

On a new subspecies of *Tamamushia virida* Miwa and Chujo, 1935 from the Ogasawara Islands

Sadahiro OHMOMO and Haruki KARUBE

Abstract. A new subspecies is described under the name of *Tamamushia virida fujitai* subsp. nov. from Muko-jima Is., Bonin Iss., Japan.

In the early June of 2003, the second author had an opportunity to investigate of Muko-jima Is. of northern part of the Ogasawara Islands, Japan. Then his friends Dr. Taku Fujita of plant student collected a female of a surprising buprestid species. Two weeks later, the second author had a second chance to visit for the same Island and after careful research, succeeded in collecting some additional specimens. By the close examination, it was morphologically judged that this species was contained in *Tamamushia virida* Miwa and Chujo, 1935. The body coloration was stable among 22 specimens examined but entirely different from *T. virida*. Therefore, we will describe this species under the name of *T. virida fujitai* subsp. nov.

We wish to express our sincere thanks to Drs. Hidetoshi Kato and Taku Fujita of Makino Herbarium, Graduate School of Science, Tokyo Metropolitan University and Mr. Hideo Maruoka of Japan Wildlife Research Center, Drs. Kazuo Horikosi, Makoto Inaba and Hajime Suzuki of Institute of Ogasawaraology, for their kind help in the investigational work. Photographs inserted in this paper are taken by Dr. Yoshio Hirai, National Institute of Agrobiological Resources, Tsukuba-shi, Ibaraki-ken, Japan.

The holotype is deposited in the collection of the Kanagawa Prefecture Museum of Natural History (KPMNH), Odawara-shi, Kanagawa-ken, Japan.

Tamamushia virida fujitai subsp. nov.
(Fig. 1)

Sadahiro Ohmomo
Sumiyoshi 1-12-4, Ami-machi, Inashiki-gun, Ibaraki-ken 300-1151, Japan
Haruki Karube
Kanagawa Prefectural Museum of Natural History
499 Iryuda, Odawara, Kanagawa 250-0031, Japan

Type series. Holotype: ♂, 26.VI. 2003, Muko-jima Island, Ogasawara Islands, Japan, H. Karube leg. Paratypes: 1 ♀, 9. VI. 2003, same locality as the holotype, T. Fujita leg.; 7 ♂ 14 ♀, KPMNH, the same data as for the holotype.

Description. Size 16.2 - 17.0 x 5.4 - 5.6 mm in male and 18.0 - 21.0 x 6.6 - 7.0 mm in female. Holotype: 17.0 mm in length and 5.6 mm in width. Body rather robust, blackish purple with a tinge of golden green, especially in pronotum. Antennae metallic green in 1st segment, reddish brown in 2nd to 4th segments and blackish brown in 5th to 11th segments. Legs blackish purple except for tarsi and claws which are reddish brown. Pronotum widest at the base, with distinct and wide carinae along the lateral margins; surface with a shallow but distinct median groove; disc shining, irregularly and finely rugosopunctate, except along the lateral sides where the punctures are larger and dense. Elytra widest at the middle and 2.1 times as long as wide; base wider than the posterior margin of pronotum; sides emarginated at the basal three-fifths and then obviously dentate to the apices which are spinal; disc with distinct nine costae; surface roughly and densely latticed.

Sexual dimorphism slightly expressed, last abdominal sternite triangularly emarginated at the apex, while in female, it is rounded.

Distribution: Muko-jima Island, Ogasawara Islands, Tokyo, Japan.

Host plant: *Rhaphiolepis indica* var. *integerrima* (dead blanch).

Adult food plant: *Syzygium cleyerifolium* (Yatabe) Makino

Etymology: This subspecific name is dedicated to Dr. Taku Fujita, Tokyo Metropolitan University, who was a first collector of this new subspecies.



Fig. 1. *Tamamushia virida fujitai* subsp. nov.

Remarks: This new subspecies is easily separable from the nominotypical subspecies (fig. 2) from Haha-jima Is. and Chichi-jima Is., Ogasawara Islands, Japan, in body coloration.

The changing of body coloration among near habitants, especially in island, is known in *Chrysochroa* species such as *C. fulminans* (Fabricious, 1787) and *C. variabilis* Deyrolle, 1864. The body coloration of *C. f. vethiana* Obenberger, 1926 from Babi Island, Indonesia, *C. f. nishiyamai* Y. Kurosawa, 1990 from Batu Island, Indonesia, and *C. f. nagaii* Y. Kurosawa, 1990 from Tarempa island of the Anambas Islands, Indonesia, are blackish purple, reddish purple and black, respectively, while in the nominotypical subspecies from other localities, it is golden green. In the case of *C. variabilis*, the elytral coloration of *C. v. coerulea* Kerremans, 1903 from Mandioli Island, Indonesia, and *C. v. funebris* Thery, 1897 from Haluku Island, Indonesia, are reddish purple and bluish purple, respectively, while in the nominotypical subspecies from Bachan Island, Indonesia, it is golden green.

For Japanese buprestid species, the changing of body coloration among subspecies is also known in *Chalcophora japonica* (Gory, 1841). Body coloration of only subspecies *oshimana* Schönfeldt, 1890 from Amami-oshima Island and Okinawa Island, Ryukyu Islands, is exceptionally beautiful golden green, though the other species of the genus *Chalcophora* including the nominotypical subspecies and other subspecies of *C. japonica* is dark brown. The obvious and impressive changing of body coloration in *Tanamushia virida* is the second example of Japanese buprestid species.



Fig. 2. *Tamamushia virida virida* Miwa and Chujo

References

- Deyrolle, H. 1864. Description des Buprestides de la Malaisie recueillies par M. Wallace. *Annales de la Société Entomologique de Belgique*, 8:1-312.
- Fabricius, J.C. 1787. *Mantissa insectorum sistens eorum species nuper detectas adiectis characteribus genericis, differentiis specificis, emendationibus, observationibus*. C. G. Proft, Hafninae, 1, : 1-348.
- Gory, H. L. 1841. *Histoire naturelle et iconographie des insectes coléoptères. Supplément aux buprestids. Tome 4, genre Buprestis*. (Livrasons 43-52).
- Kerremans, Ch. 1903. *Coleoptera, Fam. Buprestidae*. In: P. Wytsman (ed.), *Genera Insectorum, Fasc. 12a*, pp.1-48. Verteneuil et Desmet, Bruxelles.
- Kurosawa, Y. 1990. New buprestid taxa from tropical Asia (1). *Elytra*, Tokyo, 18(2):226.
- Miwa, Y. and Chujo, M. 1935. Some buprestids from the Japanese Empire. *The Entomological World*, 3(17):270-282.
- Obenberger, J. 1926. *Buprestidae I*. In: W. Junk and S. Schlenkling (eds.), *Coleopterorum Catalogus*, (84): 1-212.
- Schönfeldt, H. 1890. Ein Beitrag zur Coleopteren fauna der Liu-Kiu-Inseln. *Entomologischen Nachrichten Berlin*, (11):168-175.
- Thery, A. 1897. Descriptions de Buprestides nouveaux et remarques diverses. *Annales de la Société Entomologique de France*, 1897:364-369.