribauti Wagner, 1943 = ? *Capsus scutellaris* var. *marginiventris* Rey, 1894, *syn. n.* Rey (1894) described var. *marginiventris* without indication of locality, as he usually made for specimens from France; it may be presumed that the 3 females in his collection (one not labelled and two from France) are the true types. Wagner (1955) indicated in error that the variety was described from Serbia and suspected (Wagner, 1953) its synonymy with *Deraeocoris ventralis* Reuter. The latter is not found in France, thus synonymy with *D. ribauti* in which females have often red sides of abdomen seems more probable.

Subfamily MIRINAE

Myrmecoris gracilis (R.F. Sahlberg, 1848) = *M. rubricatus* Jakovlev, 1882, *syn. n.* Kerzhner (1962) downgraded *M. rubricatus* to subspecies of *M. gracilis*, but it is better to consider it as a pale variety.

Subfamily ORTHOTYLINAE

Heterotoma Lepelletier & Serville, 1825 = *Pachycera* Billberg, 1820 (*nomen oblitum*), *syn. n.* The type species of *Pachycera* by monotypy is *Cimex spissi-*



Figs 1-4, vesica: 1, *Psallus holomelas*; 2, *Orthonotus pallidipennis*; 3, *O. alpestris*; 4, *Phoenicocoris opacus*. Scale: 0.1 mm.

cornis Fabricius, 1777 (= *Cimex planicornis* Pallas, 1772), thus this name is an objective synonym of *Heterotoma*. The name *Pachycera* was not used since its proposal; *Heterotoma* is used in many dozens of works.

Subfamily PHYLINAE

Agraptocoris Reuter, 1903 = *Tibetocoris* Hutchinson, 1934, **syn. n.** The synonymy is based on comparison of the original description and figures of *Tibetocoris* with specimens of *Agraptocoris*.

Agraptocoris margaretae (Hutchinson, 1934), **comb. n.** (*Tibetocoris*). See the generic synonymy above.

Atomoscelis onusta (Fieber, 1861) = *A. roubali* Hoberlandt, 1961, **syn. n.** I examined 3 paratypes (2 ♂, 1 ♀) of *A. roubali*. They do not differ from *A. onusta* either in the external characters or in the structure of the male genitalia. Contrary to the original description, claws in paratypes of *A. roubali* have small pulvillae. The generic name *Atomoscelis* is of feminine gender.

Camptotylidea flavida (Nonnaizab & Yang, 1994), **comb. n.** (*Atomophora*). *Atomophora* was subdivided recently (Linnavuori, 1990) in *Atomophora* and *Camptotylidea*. *A. flavida* Nonnaizab & Yang and *A. punctulatus* Nonnaizab & Yang belong to this latter genus.

Camptotylidea punctulata (Nonnaizab & Yang, 1994), **comb. n.** (*Atomophora*). See comments under *C. flavida*.

Chlamydatus (Euattus) pallidipes (Reuter, 1906), **comb. n.** (*Sthenarus*). Lectotype of *S. pallidipes* (designated here): ♂, labelled "Sych., r. Syaochzhinkho, Yoza - Pan'shamyr, Potan., 26.VII.93" [in Russian], "*Sthenarus pallidipes* Reut. n. sp. Typ." [in Reuter's handwriting], (ZISP); in addition, 1 ♂ and 1 ♀ paratypes are examined. The species is very similar to *Ch. drymophilus* Vinokurov, but differs in having the sides of head below eyes yellow and the theca with a low carina. The specimen described by Reuter as var. β is a male of *Ch. pullus* Reut.

Glaucopterum Wagner, 1963 = *Putshkoviattus* Josifov, 1993, **syn. n.** The type species of *Putshkoviattus*, *P. muminovi* Josifov, 1993, differs from other species of *Glaucopterum* in the completely black coloration, but in the structure of vesica it is closely related to *G. albonigrum* Kerzh. and *G. maculipenne* Kerzh. living, like *P. muminovi*, on *Atraphaxis* and having partly black body.

Glaucopterum muminovi (Josifov, 1993), **comb. n.** (*Putshkoviattus*). See the generic synonymy above.

Glaucopterum atraphaxidis (V. Putshkov, 1979), **comb. n.** (*Chlamydatus*). The species was placed in *Chlamydatus* with some reservation, and Josifov (1993) suspected that it actually belongs to *Putshkoviattus*. It is worth to note that the vesica in this species is with two apical processes, as typical of

Glaucopterum (in *Chlamydatus* always with one). The sexual dimorphism in the structure of antennae does not occur in other species of *Glaucopterum* and the black coloration of the body and antennae is shared with *G. muminovi* only.

Heterochlorillus amygdali (Linnavuori, 1965), **comb. n.** (*Chlorillus*). According to the structure of the aedeagus, Linnavuori's species should be placed in *Heterochlorillus* V. Putshkov. As other species of this genus, it is living on shrubs; species of *Chlorillus* inhabit herbaceous Lamiaceae.

Maurodactylus albidus (Kolenati, 1845) = *M. alutaceus* var. *discifer* Reuter, 1901, **syn. n.** The variety was described from 2 ♂ collected by Hauser in "Transcaspien" (Turkmenistan or SW Uzbekistan), they were examined and one of them designated lectotype (Kerzhner, 1996). *M. alutaceus* is a species distributed in Spain and South France, the variety should be referred to the closely related *M. albidus*.

Orthonotus Stephens, 1829 = *Eucharicoris* Reuter, 1906, **syn. n.** The type species of *Eucharicoris* belongs to *Orthonotus* (see below).

Orthonotus pallidipennis (Reuter, 1906), **comb. n.** (*Eucharicoris*). Lectotype (designated here): ♂, labelled "Sich., r. Fubyankho, Lamasy - Fubyen, Potan., 3.VIII.93" [in Russian], "*Eucharicoris pallidipennis* Reut. n. g. et sp. Typ." [Reuter's handwriting] (ZISP). In addition, 2 ♀ paralectotypes (ZISP) are examined. The vesica (Fig. 2) is typical of *Orthonotus*, with a hook at apex.

Orthonotus alpestris (Reuter, 1906), **comb. n.** (*Psallus*). I examined the holotype ♂ (ZISP). Also in this species the structure of vesica (Fig. 3) is typical of *Orthonotus*. *O. alpestris* differs from other species of the genus in the black spots on tibiae.

Phoenicocoris opacus (Reuter, 1906), **comb. n.** (*Psallus*). Lectotype (designated here): ♂, labelled "Sich., les sev. skl. perev. Khunchyao, Potan., 11.VIII.93" [in Russian; label not mentioned in the original description in error!], "*Psallus opacus* Reut. n. sp. Typ." [Reuter's handwriting] (ZISP). In addition 10 ♀ paralectotypes are examined. The lectotype is teneral, with the vesica (Fig. 4) not sclerotized (its very base was broken during preparation). The species definitely does not belong to *Psallus*, but it is placed in *Phoenicocoris* with some doubt. It is similar to *Ph. kyushuensis* Lnv. in some external characters, but the eyes are much smaller, femora pale with dark spots (as in *Psallus*) and the vesica with two unequal apical processes.

Psallus subgen. *Mesopsallus* Wagner, 1970. When considering the names *Apocremnus* and *Mesopsallus* as isogenotypic, Kerzhner (1993: 100) overlooked the fact that the type species of *Apocremnus* was misidentified by Fieber. This circumstance gives formal reason to refer the case to the International Commission on Zoological Nomenclature for designation of the type species of *Apocremnus* (better to fix *betuleti* Fallén) under the plenary powers. Accordingly, *Mesopsallus* will be saved as a separate subgenus.

Psallus (*Mesopsallus*) *holomelas* Reuter, 1906. Lectotype (designated here): ♂, labelled "Sich., r. Fubyankho, Lamasy - Fubyen, Potan., 3.VIII.93" [in Russian], "*Psallus holomelas* Reut. n. sp. Typ." [Reuter's handwriting] (ZISP). In addition, 1 ♂ and 4 ♀

paralectotypes (ZISP) are examined. The vesica (Fig. 1) of the lectotype is illustrated.

Psallus (*Phyllidea*) *ulmi* Kerzhner & Josifov, 1966 = *P. (Ph.) kerzhneri* Qi & Nonnaizab, 1994 (junior primary homonym of *P. kerzhneri* Josifov, 1992), **syn. n.** = *P. (Ph.) innermongolicus* Qi & Nonnaizab in Qi, 1995 (new name for *kerzhneri* Qi & Nonnaizab, 1994). *P. ulmi* is a common species on *Ulmus pumila* in Mongolia (including its southern part), Transbaikal, Russian Far East and Korea, it was also recorded from China. The species is very variable in coloration. I did not examine the type specimens of *P. kerzhneri* Qi & Nonnaizab, but judging from the original description accompanied with good figures of the male genitalia, it is a synonym of *P. ulmi*.

Salicarus fulvicornis (Jakovlev, 1889), **comb. n.** (*Agalliates*) = *S. flagellatus* (Wagner, 1967), **syn. n.** Lectotype of *Agalliates fulvicornis*, designated here: ♀, with the following labels: golden circle, "Khara - Boro" [in Cyrillic characters; Jakovlev's handwriting], "k. V. Yakovleva" [in Cyrillic characters], "*fulvicornis*" [Jakovlev's handwriting] (ZISP). Both *Agalliates fulvicornis* (later placed in *Chlamydatus*) and *Phoenicocoris flagellatus* (transferred to *Salicarus* by Vinokurov & Kanyukova, 1995) were described from N Mongolia, the species occurs also in South Siberia. It is living on *Caragana*.

Tuponia arcuifera Reuter, 1879 = *T. elegantulus* Zheng & Li, 1992, **syn. n.** Differences indicated for *T. elegantulus* are within the limits of individual variability. The synonymy was confirmed by examination of paratypes of *T. elegantulus*.

Tuponia mongolica Drapolyuk, 1980 = *T. tamaricicola* Hsiao in Hsiao & Meng, 1963 (junior primary homonym of *T. tamaricicola* Lindberg, 1939), **syn. n.** = *T. hsiaoi* Zheng & Li, 1992 (new name for *T. tamaricicola* Hsiao, 1963), **syn. n.** Drapolyuk (1980) suspected synonymy of *T. tamaricicola* Hsiao with *T. arcuifera* Reut. Zheng & Li (1992) correctly indicated that these species are not synonyms, but Hsiao's species is a synonym of *T. mongolica*. The latter synonymy is confirmed by examination of Chinese specimens received from L.Y. Zheng.

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