

NOMENCLATRURAL CHANGES FOR FIVE PREOCCUPIED SCARAB BEETLE GENUS GROUP NAMES (COLEOPTERA: SCARABAEIDAE)

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ABSTRACT: Five junior homonyms were detected among the scarab beetle genera and the following replacement names are proposed: in Dynastinae: *Carneoryctes* nom. nov. for *Cryptoryctes* Carne, 1957; *Carneodon* nom. nov. for *Neodon* Carne, 1957; in Scarabaeinae: *Amartinezus* nom. nov. for *Eurysternodes* Martinez, 1988; in Rutelinae: *Strigidia* Burmeister, 1844 substitute name for *Odontognathus* Laporte, 1840 and in Melolonthinae: *Lutfius* nom. nov. for *Colpomorpha* Szito, 1994. Accordingly, new combinations are herein proposed for the species currently included in these genera: *Carneoryctes ater* (Lea, 1917) comb. nov.; *Carneoryctes brittoni* (Carne, 1957) comb. nov.; *Carneoryctes griseopilosus* (Lea, 1917) comb. nov.; *Carneoryctes minchami* (Carne, 1981) comb. nov.; *Carneoryctes montrosus* (Blackburn, 1895) comb. nov.; *Carneoryctes nigripennis* (Lea, 1917) comb. nov.; *Carneoryctes peterseni* (Endrodi, 1967) comb. nov.; *Carneoryctes pimbus* (Carne, 1957) comb. nov.; *Carneoryctes psilus* (Carne, 1957) comb. nov.; *Carneoryctes semiclavus* (Lea, 1917) comb. nov.; *Carneoryctes sulcatus* (Arrow, 1914) comb. nov.; *Carneoryctes tectus* (Blackburn, 1892) comb. nov.; *Carneoryctes tricornutus* (Howden & Maly, 2005) comb. nov.; *Carneoryctes trifidus* (Blackburn, 1895) comb. nov.; *Carneoryctes truncatus* (Carne, 1957) comb. nov.; *Carneoryctes wingarus* (Carne, 1957) comb. nov.; *Carneodon bidens* (Blackburn, 1896) comb. nov.; *Carneodon glauerti* (Carne, 1957) comb. nov.; *Carneodon intermedius* (Blackburn, 1896) comb. nov.; *Carneodon laevicollis* (Macleay, 1873) comb. nov.; *Carneodon laevipennis* (Blackburn, 1896) comb. nov.; *Carneodon laevis* (Burmeister, 1847) comb. nov.; *Carneodon meyricki* (Blackburn, 1896) comb. nov.; *Carneodon occidentalis* (Macleay, 1888) comb. nov.; *Carneodon pecuarius* (Reiche, 1860) comb. nov.; *Carneodon simplex* (Carne, 1957) comb. nov.; *Amartinezus velutinus* (Bates, 1887) comb. nov. and *Lutfius parvus* (Szito, 1994) comb. nov..

KEY WORDS: nomenclatural changes, homonymy, replacement names, Coleoptera, Scarabaeidae, Dynastinae, Scarabaeinae, Rutelinae, Melolonthinae.

Five previously proposed scarab beetle genus group names are nomenclaturally invalid, as the genus group names have already been used by a different authors in Mammalia, Pisces, Acari and Insecta. In accordance with Article 60 of the International Code of Zoological Nomenclature, I propose substitute names for these genus group names.

TAXONOMY

Family SCARABAEIDAE

Subfamily DYNASTINAE

Genus *CARNEORYCTES* nom. nov.

Cryptoryctes Carne, 1957. A systematic revision of the Australian Dynastinae. C.S.I.R.O. Melbourne: 154. (Insecta: Coleoptera: Scarabaeoidea: Scarabaeidae: Dynastinae).

Preoccupied by *Cryptoryctes* Reed, 1954. J. Paleont., 28, 103. (Mammalia: Eutheria: Lipotyphla: Micropternodontidae).

Remarks: The name *Cryptoryctes* was initially introduced by Reed, 1954 for a genus of the mammals family Micropternodontinae (with the type species *Cryptoryctes kayi* Reed, 1954). This genus is not extant. It was assigned to Micropternodontidae by Reed (1954) and McKenna & Bell (1997). Subsequently, Carne, 1957 erected a new Australian scarab beetle genus of the family Scarabaeidae (with the type species *Pseudoryctes tectus* Blackburn, 1892 by original designation under the same generic name. Thus, the genus *Cryptoryctes* Carne, 1957 is a junior homonym of the genus *Cryptoryctes* Reed, 1954. According to Article 60 of the International Code of Zoological Nomenclature, I propose for the genus *Cryptoryctes* Carne, 1957 the new replacement name *Carneoryctes* **nom. nov.**

Etymology: The name is dedicated to P. B. Carne who is current author of the genus name *Cryptoryctes*.

Summary of nomenclatural changes:

Carneoryctes **nom. nov.**

pro *Cryptoryctes* Carne, 1957 (nec Reed, 1954)

Carneoryctes ater (Lea, 1917) **comb. nov.**

from *Cryptoryctes ater* (Lea, 1917)

Pseudoryctes ater Lea, 1917

Distr.: Australian (S Australia)

Carneoryctes brittoni (Carne, 1957) **comb. nov.**

from *Cryptoryctes brittoni* Carne, 1957

Distr.: Australian (W Australia)

Carneoryctes griseopilosus (Lea, 1917) **comb. nov.**

from *Cryptoryctes griseopilosus* (Lea, 1917)

Pseudoryctes griseopilosus Lea, 1917

= *Pseudoryctes friseopilosus* Lea, 1917

Distr.: Australian (S Australia)

Carneoryctes minchami (Carne, 1981) **comb. nov.**

from *Cryptoryctes minchami* Carne, 1981

Distr.: Australian (S Australia)

Carneoryctes montrosus (Blackburn, 1895) **comb. nov.**

from *Cryptoryctes montrosus* (Blackburn, 1895)

Pseudoryctes montrosus Blackburn, 1895

Distr.: Australian (W Australia)

Carneoryctes nigripennis (Lea, 1917) **comb. nov.**

from *Cryptoryctes nigripennis* (Lea, 1917)

Pseudoryctes nigripennis Lea, 1917

Distr.: Australian (Queensland)

Carneoryctes peterseni (Endrodi, 1967) **comb. nov.**

from *Cryptoryctes peterseni* Endrodi, 1967

Distr.: Australian (Bismarc Archipel)

Carneoryctes pimbus (Carne, 1957) **comb. nov.**

from *Cryptoryctes pimbus* Carne, 1957

Distr.: Australian (C Australia)

Carneoryctes psilus (Carne, 1957) **comb. nov.**

from *Cryptoryctes psilus* Carne, 1957

Distr.: Australian (W Australia)

Carneoryctes semiclavus (Lea, 1917) **comb. nov.**

from *Cryptoryctes semiclavus* (Lea, 1917)

Pseudoryctes semiclavus Lea, 1917

Distr.: Australian (S Australia)

Carneoryctes sulcatus (Arrow, 1914) **comb. nov.**

from *Cryptoryctes sulcatus* (Arrow, 1914)

Pseudoryctes sulcatus Arrow, 1914

Distr.: Australian (Queensland)

Carneoryctes tectus (Blackburn, 1892) **comb. nov.**

from *Cryptoryctes tectus* (Blackburn, 1892)

Pseudoryctes tectus Blackburn, 1892

Distr.: Australian (S Australia)

Carneoryctes tricornutus (Howden & Maly, 2005) **comb. nov.**

from *Cryptoryctes tricornutus* Howden & Maly, 2005

Distr.: Australian (S Australia)

Carneoryctes trifidus (Blackburn, 1895) **comb. nov.**

from *Cryptoryctes trifidus* (Blackburn, 1895)

Pseudoryctes trifidus Blackburn, 1895

Distr.: Australian (Queensland)

Carneoryctes truncatus (Carne, 1957) **comb. nov.**

from *Cryptoryctes truncatus* Carne, 1957

Distr.: Australian (Queensland)

Carneoryctes wingarus (Carne, 1957) **comb. nov.**

from *Cryptoryctes wingarus* Carne, 1957

Distr.: Australian (W Australia)

Genus *CARNEODON* nom. nov.

Neodon Carne, 1957. A systematic revision of the Australian Dynastinae. C.S.I.R.O. Melbourne: 41, 46. (Insecta: Coleoptera: Scarabaeoidea: Scarabaeidae: Dynastinae). Preoccupied by *Neodon* Horsfield, 1841. J. Asiat. Soc. Bengal 10. (Mammalia: Rodentia: Muroidea: Cricetidae: Arvicolinae).

Remarks: The generic name *Neodon* was proposed by Horsfield, 1841 with the type species *Neodon sikimensis* Horsfield, 1841 in Mammalia. Wilson & Reeder (2005) gave it as a genus. They stated that “*it maintained as a genus by some specialists (Ellerman, 1941; Hinton, 1923, 1926a; Zagorodnyuk, 1990, 1992c), as a subgenus of Pitymys by others (Corbet, 1978c; Ellerman, 1941; Ellerman and Morrison-Scott,*

1951), or a subgenus of *Microtus* (G. M. Allen, 1940; Gromov and Erjabeva, 1995; Gromov and Polyakov, 1977; Musser and Carleton, 1993; Pavlinov et al., 1995a). Hinton (1923) included *forresti*, *irene*, *oniscus* (= *irene*), and *carruthersi* (= *juldaschi*) in *Neodon*". Later, the scarab beetle genus *Neodon* was described by Carne, 1957 with the type species *Cheiroplatys pecuarius* Reiche, 1860 by original designation. However, the name *Neodon* Carne, 1957 is invalid under the law of homonymy, being a junior homonym of *Neodon* Horsfield, 1841. In accordance with article 60 of the International Code of Zoological Nomenclature, I propose to substitute the junior homonym name *Neodon* Carne, 1957 for the nomen novum *Carneodon*.

Etymology: The name is dedicated to P. B. Carne who is current author of the genus name *Neodon*.

Summary of nomenclatural changes:

***Carneodon* nom. nov.**

pro *Neodon* Carne, 1957 (nec Horsfield, 1841)

***Carneodon bidens* (Blackburn, 1896) comb. nov.**

from *Neodon bidens* (Blackburn, 1896)

Isodon bidens Blackburn, 1896

Distr.: Australian (Queensland, C Australia)

***Carneodon glauerti* (Carne, 1957) comb. nov.**

from *Neodon glauerti* Carne, 1957

Distr.: Australian (NW and C Australia)

***Carneodon intermedius* (Blackburn, 1896) comb. nov.**

from *Neodon intermedius* (Blackburn, 1896)

Isodon intermedius Blackburn, 1896

Distr.: Australian (NW Australia and New South Wales)

***Carneodon laevicollis* (Macleay, 1873) comb. nov.**

from *Neodon laevicollis* (Macleay, 1873)

Isodon laevicollis Macleay, 1873

Distr.: Australian

***Carneodon laevipennis* (Blackburn, 1896) comb. nov.**

from *Neodon laevipennis* (Blackburn, 1896)

Isodon laevipennis Blackburn, 1896

Distr.: Australian (NW Australia and Queensland)

***Carneodon laevis* (Burmeister, 1847) comb. nov.**

from *Neodon laevis* (Burmeister, 1847)

Pimelopus laevis Burmeister, 1847

Isodon novitius Blackburn, 1897

Distr.: Australian (W Australia and Queensland)

***Carneodon meyricki* (Blackburn, 1896) comb. nov.**

from *Neodon meyricki* (Blackburn, 1896)

Isodon meyricki Blackburn, 1896

Distr.: Australian (W Australia)

Carneodon occidentalis (Macleay, 1888) **comb. nov.**
 from *Neodon occidentalis* (Macleay, 1888)
Cheiroplatys occidentalis Macleay, 1888
 Distr.: Australian (NW Australia)

Carneodon pecuarius (Reiche, 1860) **comb. nov.**
 from *Neodon pecuarius* (Reiche, 1860)
Cheiroplatys pecuarius Reiche, 1860
 = *Isodon puncticollis* Macleay, 1871
 = *Isodon subcornutus* Fairmaire, 1879
 = *Heteronychus lucidus* Macleay, 1888
 = *Isodon picipennis* Macleay, 1888
 = *Trissodon denticeps* Arrow, 1941
 Distr.: Australian (Australia)

Carneodon simplex (Carne, 1957) **comb. nov.**
 from *Neodon simplex* Carne, 1957
 Distr.: Australian (W Australia)

Subfamily SCARABAEINAE **Genus AMARTINEZUS nom. nov.**

Eurysternodes Martinez, 1988. Entomol Basil 12: 281. (Insecta: Coleoptera: Scarabaeoidea: Scarabaeidae: Scarabaeinae). Preoccupied by *Eurysternodes* Schuster & Summer, 1978. International J. Acarol. 4: 303. (Acari: Parasitiformes: Mesostigmata: Diarthrophalloidea: Diarthrophallidae).

Remarks: The generic name *Eurysternodes* Schuster & Summer, 1978 was proposed for a genus of Acari with the type species *Brachytremella tragardhi* Womersley, 1961. The genus is still used as a valid generic name in the family Diarthrophallidae. Subsequently, the generic name *Eurysternodes* Martinez, 1988 was introduced for a new scarab beetle genus group (with the type species *Eurysternodes velutinus* Bates, 1887) of the family Scarabaeidae. *Eurysternodes* Martinez, 1988 was accepted by some authors (e.g. Vaz-De-Mello, 2000) as a subgenus of the genus *Eurysternus* Dalman, 1824. Thus, the generic name *Eurysternodes* Martinez, 1988 is a junior homonym of the genus *Eurysternodes* Schuster & Summer, 1978. According to Article 60 of the International Code of Zoological Nomenclature, I propose for the genus *Eurysternodes* Martinez, 1988 the new replacement name *Amartinezus* **nom. nov.**

Etymology: The name is dedicated to A. Martinez who is current author of the preexisting generic name *Eurysternodes*.

Summary of nomenclatural changes:

Amartinezus **nom. nov.**
 pro *Eurysternodes* Martinez, 1988 (nec Schuster & Summer, 1978)

Amartinezus velutinus (Bates, 1887) **comb. nov.**
 from *Eurysternodes velutinus* (Bates, 1887)
Eurysternus velutinus Bates, 1887
 = *Eurysternus hypocrita* Balthasar, 1939

Distr.: Neotropical (Panama, Colombia, French Guiana, Suriname, Guyana, Ecuador, Peru, Brasil, Mexico, Venezuela, Bolivia)

Subfamily RUTELINAE
Genus *PELIDNOTA* Macleay, 1819
Subgenus *STRIGIDIA* Burmeister, 1844 new name

Odontognathus Laporte, 1840. H. N. Anim. artic. (Col.), 2, 137. (Insecta: Coleoptera: Scarabaeoidea: Scarabaeidae: Rutelinae). Preoccupied by *Odontognathus* Lacepède, 1800. Hist. Nat. Poiss., 2, 218. (Chordata: Actinopterygii: Clupeiformes: Clupeidae).

Remarks: The fish genus *Odontognathus* was erected by Lacepède, 1800 with the type species *Odontognathus mucronatum* Lacepède, 1800 by monotypy. It is still used as a valid generic name and it has three species currently. Later, the scarab beetle generic name *Odontognathus* was proposed by Laporte, 1840 with the type species *Odontognathus unicolor* Laporte, 1840 that is a synonym of the species *Pelidnota* (*Odontognathus*) *cuprea* (Germar, 1828). In 1975, this genus was placed by Hardy in the genus *Pelidnota* Macleay, 1819 as a subgenus. However, the name *Odontognathus* Laporte, 1840 is invalid under the law of homonymy, being a junior homonym of *Odontognathus* Lacepède, 1800. The generic name *Odontognathus* Laporte, 1840 (type species: *O. unicolor* Laporte, 1840) has three subjective junior synonyms as *Strigidia* Burmeister, 1844 (type species: *Pelidnota cuprea* Germar, 1824); *Delipnia* Casey, 1915 (type species: *Pelidnota belti* Sharp, 1877) and *Ganonota* Ohaus, 1915 (type species: *Rutela cuprea* Germar, 1824). So, in accordance with the International Code of Zoological Nomenclature, I propose to substitute the junior homonym name *Odontognathus* Laporte, 1840 for the oldest name “senior subjective synonym name” *Strigidia* Burmeister, 1844 as a replacement name.

Summary of nomenclatural changes:

Genus *Pelidnota* Macleay, 1819

syn. *Aglycoptera* Sharp, 1885 (type species: *A. lacerdae* Sharp, 1885)

syn. *Pelidnota* (*Pelidnotidia*) Casey, 1915 (type species: *P. strigosa* Laporte, 1840)

This genus includes approximately 120 species (incl. two incertae sedis species).

Subgenus *Pelidnota* Macleay, 1819

syn. *Aglycoptera* Sharp, 1885 (type species: *A. lacerdae* Sharp, 1885)

syn. *Pelidnota* (*Pelidnotidia*) Casey, 1915 (type species: *P. strigosa* Laporte, 1840)

This subgenus includes 47 species.

Subgenus *Chalcoplethis* Burmeister, 1844 (type species: *Chrysophora kirbyi* Gray, 1832)

syn. *Epichalcoplethis* F. Bates, 1904 (type species: *Pelidnota velutipes* Arrow, 1900)

This subgenus includes 23 species.

Subgenus *Strigidia* Burmeister, 1844 **substitute name**

syn. *Odontognathus* Laporte, 1840 (type species: *O. unicolor* Laporte, 1840)

syn. *Strigidia* Burmeister, 1844 (type species: *Pelidnota cuprea* Germar, 1824)

syn. *Delipnia* Casey, 1915 (type species: *Pelidnota belti* Sharp, 1877)

syn. *Ganonota* Ohaus, 1915 (type species: *Rutela cuprea* Germar, 1824)

This subgenus includes 46 species. The species list of this subgenus as follows:

- Pelidnota acutipennis* Bates, 1904
- Pelidnota adrianae* Martinez, 1982
- Pelidnota assumpta* Ohaus, 1928
- Pelidnota belti* Sharp, 1877
- Pelidnota bivittata* (Swederus, 1787)
- Pelidnota boyi* Ohaus, 1928
- Pelidnota crassipes* Ohaus, 1905
- Pelidnota cuprea* (Germar, 1824)
- Pelidnota cupripes* Perty, 1832
- Pelidnota discicollis* Ohaus, 1912
- Pelidnota dubia* Bates, 1904
- Pelidnota ebenina* (Blanchard, 1842)
- Pelidnota flavovittata* Perty, 1832
- Pelidnota fusciventris* Ohaus, 1905
- Pelidnota gabriela* Martinez, 1979
- Pelidnota glaberrima* Blanchard, 1850
- Pelidnota gounellei* Ohaus, 1908
- Pelidnota gracilis* (Gory, 1834)
- Pelidnota impressicollis* Ohaus, 1925
- Pelidnota labyrinthophallica* Solis & Moron, 1994
- Pelidnota liturella* (Kirby, 1818)
- Pelidnota matogrossensis* Frey, 1976
- Pelidnota nadiae* Martinez, 1978
- Pelidnota nitescens* Vigors, 1825
- Pelidnota ohausi* Frey, 1976
- Pelidnota plicipennis* Ohaus, 1934
- Pelidnota pubes* Ohaus, 1913
- Pelidnota pulchella* (Kirby, 1818)
- Pelidnota purpurea* Burmeister, 1844
- Pelidnota quadripunctata* Bates, 1904
- Pelidnota riedeli* (Ohaus, 1905)
- Pelidnota rubripennis* (Burmeister, 1844)
- Pelidnota santidomini* Ohaus, 1905
- Pelidnota sericeicollis* Frey, 1976
- Pelidnota similis* Ohaus, 1908
- Pelidnota soederstroemi* Ohaus, 1908
- Pelidnota striatopunctata* (Kirsch, 1885)
- Pelidnota testaceovirens* Blanchard, 1850
- Pelidnota tibialis* Burmeister, 1844
- Pelidnota uncinata* Ohaus, 1930
- Pelidnota vitalisi* Ohaus, 1925
- Pelidnota vitticollis* Burmeister, 1844
- Pelidnota xanthopyga* Hardy, 1975
- Pelidnota xanthospila* Germar, 1824
- Pelidnota yungana* Ohaus, 1934
- Pelidnota zikani* Ohaus, 1922

Subfamily MELOLONTHINAE**Genus *LUTFIUS* nom. nov.**

Colpomorpha Szito, 1994. Journal of the Australian Entomological Society 33(4), 30 November: 363. (Insecta: Coleoptera: Scarabaeoidea: Scarabaeidae: Melolonthinae). Preoccupied by *Colpomorpha* Meyrick, 1929. Exot. Microlep., 3, 528. (Insecta: Lepidoptera: Gelechoidea: Oecophoridae: Oecophorinae).

Remarks: The moth genus *Colpomorpha* was established by Meyrick, 1929 with the type species *Colpomorpha orthomeris* Meyrick, 1929 by monotypy in Lepidoptera. It was described in the "Gelechiadae" and it was transferred to the Oecophoridae by Clarke (1955). It is still used as a valid generic name. Subsequently, the Australian scarab beetle generic name *Colpomorpha* was proposed by Szito, 1994 with the type species *Colpomorpha parva* Szito, 1994 by monotypy and original designation in Melolonthinae. However, the name *Colpomorpha* Szito, 1994 is invalid under the law of homonymy, being a junior homonym of *Colpomorpha* Meyrick, 1929. So, in accordance with the article 60 International Code of Zoological Nomenclature, I propose to substitute the junior homonym name *Colpomorpha* Szito, 1994 for the nomen novum *Lutfius* as a replacement name.

Etymology: The name is dedicated to my friend Lütü Özden (Turkey). It is masculine in gender.

Summary of nomenclatural changes:

***Lutfius* nom. nov.**

pro *Colpomorpha* Szito, 1994 (nec Meyrick, 1929)

***Lutfius parvus* (Szito, 1994) comb. nov.**

from *Colpomorpha parva* Szito, 1994

Distr.: Australian (W Australia)

Note: I know that Dr. Andras Szito (Australia) is alive. This status on homonymy was informed by me to Dr. Andras Szito who is the current author of the genus name at least two years ago. Paper on this genus was prepared by me. Then it was sent to Dr. Szito. Finally we came to an agreement to publish it in the Australian Journal of Entomology. However, I have not been in communication with Dr. Szito since then, despite all my efforts. So I have decided to publish it here.

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