

**LECTOTYPE DESIGNATIONS AND TAXONOMIC NOTES ON
P. R. UHLER'S JAPANESE CERCOPOIDEA (HOMOPTERA) IN
THE U.S. NATIONAL MUSEUM OF NATURAL HISTORY**

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Abstract.—The type series of eight species of Japanese Cercopoidea described by P. R. Uhler in the National Museum of Natural History, Washington D.C., were examined and lectotypes and paralectotypes are newly designated. Syntypes of four of these Uhler species found in the Natural History Museum, London, are also documented. *Aphrophora impressa* Metcalf & Horton is placed as a junior synonym of *Aphrophora flavipes* Uhler.

This paper is written to stabilize the identities of eight species of Cercopoidea described by P. R. Uhler (1896) from Japan. The types are located in the National Museum of Natural History, Smithsonian Institution [formerly the US National Museum of Natural History], in Washington (USNM). They were loaned to the writer through the kindness of Dr. Richard C. Froeschner of that museum.

Part of the type series of four of these Uhler species were also found and examined in the Natural History Museum, London (BMNH). The depositories of these syntypes were never mentioned in any publication.

The list of types is arranged alphabetically by family, genera within each family and by species within each genus in their currently used status and combination. For each species, information is presented in the following sequence: species name, original generic combination, author, date, page reference, and subsequent combination or status. To document the status of the syntypes, label data associated with each syntype were recorded exactly by the following format: (1), (2), (3), etc., indicating the sequence of labels on the pin from top to bottom. Lastly, my hand printed red lectotype or yellow paralectotype label is attached to each specimen so designated.

APHROPHORIDAE

Aphrophora flavipes Uhler

flavipes, *Aphrophora*, Uhler, 1896:289; *Tilophora flavipes*, Matsumura, 1942:88.
= *Aphrophora impressa* Metcalf & Horton, 1934:415, pl. 43, figs. 143, 144; Wu, 1935:154; Metcalf, 1962:463. Holotype m, China (USNM) [examined]. **Syn. nov.**

Lectotype m, by present designation, (1) Japan, Mitsukuri; (2) 25,7,19, Gifu [In Japanese]; (3) [red square label] Type, No. 3137, U.S.N.M.

Paralectotypes 1m, 2f, by present designation, same data as lectotype.

Discussion. Matsumura (1942) established the new genus *Tilophora* for *Aphrophora flavipes* Uhler. *Tilophora* was synonymized with *Aphrophora* by Nast (1972) and the original combination *Aphrophora flavipes* was reinstated by Liang (1998).

The direct comparison of the male lectotype of *Aphrophora flavipes* Uhler and the male holotype of the *Aphrophora impressa* Metcalf & Horton clearly shows that the two species are conspecific, *impressa* being the junior synonym.

Aphrophora intermedia Uhler

intermedia, *Aphrophora*, Uhler, 1896:288; *Obiphora intermedia*, Matsumura, 1942:63.

Lectotype m, by present designation, (1) [JAPAN]: [underside] Mt. Ibuki [In Japanese], 25.7.29, f; (2) [red square label] Type, No. 3136, U.S.N.M.

Paralectotypes 1m, 1f, by present designation, [JAPAN]: same data as lectotype.

Paralectotype 1f, by present designation, (1) [JAPAN]: [underside] Mt. Ibuki [In Japanese], 25.8.0, f; (2) [red square label] Type, No. 3136, U.S.N.M.

Discussion. Matsumura (1942) erected the new genus *Obiphora* for *intermedia* (type species) and five other species. *Obiphora* was synonymized with *Aphrophora* by Nast (1972) and the original combination *Aphrophora intermedia* was reinstated by Liang (1998).

Aphrophora major Uhler

major, *Aphrophora*, Uhler, 1896:287; *Yezophora major*, Matsumura, 1942:97; *Europhora major*, China, 1951:279.

Paralectotypes 2m, 2f, presently labelled (1) [JAPAN]: [underside] Mt. Ibuki [In Japanese], 25.vii.1829; (2) U.S.N.M. Type No. 3134.

Paralectotypes 3f, presently labelled (1) [JAPAN]: [underside] Mt. Ibuki [In Japanese], 25.viii.[?]; (2) U.S.N.M. Type No. 3134.

Discussion. The lectotype male and three paralectotypes (two males and one female) of this species were designated by Ushijima (1981:217).

Originally described in *Aphrophora*, *major* was subsequently placed in *Yezophora* Matsumura and *Europhora* Matsumura, by Matsumura (1942) and China (1951), respectively. *Yezophora* and *Europhora* were placed in synonymy with *Aphrophora* by Kwon & Lee (1979) and Nast (1972), respectively. Liang (1998) reinstated the original combination *Aphrophora major*.

Aphrophora obliqua Uhler

obliqua, *Aphrophora*, Uhler, 1896:288; *Trigophora obliqua*, Matsumura, 1942:92.

Lectotype m, by present designation, (1) [JAPAN]: [underside] 25.7.29, Mt. Ibuki [In Japanese]; (2) [red label] Lectotypus, *Aphrophora obliqua* Uhl., Anufriev design.; (3) [red square label] Type, No. 3135, U.S.N.M.; (4) *APHROPHORA OBLIQUA* Uhler COTYPE.

Paralectotypes 2m, by present designation, (1) [JAPAN]: [underside] Mt. Ibuki [In Japanese], 25.8.0; (2) [red square label] Type, No. 3135, U.S.N.M.

Paralectotype 1f, by present designation, same data as lectotype;

Paralectotype 1m, by present designation, (1) [red square label] Type No. 3135 U.S.N.M.; (2) Japan: Mt. Ibuki, viii.1892, Dr. K. Mitzukuri; Kirkaldy Coll., Brit. Mus. 1912-513; [Uhler's handwriting] *Aphrophora obliqua* Uhl. (BMNH).

Discussion. In the USNM, there is one male syntype with a red lectotype label that was attached by A. G. Anufriev. However, Anufriev has not published the formal designation. The lectotype is here formally designated.

Matsumura (1942) transferred *obliqua* from *Aphrophora* to *Trigophora* Matsumura. *Trigophora* was synonymized with *Aphrophora* by China (1951) and the original combination *Aphrophora obliqua* was reinstated by Liang (1998).

Lepyronia grossa Uhler

grossa, *Lepyronia*, Uhler, 1896:285; *L. coleoprata grossa*, Matsumura, 1903:23, fig. 4.

Lectotype m, by present designation, (1) [JAPAN]: [underside] 25,7,29, Mt. Ibuki [In Japanese] m; (2) [Uhler's handwriting] *Lepyronia grossa* Uhler; (3) [red square label] Type No. 3133, U.S.N.M.

Paralectotypes 7m, 2f, by present designation, (1) [JAPAN]: [underside] 25,7,29, Mt. Ibuki [In Japanese] m/f; (2) [red square label] Type No. 3133, U.S.N.M.

Paralectotypes 3m, by present designation, (1) [JAPAN]: [underside] 25,8,0, Mt. Ibuki [In Japanese] m; (2) [red square label] Type No. 3133, U.S.N.M.

Paralectotype 1f, by present designation, (1) [JAPAN]: [underside] 25,7,18, Ibuki [In Japanese]; (2) [red square label] Type No. 3133, U.S.N.M.

Paralectotypes 4f, by present designation, (1) Japan, Mitsukuri; (2) 25,7,29, Mt. Ibuki [In Japanese] f; (3) [red square label] Type No. 3133, U.S.N.M.

Paralectotypes 4f, by present designation, (1) Japan, Mitsukuri; (2) 25,8,0, Mt. Ibuki [In Japanese] f; (3) [red square label] Type No. 3133, U.S.N.M.

Paralectotype 1f, by present designation, (1) Japan, Mitsukuri; (2) 25,7,18, Ibuki [In Japanese]; (3) [red square label] Type No. 3133, U.S.N.M.

Paralectotype 1m, by present designation, (1) [red square label] Type No. 3133 U.S.N.M.; (2) [underside] 25,7,29., Mt. Ibuki [In Japanese] m; (3) Japan: Mt. Ibuki, 29.vii.1892, Dr. K. Mitzukuri; (4) [Uhler's handwriting] *Lepyronia grossa* Uhl.; (5) [underside] Kirkaldy Coll., Brit. Mus. 1912-513 (BMNH).

Peuceptyelus indentatus (Uhler)

indentata, *Aphrophora*, Uhler, 1896:290; *Peuceptyelus indentatus*, Matsumura, 1903:45.

Lectotype f, by present designation, (1) [JAPAN]: [underside] Mt. Ibuki [In Japanese], 25,10,0, f; (2) [Uhler's handwriting] *Aphrophora indentata* Uhler; (3) [red square label] Type No. 3132, U.S.N.M.

Paralectotype 1m, by present designation, (1) [red square label] Type No. 3132 U.S.N.M.; (2) [underside] 25,10,0., Mt. Ibuki [In Japanese] m; (3) Japan: Mt. Ibuki, x.1892, Dr. K. Mitzukuri; (4) [Uhler's handwriting] *Aphrophora indentata* Uhl.; (5) [underside] Kirkaldy Coll., Brit. Mus. 1912-513 (BMNH).

Discussion. Matsumura (1903) correctly moved this species from *Aphrophora* to *Peuceptyelus*.

Philagra albinotata Uhler

albinotata, *Philagra*, Uhler, 1896:286.

Lectotype m, by present designation, (1) [JAPAN]: [underside] 25,8,0 Mt. Ibuki [In Japanese] m; (2) [red square label] Type No. 3138, U.S.N.M.

Paralectotype 1m, by present designation, (1) [underside] 25,8,0, Mt. Ibuki [In Japanese] f[sic]; (2) [red square label] Type No. 3138, U.S.N.M.

Paralectotypes 1m, 2f, by present designation, (1) [underside] 25,7,29, Mt. Ibuki [In Japanese] m/f; (2) [red square label] Type No. 3138, U.S.N.M.

Paralectotype 1m, by present designation, (1) [small rectangular red label] Type No. 3138 U.S.N.M.; (2) [underside] 25,8,0 Mt. Ibuki [In Japanese], m; (3) Japan: Mt. Ibuki, VIII.1892, Dr. K. Mitzukuri; (4) [underside] Kirkaldy Coll., Brit. Mus. 1912–513; (5) [Uhler's handwriting] *Philagra albinotata* Uhl. (BMNH).

CERCOPIDAE

Eoscarta assimilis (Uhler)

assimilis, *Monecphora*, Uhler, 1896:285; *Rhinaulax assimilis*, Matsumura, 1903:18, fig. 1; *Eoscarta (Rhinaulax) assimilis*, Matsumura, 1916:418; *Eoscartopsis assimilis*, Matsumura, 1940:70; *Eoscarta (Euthiaeoscarta) assimilis*, Lallemand, 1949:46, 47; *Paracercopis assimilis*, Kwon & Lee, 1979:10.

Paralectotype 1m, presently labelled (1) [JAPAN]: [underside] 25,7,18, Yigiki [In Japanese]; (2) [red square label] Type No. 3139, U.S.N.M.; (3) [Uhler's handwriting] *Monecphora assimilis* Uhler.

Paralectotypes 1m, 3f, presently labelled (1) [JAPAN]: [underside] 25,7,18, Yigiki [In Japanese]; (2) [red square label] Type No. 3139, U.S.N.M.

Discussion. The lectotype male and six paralectotypes (two males and four females) of this species, designated by Liang (1996: 107), are in the USNM.

This widespread species has been fraught with generic placement problems. Uhler (1896) originally described *assimilis* under *Monecphora*. Matsumura (1916) first transferred this species to *Eoscarta* and later in 1940 established the new genus *Eoscartopsis* for it and another species. Kwon and Lee (1979) transferred *assimilis* to *Paracercopis* and synonymized *Eoscartopsis* Matsumura with *Paracercopis* Schmidt. Anufriev and Emeljanov (1988) did not accept Kwon and Lee's (1979) action instead following Matsumura's (1940) treatment. Liang (1996) correctly returned this species to the genus *Eoscarta* based on the hindwing venation.

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