

Synonymic notes on three Japanese caddisfly species (Trichoptera: Calamoceratidae, Odontoceridae)

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Key words: Synonym, Trichoptera, Calamoceratidae, Odontoceridae, Japan.

Through the course of our bibliographical investigations on some Japanese calamoceratid caddisflies, we recognized the following synonyms.

Ganonema uchidai Iwata, 1930

Ganonema uchidai Iwata, February 1930, 61–62, 64–65, larva, case. Made invalid as a junior synonym by Tanida, 2005. Here reinstated.

Asotocerus nigripennis Kuwayama, November 1930, 53–56, male, female. Here made invalid as a junior synonym.

Ganonema nigripenne: Fischer, 1972, 48; Tanida, 2005, 554–555, larva, case.

Remarks. Tanida (2005) synonymized *Ganonema uchidai* with *Asotocerus nigripennis* (as *Ganonema nigripenne*), both described in the same year, and treated *G. nigripenne* as the valid name. However, the article (Kuwayama, 1930) in which *Asotocerus nigripennis* described was published in November 1930. The date is specified from the footnote of the first page of Kuwayama's paper. On the other hand, the article (Iwata, 1930) in which *G. uchidai* described was published in an issue (No. 496) of 'Zoological Magazine, Vol. 42' and the date of the publication is specified as February 15, 1930 from the note on the front cover of this issue. Thus, *G. nigripenne* is a junior subjective synonym of *G. uchidai*.

Georgium japonicum (Ulmer, 1905)

Rhabdoceras japonicum Ulmer, 1905, 32–33, pl. 1, male; Tsuda, 1954, 27; 1958, 170–171.

Anabolia kawamurai Iwata, 1927, 249–250, pl. 10, larva. Synonymized by Tsuda (1954).

Ganonema japonicum Iwata, 1928, 238–241, larva, case (spelled *G. japonica*). Synonymized by Tsuda (1958). Removed from the synonymy by Tanida (2005) (as *Georgium*). Here synonymized again.

Georgium japonicum (Ulmer, 1905): Fischer, 1964, 106; Dudgeon, 1999, 86–87; Tanida, 2005, 554.

Georgium japonicum (Iwata, 1928): Tanida, 2005, 554 (spelled *G. japonica*).

Remarks. Although Tsuda (1958) synonymized *Ganonema japonicum* Iwata, 1928 with *Rhabdoceras japonicum* Ulmer, 1905, Tanida (2005) removed the former from the synonymy with the latter because of the necessity to revise the specific status of the two names. However, the description and illustrations of *Ganonema japonicum* provided by Iwata (1928) agree well with the larva of *Georgium japonicum* (Ulmer, 1905) illustrated by Dudgeon (1999). Since no related species belonging to this genus has not been recorded from Japanese Islands, we follow the synonymy proposed by Tsuda (1958).

The specific name of *Ganonema japonicum* Iwata, 1928, was spelled "japonica" in the original description. It should have been changed to "japonicum" as a Latin adjective agreeing in gender with the generic name (neuter). In addition, when Tanida (2005) placed *Ganonema japonicum* Iwata, 1928, in *Georgium*, the name became a junior secondary homonym of *Georgium japonicum* (Ulmer, 1905), and the name should have been replaced by a new name. We now synonymize the name with *Georgium japonicum* (Ulmer, 1905) and the replacement name be-

comes unnecessary.

***Perissoneura paradoxa* McLachlan, 1871**

Perissoneura paradoxa McLachlan, 1871, 120–121, pl. 2: Kuwayama, 1972, 78–79.

Heteroplectron yamaguchii Tsuda, 1942, 283–284, male. **Syn. nov.**

Remarks. Tsuda (1942) described *Heteroplectron yamaguchii* as a member of the family Calamoceratidae based on three males collected from Takaragaike, Kyoto. Although the type series of *H. yamaguchii* were mostly lost except for the right wings of one male with the label (*Heteroplectron yamaguchii* ♂ n. sp. Takaragaike, 3! (31?) V. (19)36), his illustrations of male genitalia coincided with those of *Perissoneura paradoxa* McLachlan, 1871 (Odontoceridae). *Perissoneura paradoxa* is one of the most beautiful caddisflies in Japan often having a remarkable marking on each wing. Kuwayama (1972) described four types of variations in male wings (non-flecked, brownish gray flecked, white flecked, yellow flecked). Tsuda's description and the wings suggest that he described *H. yamaguchii* based on males without any markings on their wings. The preparation of the wings is now deposited in Laboratory of Ecology and Systematics, Graduate School of Science, Osaka Prefecture University.

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日本産トビケラ目 3 種の分類学的整理

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日本産トビケラ目アシエダトビケラ科に所属する 3 種のトビケラについて検討を行い、以下のように整理した。

1. 同一年に記載された *Asotocerus nigripennis* Kuwayama, 1930 と *Ganonema uchidai* Iwata, 1930 は、谷田 (2005)によって後者が新参シノニムとして扱われたが、出版の日付が早い後者を有効名として採用した。
2. *Ganonema japonicum* Iwata, 1928 は、津田 (1958)によって *Rhabdoceras japonicum* (= *Georgium japonicum*) の新参シノニムとされたが、谷田 (2005)は分類学的再検討の必要性を指摘するとともに属名を *Georgium* とした。この結果本種の学名は新参二次ホモニムとなったが、津田 (1958)の新参シノニムとしての扱いを妥当と認めた。
3. *Heteroplectron yamaguchii* Tsuda, 1942 を、*Perissoneura paradoxa* McLachlan, 1871 (フトヒゲトビケラ科) の新参シノニムとした。

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