

New Synonyms of *Sarimodes taimokko* Matsumura, 1916 (Hemiptera, Fulgoroidea, Issidae)

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ABSTRACT

Paravindilis Yang, 1994 is placed in synonymy under *Sarimodes* Matsumura, 1916 and *Paravindilis taiwana* Yang, 1994 and *Pterilia formosana* Kato, 1933 are placed in synonymy under *Sarimodes taimokko* Matsumura, 1916. *Pterilia taiwanensis* Kato, 1933 is considered as *nomen nudum*.

Key words: Issini, *Paravindilis taiwana*, *Pterilia formosana*, *P. taiwanensis*, Taiwan

Chan and Yang (1994) when revising the issid fauna of Taiwan listed three species within others described by Matsumura and Kato – *Sarimodes taimokko* Matsumura, 1916, *Pterilia formosana* Kato, 1933, and *Pterilia taiwanensis* Kato, 1933, without studying any material of these species. Later Gnezdilov and Wilson (2006) showed that the genus *Pterilia* Stål, 1859 belongs to the family Caliscelidae Amyot et Serville, 1843 and indicated that *P. formosana* Kato and *P. taiwanensis* Kato, described from Taiwan in the family Issidae Spinola, 1839, do not belong to *Pterilia*. However, they were not able to place these Kato's species into any other genus, and the taxonomic positions of these species, as well as *S. taimokko*, remained unclear up to now.

During our study the holotype male of *P. formosana* was examined (Figs. 1-4) and compared with the photos of the holotype female of *S. taimokko* (Figs. 5-6), which were available on the web-site of the Hokkaido University. This comparison showed that these two species are very likely to be identical and thus the names are considered synonyms. Additionally it became clear that *Paravindilis taiwana* Yang, 1994 (in Chan and Yang, 1994, fig. 38) is another junior synonym of *S. taimokko* Matsumura, 1916. Three mentioned species are characterized by the same following features: metope (frons) with weak (distinct only apically) median carina and indistinct sublateral carinae (Fig. 4), fore wings strongly convex at the point of radius vein bifurcation (Figs. 1, 2) and almost not narrowing apically in

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Figs. 1-4. *Pterilia formosana* Kato, 1933, holotype, male. 1, dorsal view; 2, dorso-lateral view; 3, lateral view; 4, frontal view. Total length of the specimen-7.9 mm, width of the frons-1.3 mm. The photos were taken by digital camera Canon 50D and Macro Photo Lens MP-E 65 mm.

lateral view (Fig. 3), with dark brown or black large patches, radius and cubitus anterior each with two branches, median with three branches.

Family Issidae Spinola, 1839
 Subfamily Issinae Spinola, 1839
 Tribe Issini Spinola, 1839

Genus ***Sarimodes* Matsumura, 1916**

Sarimodes Matsumura, 1916: 115. Type species: *Sarimodes taimokko* Matsumura, 1916.

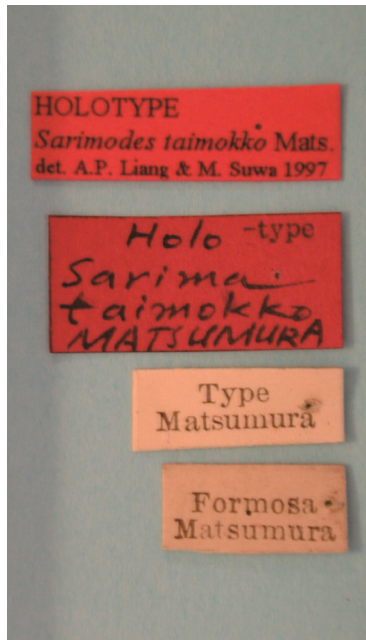
Paravindilis Yang, 1994: 94 (in Chan and Yang, 1994) (type species: *Paravindilis taiwana* Yang, 1994), **syn. n.**



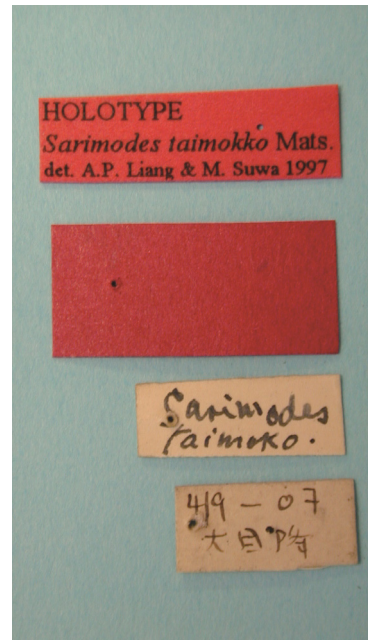
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Figs. 5-8. *Sarimodes taimokko* Matsumura, 1916, holotype, female. 5, dorsal view; 6, lateral view; 7-8, labels.

***Sarimodes taimokko* Matsumura, 1916**

Sarimodes taimokko Matsumura, 1916: 115.

Pterilia formosana Kato, 1933a: 462, pl. 14, fig. 3, **syn. n.**

Pterilia taiwanensis Kato, 1933b: pl. 13, fig. 15, *nomen nudum*.

Paravindilis taiwana Yang, 1994: 95 (in Chan and Yang, 1994), **syn. n.**

Material examined. 1 ♂ (*Pterilia formosana* holotype), "Karenko, Formosa,

VII. 1919, Col. M. Kato", "TYPE No. 247, M. Kato Coll.", deposited in the Kato Collection, Museum of University of Tokyo, Japan.

Kato (1933a) stated that the type specimen of *Pterilia formosana* is a female. However there is only a single male corresponding to the original description in his collection. Apparently Kato misidentified (or mistyped) the sex of the specimen.

Discussion

The changes listed above confirm that the genus *Pterilia* was erroneously recorded from Taiwan as it was expected by Gnezdilov and Wilson (2006).

When first published in Kato's book "Three Colour Illustrated Insects of Japan" (1933b), *Pterilia taiwanensis* Kato was shown with only a picture of the type specimen and the collecting data but without character description or diagnosis. The species name is therefore unavailable under the ICZN Code and no subsequent authors make the name available. The pictured specimen by Kato (1933b) is apparently *Pterilia formosana* described by him (Kato, 1933a) in the "Entomological World". Probably Kato confused the species name "*taiwanensis*" with the meaning "from Taiwan" – *formosana* / *taiwanensis*. No type specimen of *Pterilia taiwanensis* is found in Kato Collection. Type localities for both species are the same.

Acknowledgments

We thank Dr. Masaya Yago (Museum of University of Tokyo, Japan) for his permission to study Kato Collection and Prof. Dr. Hannelore Hoch (Berlin, Germany) for her valuable comments on the manuscript. The photos of the holotype of *Sarimodes taimokko* are published under the permission by Dr. Masahiro Ohara and Dr. Kazunori Yoshizawa (Hokkaido University). The first author was financially supported by the Alexander von Humboldt Stiftung (Bonn, Germany).

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Received: May 31, 2013

Accepted: June 19, 2013

Sarimodes taimokko Matsumura, 1916 之新同物異名 (半翅目：飛蝨總科：圓飛蝨科)

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摘 要

本文處理 *Paravindilis* Yang, 1994 為 *Sarimodes* Matsumura, 1916 之同物異名，*Paravindilis taiwana* Yang, 1994 和 *Pterilia formosana* Kato, 1933 為 *Sarimodes taimokko* Matsumura, 1916 之同物異名。 *Pterilia taiwanensis* Kato 1933 則被視為是裸名。

關鍵詞：圓飛蝨族、*Paravindilis taiwana*、*Pterilia formosana*、*P. taiwanensis*、臺灣。

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