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Case 3733 – *Cetonia marmorea* Olivier, 1789  
(Coleoptera: Scarabaeidae: Cetoniinae:  
Gymnetini): proposed conservation by reversal of  
precedence with *Scarabaeus pulcher* Swederus, 1787

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**Case 3733 – *Cetonia marmorea* Olivier, 1789 (Coleoptera: Scarabaeidae: Cetoniinae: Gymnetini): proposed conservation by reversal of precedence with *Scarabaeus pulcher* Swederus, 1787**

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**Abstract.** The purpose of this application, under Article 23.9.3 of the Code, is to conserve the widely used name *Gymnetis marmorea* (Olivier, 1789), a flower chafer (Scarabaeidae: Cetoniinae) from Trinidad and Tobago, West Indies, which is threatened by the unused senior subjective synonym *Scarabaeus pulcher* Swederus, 1787. The head of the holotype of *Scarabaeus pulcher* Swederus, 1787 is excluded from the holotype under Article 73.1.5 of the Code since it is a piece belonging to a *Cotinis* Burmeister glued to the body of a *Gymnetis* MacLeay.

**Keywords.** Nomenclature; taxonomy; Insecta; Coleoptera; Scarabaeidae; Cetoniinae; *Cetonia marmorea*, *Gymnetis marmorea*; *Gymnetis pulchra*; *Gymnetosoma marmorea*, *Scarabaeus pulcher*; Neotropics; flower chafer.

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1. *Cetonia marmorea* was described by Olivier (1789: 17) from Tobago. In 1844 the species was transferred to the genus *Gymnetis* MacLeay by Schaum (1844). The epithet *marmorea* has been used in about a dozen publications (e.g., Schaum, 1844, 1845, 1848, 1849; Gemminger & Harold, 1869; Schoch, 1895, 1896; Schenkling, 1921; Schürhoff, 1937; Blackwelder, 1944; Krajcik, 1998, 2012), and the taxon is represented with that name in nearly every museum research collection that houses specimens of it (e.g., London, Paris, Berlin, Brussels, Leiden, Washington DC, New York, Ottawa).

2. *Scarabaeus pulcher* was described by Swederus (1787: 189) based upon a single specimen from Trinidad and Tobago he had seen in the Dru Drury collection. The majority of the Drury collection was sold at auction upon his death in 1803 (Watkins, 1888; Horn & Kahle, 1935–1937), and the type specimen of *S. pulcher* (Figs. 1, 2) currently resides in the Macleay Collection (MAMU) in Sydney, Australia. Burmeister (1842: 800) and Schürhoff (1937: 59) both observed that this composite specimen had the head of a *Cotinis* Burmeister species (frontal horn) and the body of *Gymnetis*. *Cotinis* species do not occur in the West Indies, and *Gymnetis* species do not possess armature on the head. The overly brief and general description provided by Swederus matches the composite holotype (“thorace elytrisque pulchre variegatis, laevibus, capite nigro spina incumbent” = thorax and elytra with a beautiful, gently variegated



**Fig. 1.** Dorsal habitus of the holotype of *Scarabaeus pulcher* Swederus in the Macleay Collection (MAMU), Sydney, Australia, with the head that belongs to a *Cotinis* specimen (the glue is visible). Photograph courtesy of Robert Blackburn (Macleay Museum, The University of Sydney, Sydney, Australia).



**Fig. 2.** Close-up of the head that belongs to a *Cotinis* specimen (the glue is visible) on the holotype of *Scarabaeus pulcher* Swederus in the Macleay Collection (MAMU), Sydney, Australia. Photograph courtesy of Robert Blackburn (Macleay Museum, The University of Sydney, Sydney, Australia).

color, head with an upper thorn) which allows us to confirm that the head was glued on before the description. Being a composite holotype, I hereby act under Article 73.1.5 of the Code and exclude the head from the holotype. A label has been added to the holotype with “head excluded under Article 73.1.5 of ICZN, B. C. Ratcliffe, 2017”. I did not opt for the exclusion of the rest of the body because it would have made the taxon *pulcher* unidentifiable at the species level (head capsule of *Cotinis* is in the majority of cases not diagnostic nor do *Cotinis* species occur in the West Indies). The epithet *Gymnetis pulchra* has never been used for a known species, and the name is listed only in catalogs (e.g., Schenkling, 1921; Schürhoff, 1937; Blackwelder, 1944; Krajčík, 1998 as *Gymnetosoma marmorea*) and has not been assigned to specimens in collections (e.g., London, Paris, Berlin, Brussels, Leiden, Washington DC, New York, Ottawa).

3. Based on an ongoing revision of the genus *Gymnetis* (Ratcliffe, in prep.), *Scarabaeus pulcher*, as resulting from the type restriction above, is a *Gymnetis* species and a senior synonym of *Gymnetis marmorea* (distinct color and pattern). In order to maintain prevailing usage and therefore promote nomenclatural stability, it is not possible to use Article 23.9.1 since the conditions required by Article 23.9.1.1 and 23.9.1.2 are not met. Therefore a decision by the Commission is needed in order to declare *Cetonia marmorea* Olivier, 1789 a nomen protectum.

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

- (1) to use its plenary powers to give the name *marmorea* Olivier, 1789, as published in the binomen *Cetonia marmorea*, precedence over the name *pulcher* Swederus, 1787, as published in the binomen *Scarabaeus pulcher*, whenever the two are considered synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *marmorea* Olivier, 1789, as published in the binomen *Cetonia marmorea*, with the endorsement that it is to be given precedence over the name *pulcher* Swederus, 1787, as published in the binomen *Scarabaeus pulcher*, whenever the two names are considered to be synonyms as ruled in (1) above;
  - (b) *pulcher* Swederus, 1787, as published in the binomen *Scarabaeus pulcher*, with the endorsement that it is not to be given priority over the name *marmorea* Olivier, 1789, as published in the binomen *Cetonia marmorea*, whenever the two names are considered to be synonyms as ruled in (1) above.

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## References

- Blackwelder RE (1944) Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America, part 2. Bulletin of the United States National Museum 185: 189–341.
- Burmeister H (1842) Handbuch der Entomologie. Volume 3. T. E. F. Enslin, Berlin, 826 pp.
- Gemminger M, Harold E von (1869) Catalogus Coleopterorum hucusque descriptorum synonymicus et systematicus, Volume 4, Scarabaeidae. E. H. Gummi, Munich, pp. 979–1346.
- Horn W, Kahle I (1935–1937) Über Entomologische Sammlungen, Entomologen & Entomomuseologie, Volumes 1–3. Entomologische Beihefte, 2–4: 1–540.
- Krajčák M (1998) Cetoniidae of the World. Catalogue – Part 1. [The Author], Most, 96 + 36 pp.
- Krajčák M (2012) Checklist of the world Scarabaeoidea. *Anima*.X, supp. 5: 1–278.
- Olivier AG (1789) Entomologie, ou histoire naturelle des insectes, avec leurs caractères génériques et spécifiques, leur description, leur synonymie, et leur figure enluminée. Coléoptères, Volume 1 [genera separately paged]. Paris.
- Schaum HR (1844) Observations critiques sur la famille des lamellicornes mélitophiles. *Annales de la Société Entomologique de France* (2) 2: 333–426.
- Schaum HR (1845) Catalogue des espèces-connues qui entrent dans la famille des lamellicornes mélitophiles. *Annales de la Société Entomologique de France* (2) 3: 37–56.
- Schaum HR (1848) Verzeichniss der Lamellicornia Melitophila. [The Author], Stettin, 74 pp.
- Schaum HR (1849) Observations critiques sur la famille des lamellicornes mélitophiles (2<sup>e</sup> Partie). *Annales de la Société Entomologique de France* (2) 7: 241–295.
- Schenkling S (1921) Coleopterorum catalogus, pars 72. Scarabaeidae: Cetoniinae. W. Junk, Berlin, 431 pp.
- Schoch G (1895) Die Genera und Species meiner Cetoniden-Sammlung. I. Teil: Trib. Goliathidae, Gymnetidae, Madagassae, Schizorrhinidae. *Zürcher and Furrer, Zurich*, pp. 68–92.
- Schoch G (1896) Nachtrag zu: [sic] Schoch, Genera und Species meiner Cetoniden-Sammlung. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* 9: 358–370.
- Schürhoff PN (1937) Beiträge zur Kenntnis der Cetoniden (Col.). VIII. Revision der Gattung *Gymnetis* MacLeay. *Deutsche Entomologische Zeitschrift* 1937: 56–80.
- Swederus NS (1787) Et nytt Genus, och Femtio nya Species af Insecter, beskripte. *Kongl. Vetenskaps Akademiens nya Handlingar* 8: 181–201.
- Watkins MG (1888) Drury, Dru (1725–1803). In: *Dictionary of National Biography, 1885–1900*, Volume 16, Drant – Eldridge (L. Stephen Editor). MacMillan and Co., New York. (Accessed 1 February 2017).  
[https://en.wikisource.org/wiki/Drury,\\_Dru\\_\(1725-1803\)\\_\(DNB00\)](https://en.wikisource.org/wiki/Drury,_Dru_(1725-1803)_(DNB00))

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Secretariat, ICZN, Lee Kong Chian Natural History Museum, 2 Conservatory Drive, Singapore 117377, Republic of Singapore (e-mail: [iczn@nus.edu.sg](mailto:iczn@nus.edu.sg)).