On *Hygia opaca* (Uhler), *H. lativentris* (Motschulsky) and *H. obscura* (Dallas) (Heteroptera: Coreidae)

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Kerzhner, I.M. & Brailovsky, H. 2003. On *Hygia opaca* (Uhler), *H. lativentris* (Motschulsky) and *H. obscura* (Dallas) (Heteroptera: Coreidae). *Zoosystematica Rossica*, **12**(1): 99-100.

The following new synonymy is established: *Hygia opaca* (Uhler, 1860) = *H. japonica* Ahmad, 1969, **syn. n.**, *H. lativentris* (Motschulsky, 1866) = *H. touchei* (Distant, 1901), **syn. n.** *Hygia opaca opaca* sensu Ahmad, 1969 is a misidentification of *H. lativentris* (Motschulsky, 1866), the latter species does not belong to the subgenus *Microcolpura*. The records of *H. obscura* (Dallas, 1852) from Korea and China are considered mistakes.

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Two species of the genus *Hygia*, *H. opaca* and *H. lativentris*, occur in Japan (Miyamoto & Yasunaga, 1989) and Korea (Lee & Kwon, 1991). Ahmad (1969) described a third species from Japan, *H. japonica*, but examination of his paper showed *H. japonica* to be a junior synonym of *H. opaca*, the latter was misidentified by Ahmad. The records of *H. obscura* from Korea and China are considered mistakes.

Hygia opaca (Uhler, 1860)

- Pachycephalus opacus Uhler, 1860: 226 (syntypes: J, Q, Japan, Takanosima [= Tokunoshima Is.], U.S. Nat. Mus. Natur. Hist., Washington, D.C.).
- *Hygia japonica* Ahmad, 1969: 74, **syn. n.** (holotype: o', Japan, Natural History Museum, London).

Lectotype (present designation; U.S. Nat. Mus. Natur. Hist., Washington, D.C.): o, "Japan, Takanosima", "PHUhler Collection".

Paralectotype (same collection): 9, labels as in the lectotype.

Species of *Hygia* differ in the structure of the posteroventral edge of the male genital segment: it is almost straight in *H. opaca* (Hsiao et al., 1977, fig. 1150) and clearly bilobed in *H. lativentris* (Kiritshenko, 1916, fig. 15). Ahmad described as *H. japonica* the species with almost straight edge of the segment, i.e. *H. opaca*.

Hygia lativentris (Motschulsky, 1866)

Maccevethus lativentris Motschulsky, 1866: 188 (lectotype (Kerzhner & Jansson, 1985: 41): 9, Japan, Zool. Mus. Moscow Univ.).

- Pachycephalus touchei Distant, 1901: 19, syn. n. (lectotype (Ahmad, 1969: 74, as holotype): o', China, Fujian, Kualun, Natur. Hist. Museum, London).
- *Hygia opaca opaca* (non Uhler, 1860): Ahmad, 1969: 73. Misidentification.

Under the Code, *H. opaca opaca* (the nominotypical subspecies) has the same authorship, date and types as the species (*H. opaca*), but Ahmad erroneously described *H. o. opaca* as a "new subspecies", for which he designated as holotype a specimen in Carnegie Museum not belonging to the type series. By mistake, Ahmad used the name *H. opaca opaca* for the species with bilobed male genital segment, i.e. *H. lativentris*.

Ahmad (1969) considered *H. touchei* (Distant, 1901) (type locality: China, Fujian) to be a subspecies of *H. opaca*, but examination of the lectotype of *H. touchei* and additional material from Japan, Korea and China (Hebei, Beijing, Tianjin, and Fujian) in the collection of Zoological Institute, St.Petersburg, has shown that *H. touchei* is conspecific and consubspecific with *H. lativentris*. The male genital segment of *H. touchei* figured by Ahmad (from a specimen collected in Tonkin, i.e. N Vietnam) is strongly dissimilar to that of both *H. opaca* and *H. lativentris* and definitely belongs to a separate species.

Kiritshenko (1916: 113) placed *H. lativentris* in the subgenus *Microcolpura* Breddin, 1900 and was followed by other authors (Blute, 1936; Brailovsky & Barrera, 2002). However, this species does not possess characteristic features of *Microcolpura* (yellow basal part of hind femur; short and adpressed pubescence of pronotum; almost flat dorsally and elongate, not quadrate head; long rostrum usually extending beyond the posterior border of metasternum; complex, trito pentalobulate posteroventral edge of the male genital segment; anterior pronotal angles not produced like small conical teeth); accordingly, *H. lativentris* should be removed from this subgenus.

Hygia obscura (Dallas, 1852)

Lybas obscurus Dallas, 1852: 463.

H. obscura was described (in Lybas) from two specimens ("a. Java. From the East India Company Collection. b. Corea. Presented by Capt. Sir Eduard Belcher, R.N."), both retained in the collection of the British Museum (Natural History) at least until 1871 (Walker, 1871). No lectotype is designated. Further records of the species are from the Oriental Region (India to Sulawesi). According to the figure of the head published by Dallas, each gena of *H. obscura* bears a distinct tooth. This character has been used by Breddin (1900) to separate *H. obscura* and some related species, but it does not occur in either of the two Korean species. In addition, the rostrum of H. obscura reaches the 3rd abdominal segment, according to Dallas's description of the genus Lybas, which does not fit any of the Korean species. Hence, the syntype from Korea is either mislabelled or not conspecific with the syntype from Java, on which the current interpretation of the species is based. Wu (1935) listed H. obscura from "China", but neither cited an exact locality nor included a reference to a record from China: we consider this citation as erroneous.

Acknowledgements

The authors are thankful to Dr. Th.J. Henry (Washington, D.C., USA) for providing the types of *Pachycephalus opacus* Uhler.

References

- Ahmad, I. 1969. Reconsideration of the systematic position of *Hygia* Uhlar [sic] 1861 (Hemiptera, Coreidae), with description of a new species from Japan. *Paki*stan J. Zool., 1(1): 65-76.
- Blöte, H.C. 1936. Catalogue of the Coreidae in the Rijksmuseum van Natuurlijke Historie. Part III. Coreinae, second part. Zool. Mededeel. (Leiden), 19: 22-66.
- Brailovsky, H. & Barrera, E. 2002. Redescription of the subgenus *Microcolpura* Breddin, 1900 of the genus *Hygia* Uhler, 1861 (Hemiptera: Heteroptera: Coreidae: Colpurini), with description of five new species. *Pol. Pismo entomol.*, 71: 211-223.
- Breddin, G. 1900. Materiae ad cognitionem subfamiliae Pachycephalini (Lybantini olim.) ex Hemipteris-Heteropteris, Fam. Coreidae. *Rev. Entomol.*, 19: 194-217.
- Dallas, W.S. 1852. List of the specimens of the hemipterous insects in the collection of the British Museum, 2: 369-592. London.
- Distant, W.L. 1901. Rhynchotal notes. VIII. Heteroptera: Fam. Coreidae. Ann. Mag. natur. Hist. (7), 7: 6-22.
- Kerzhner, I.M. & Jansson, A. 1985. The type-specimens of Heteroptera described by V. Motschulsky. Ann. entomol. Fenn., 51: 33-45.
- Kiritshenko, A.N. 1916. Coreidae: Coreinae. Fauna Rossii i sopredel'nykh stran, Nasekomye poluzhestkokrylye (Insecta, Hemiptera), 6(2). Petrograd. iv + 395 p. (In Russian, with Latin diagnoses).
- Lee, C.E. & Kwon, Y.J. 1991. Annotated check list of Hemiptera from Korea. Part. IV. Pentatomorpha 1 (excluding Pentatomidae). *Nature and Life*, 21(1): 39-61.
- Miyamoto, S. & Yasunaga, T. 1989. Hemiptera, Heteroptera. In: Hirashima, Y. (Ed.). A check list of Japanese Insects, 1: 151-188. (In Japanese).
- Motschulsky, V. 1866. Catalogue des insects resus du Japon. Bull. Soc. Imp. Natur. Moscou, 39(1): 163-200.
- Uhler, P.R. 1860. Hemiptera of the North Pacific Exploring Expedition under Com'rs Rodgers and Ringgold. Proc. Acad. natur. Sci. Phila., 12: 221-231.
- Walker, F. 1871. Catalogue of the specimens of Hemiptera Heteroptera in the collection of the British Museum, 4. London. 211 p.
- Wu, C.F. 1935. Catalogus insectorum sinensium (Catalogue of Chinese insects), 2. Peiping: Fan Memor. Inst. 634 p.

Received 1 August 2003