

Notes on the Correct Spelling of an Endemic Stag Beetle, *Prosopocoilus motschulskii* (Waterhouse, 1869) (Coleoptera: Lucanidae) of Taiwan

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Abstract. *Prosopocoilus motschulskii* (Waterhouse, 1869) is an endemic stag beetle of Taiwan. However, its scientific name has been controversial owing to the incorrect spellings after the original publication in 1869. The present article demonstrates and clarifies some incorrect spellings after Waterhouse. Based on the International Code of Zoological Nomenclature (ICZN, 1999), the specific name “*motschulskii*” should be fixed and accepted as the formal spelling of this stag beetle.

Key words: Stag beetle, *Prosopocoilus*, incorrect spelling, ICZN

Prosopocoilus motschulskii is an endemic stag beetle which predominately distributes from plain to low hills in Northern and Western Taiwan (Chang, 2006; Huang, 2016). Its ecological habit is closely related to the Chinese tallow-tree, *Triadica sebifera* (L.) Small (Huang, 2016). Extraordinary mandible in male has received much attention by amateurs (Fig. 1). However, its specific name has been controversial after the initial publication in 1869.

Originally, Waterhouse (1869) described a new species, *Cladognathus motschulskii*, according to Parry’s specimen which was from Japan or Indian Archipelago. Subsequently, Boileau (1913) re-clarified the possible collecting source of the type specimen, based on the door sign of collecting place with “I. Formosa” and “Coll. Saunders Formosa”, which was more likely to be Taiwan. Simultaneously, the specific name was misspelled as “*motschulskyi*” and placed within the genus *Psalidoremus* Motschulsky, 1861 (Boileau, 1913), which was followed by Miwa (1927). However, Miwa (1932) returned to use the original spelling “*motschulskii*”. Mizunuma & Nagai (1994) published the illustrated handbook “The Lucanid Beetles of the World” including Taiwanese *P. motschulskii*, and yet, with two spellings of specific names, i.e. *motschulskii* and *motschulskyii*. Thereafter, the “Catalogue of Palaearctic Coleoptera vol. 3” also accepted the specific name “*motschulskyii*” (Löbl & Smetana, 2006; Löbl & Löbl, 2016). Fujita (2010) in “The Lucanid Beetles of the World” followed using *motschulskyii* as well. Until the more recent monograph “Stag beetles of China II”, Huang & Chen (2013) commented on the usage of specific name of *P. motschulskii* as follows: (1) the specific name “*motschulskii*” in Waterhouse (1869) was incorrect original spelling; (2) “*motschulskyii*” was incorrect subsequent spelling, e.g. Mizunuma & Nagai (1994) and Fujita (2010). Their usage of specific name was identical to Boileau (1913), i.e. “*motschulskyi*”. Moreover, the common illustrated handbook of Taiwanese Lucanidae used “*motschulskyii*” as well (Li, 2004; Chang, 2006; Huang, 2016). Apparently, the incorrect spelling of “*motschulskii*” occurred frequently. Thus, the spelling of this species is required to be corrected.

According to Article 32.5.1 in the International Code of Zoological Nomenclature (ICZN, 1999), it is necessary to propose definite evidence to prove the inadvertent error of a lapsus calami, a publisher’s or a copyist’s error. Incorrect latinization is not considered as inadvertent errors. Moreover, the Article 33.4 also mentioned that any change to the genitive ending of either “i” or “ii” by “ii” or “i” should be regarded as incorrect subsequent spelling. On the other hand, in the Article 58.2/58.14 has also defined that the variant spellings of species name with “ei, i, or y”/“i or ii” were considered identical, under the situation of homonym. Based on the above-mentioned situations, the subsequent variant spellings, i.e. “*motschulskyi*” and “*motschulskyii*”, could be regarded as identical to “*motschulskii*” (Waterhouse, 1869). All of the subsequent spellings of *P. motschulskii* should be corrected. Thus, the original spelling “*motschulskii*” is required to be fixed and considered as the only correct spelling, based on the ICZN, of Taiwanese endemic species “*Prosopocoilus motschulskii*”.



Figures 1. Dorsal view of *Prosopocoilus motschulskii* (Waterhouse, 1869). Scale bar: 10 mm.

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Reference

- Boileau, M.H. 1913. VII. Note sur Lucanides conservés dans les collections de l'Université d'Oxford et du British Museum. Transactions of the Entomological Society of London 1913: 213-272.
- Chang, Y.J. 2006. Stag beetles. Yuan-Liou Publisher, Taipei, Taiwan. 160 pp. (in Chinese)
- Fujita, H. 2010. The lucanid beetles of the world. Mushi-Sha, Tokyo, Japan. 473 pp. (in Japanese)
- Huang, H. & Chen, C.C. 2013. Stag beetles of China II. Formosa Ecological Company, New Taipei City, Taiwan. 716 pp.
- Huang, S.C. 2016. Diary of stag beetles. Mangrove Publisher, Taipei. 288 pp. (in Chinese)
- ICZN. 1999. International code of zoological nomenclature, 4th edition, adopted by the International Union of Biological Sciences. International Trust for Zoological Nomenclature, London, xxix + 306 pp.
- Li, H.Y. 2004. Taiwanese stag beetles. Kissnature Publisher, Taipei, Taiwan. 296 pp. (in Chinese)
- Löbl, I. & Smetana, A. 2006. Catalogue of Palaearctic Coleoptera, vol. 3. Apollo Books, Stenstrup. 690 pp.
- Löbl, I. & Löbl, D. 2016. Catalogue of Palaearctic Coleoptera, vol. 3. Apollo Books, Brill, Boston. 983 pp.
- Miwa, Y. 1927. A list of Japanese Lucanidae, with the description of one new species. Insecta Matsumurana 2: 25-31.
- Miwa, Y. 1932. A study on the lucanid-Coleoptera from the Japanese Empire 2. Transactions of the Natural History Society of Formosa 22: 87-97.
- Mizunuma, T. & Nagai, S. 1994. The lucanid beetles of the world. Mushi-sha, Tokyo, Japan. 339 pp. (in Japanese)
- Motschulsky, V. de. Insectes du Japon. Etudes Entomologiques 10: 3-24.
- Waterhouse, C.O. 1869. On a new genus and some new species of Coleoptera, belonging to the family Lucanidae. Transactions of the Entomological Society of London 1869: 13-20.

臺灣特有種高砂鋸锹形蟲 (鞘翅目：锹形蟲科) 之學名正確拼法短記

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摘要: 高砂鋸锹形蟲 *Prosopocoilus motschulskii* (Waterhouse, 1869) 為臺灣特有種的锹形蟲，然而其學名自 1869 年發表以來，持續有拼法上的爭議發生。本文舉例並釐清 Waterhouse 描記本種後所出現各種學名錯誤拼法，根據國際動物命名規約之規範，高砂鋸锹形蟲之種小名 “*motschulskii*” 應視為正式的學名拼法。

關鍵詞: 锹形蟲、鋸锹形蟲屬、不正確拼法、國際動物命名規約