

Case 3193***Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 (Insecta, Coleoptera): proposed conservation of usage by the designation of *C. sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema***

C.L. Bellamy

Plant Pest Diagnostics Lab, California Department of Food & Agriculture, 3294 Meadowview Road, Sacramento, California 95832, U.S.A.

(e-mail: cbellamy@cdfa.ca.gov)

Abstract. The purpose of this application is to conserve, under Article 70.2 of the Code, the usage of the buprestid (jewel beetle) generic names *Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 by the designation of *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema*. At present *C. sumptuosa* Laporte & Gory, 1835 is the valid type species of both genera. The name *Chrysodema* refers to a genus of 100 species found in the Australasian, Oriental and eastern Palaearctic regions and *Iridotaenia* refers to a genus comprised of 80 species from the tropical African, Australian and Oriental regions.

Keywords. Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Chrysodema*; *Iridotaenia*; *Chrysodema sumptuosa*; *Chrysodema sonnerati*; jewel beetles; Africa; Australasia; eastern Palaearctic; Oriental region.

1. Laporte & Gory (1835, p. 1) introduced the generic name *Chrysodema* including 33 nominal species and their diagnoses, descriptions and illustrations. The first two species listed were *C. sumptuosa* (p. 2) from Ind(es)–Or(ientales): Singapore and *C. sonnerati* (p. 3) from Indes–Orientales. *Chrysodema sumptuosa* was subsequently designated as the type species of *Chrysodema* by Duponchel (1843, p. 653).

2. The generic name *Iridotaenia* was introduced by Deyrolle (1864, p. 25) with a diagnosis, and a key to 11 nominal species. The first species listed was *Chrysodema sumptuosa* Laporte & Gory, 1835. Kurosawa (1982, p. 192) subsequently designated *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema* and (p. 188) designated *C. sumptuosa* as the type species of *Iridotaenia*, apparently unaware that Duponchel had designated it as the type species of *Chrysodema*. *Chrysodema sonnerati* has been included in *Chrysodema* since its original publication.

3. The composition of these two genera has varied over time, but almost all authors subsequent to Deyrolle (1864) have followed his use of the name *Iridotaenia* for the genus which includes *Chrysodema sumptuosa* (see, for example, Saunders, 1871, pp. 13–15; Kerremans, 1892, pp. 37–42; 1903, pp. 72–76; 1909, pp. 445–583; and Obenberger, 1926, pp. 125–135). The only exception was Gemminger & Harold (1869, p. 1356) who included both genera in *Chalcophora* Dejean, 1833. At present the name *Chrysodema* refers to a genus of 100 species found in the Australasian, Oriental and eastern Palaearctic regions and *Iridotaenia* refers to a genus comprised of 80 species from the tropical African, Australian and Oriental regions (for example

see Bellamy, 1985, 1986; Hołyński, 1993; and Volkovitsh, 2001). To apply the Principle of Priority would disturb accustomed usage of two generic names that have been accepted since Deyrolle (1864). Recognition of *Chrysodema sumptuosa* as the type species of *Chrysodema* would result in the loss of the name *Iridotaenia* as a junior objective synonym of *Chrysodema* under Article 61.3.3 of the Code. All species presently known by the name *Iridotaenia* would be called *Chrysodema* and all species presently known as *Chrysodema* would require a new generic name. This would cause considerable confusion. Recent publications in which the name *Chrysodema* has been used in the sense of *C. sonnerati* as the type species include Hołyński, 1994, 1997 and Bílý & Volkovitsh, 1996. Examples demonstrating the current usage of the name *Iridotaenia* are Tôyama, 1987 and Hołyński, 2001. The tribe name IRIDOTAENINI was introduced by Tôyama (1987, pp. 5–6) based on *Iridotaenia* Deyrolle, 1864.

4. The International Commission on Zoological Nomenclature is accordingly asked:

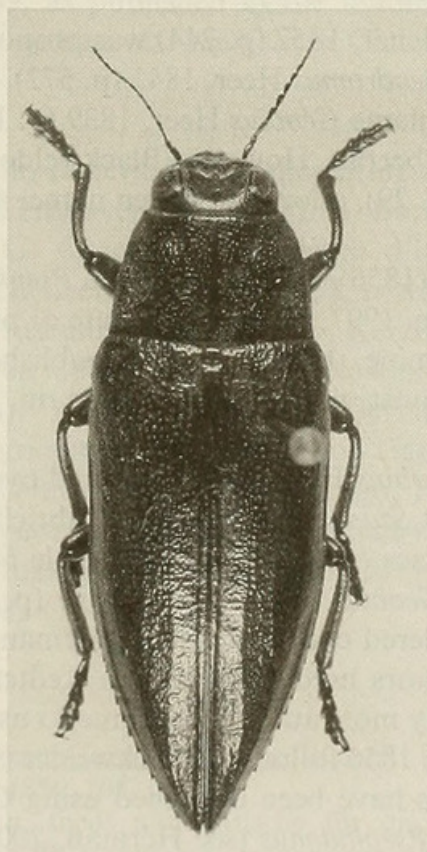
- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Chrysodema* Laporte & Gory, 1835 and to designate *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Chrysodema* Laporte & Gory, 1835 (gender: feminine), type species by designation in (1) above *Chrysodema sonnerati* Laporte & Gory, 1835;
 - (b) *Iridotaenia* Deyrolle, 1864 (gender: feminine), type species by designation by Kurosawa (1982) *Chrysodema sumptuosa* Laporte & Gory, 1835;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *sonnerati* Laporte & Gory, 1835, as published in the binomen *Chrysodema sonnerati* (specific name of the type species of *Chrysodema* Laporte & Gory, 1835);
 - (b) *sumptuosa* Laporte & Gory, 1835, as published in the binomen *Chrysodema sumptuosa* (specific name of the type species of *Iridotaenia* Deyrolle, 1864).

References

- Bellamy, C.L. 1985. A catalogue of the higher taxa of the family Buprestidae (Coleoptera). *Navorsinge van die Nasionale Museum, Bloemfontein*, 4(15): 405–472.
- Bellamy, C.L. 1986. The higher classification of Australian Buprestidae with the description of a new genus and species (Coleoptera). *Australian Journal of Zoology*, 34: 583–600.
- Bílý, S. & Volkovitsh, M.G. 1996. Revision, reclassification and larval morphology of the genus *Paratassa* (Coleoptera: Buprestidae: Paratassini tribus n.). *Acta Societatis Zoologicae Bohemicae*, 60: 325–346.
- Deyrolle, H. 1864. Description des Buprestides de la Malaisie recueillis par M. Wallace. *Annales de la Société Entomologique de Belgique*, 8: 1–312.
- Duponchel, P.A.J. 1843. *Chrysodema*. P. 653 in Orbigny, A.D. d'. (Ed.), *Dictionnaire universel d'histoire naturelle*, vol. 6. Paris.
- Gemminger, M. & Harold, E. von. 1869. *Catalogus coleopterorum hucusque descriptorum synonymicus et systematicus*, vol. 5. Pp. 1347–1608. Monachii, London.
- Hołyński, R. 1993. A reassessment of the internal classification of the Buprestidae Leach (Coleoptera). *Crystal*, (Zoologica) 1: 1–42.
- Hołyński, R. 1994. A review of *Chrysodema* C.G. (Coleoptera: Buprestidae) I. The subgenera *Tamamushia* M.C. and *Thymedes* Wath. *Annals of the Upper Silesian Museum, Entomology*, 5: 69–96.
- Hołyński, R. 1997. *Mroczkowskia*-knot and the evolution of the subtribe Chrysochroina (Coleoptera: Buprestidae). *Annales Zoologici Musei Polonici Historiae Naturalis* (Warszawa), 47: 179–188.

- Holyński, R.** 2001. Miscellaneous notes on *Iridotaenia* Deyr. and related genera (Col.: Bupr.). *Jewel Beetles*, **10**: 1–34.
- Kerremans, C.** 1892. Catalogue synonymique des Buprestides decrits de 1758 à 1890. *Mémoires de la Société Entomologique de Belgique*, **1**: 1–304.
- Kerremans, C.** 1903. Coleoptera, Fam. Buprestidae (cont.). Pp. 49–338 in Wytsman, P. (Ed.), *Genera Insectorum*, Fasc. 12b, 12c and 12d. Verteneuil & Desmet, Bruxelles.
- Kerremans, C.** 1909. *Monographie des buprestides*, vol 3. 604 pp. London, Bruxelles, Berlin.
- Kurosawa, Y.** 1982. A remarkable convergence found in Malayan buprestid beetles, with description of two new species from Thailand and Hainan. *Bulletin of the National Science Museum Tokyo (Zoology)*, (A)**8**(4): 173–204.
- Laporte, F.L. de L. (Comte de Castelnau) & Gory, H.L.** 1835. Monographie des Buprestides. In: *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1. Duméril, Paris.
- Obenberger, J.** 1926. Buprestidae 1. In Junk, W. & Schlenkling, S. (Eds.), *Coleopterorum Catalogus*, pars 84. 212 pp. Junk, Berlin.
- Saunders, E.** 1871. *Catalogus Buprestidarum synonymicus et systematicus*. xxiii, 171 pp. Janson, London.
- Tôyama, M.** 1987. The systematic positions of some buprestid genera (Coleoptera, Buprestidae). *Elytra*, **15**: 1–11.
- Volkovitsh, M.G.** 2001. The comparative morphology of antennal structures in Buprestidae (Coleoptera): evolutionary trends, taxonomic and phylogenetic implications. Part 1. *Acta Musei Moraviae*, **86**: 43–169.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).



Chrysodema sonnerati Laporte & Gory, 1835. Type specimen in Muséum National d'Histoire Naturelle, Paris. Body length: 25 mm. Photograph: T. Lander.



Bellamy, C. L. 2002. "Chrysodema Laporte & Gory, 1835 And Iridotaenia Deyrolle, 1864 Designation Of C. Sonnerati Laporte & Gory, 1835 As The Type Species Of Chrysodema." *The Bulletin of zoological nomenclature* 59, 185–187.

View This Item Online: <https://www.biodiversitylibrary.org/item/107013>

Permalink: <https://www.biodiversitylibrary.org/partpdf/43069>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: International Commission on Zoological Nomenclature

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.