A REVIEW OF THE FAMILY-GROUP NAMES FOR THE SUPERFAMILY SCARABAEEOIDEA (COLEOPTERA) WITH CORRECTIONS TO NOMENCLATURE AND A CURRENT CLASSIFICATION

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A REVIEW OF THE FAMILY-GROUP NAMES FOR THE SUPERFAMILY SCARABAEOIDEA (COLEOPTERA) WITH CORRECTIONS TO NOMENCLATURE AND A CURRENT CLASSIFICATION

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Abstract
For the first time, all family-group names in the superfamily Scarabaeoidea (Coleoptera) are evaluated using the International Code of Zoological Nomenclature to determine their availability and validity. A total of 383 family-group names were found to be available, and all are reviewed to scrutinize the correct spelling, author, date, nomenclatural availability and validity, and current classification status. Numerous corrections are given to various errors that are commonly perpetuated in the literature. A reversal of precedence is used to preserve the prevailing usage of the following family-group names: Euparini Schmidt, 1910 (over Ataeniini Harold, 1868); Pachydemini Burmeister, 1855 (over Elaphocerini Blanchard, 1851); Heterosternina Bates, 1888 (over Macropnina Horn, 1866); and Anomalina Streubel, 1839 (over Euchlorina Hope, 1839).

Houston, we've had a problem here
–Apollo 13 Astronaut Jack Swigert
13 April 1970

Trust No One
–X-Files mantra

Recently, there has been an effort to investigate and modernize the family-group names for many taxa. Within Coleoptera, family-group names have been evaluated and listed for Geodephaga (Madge 1989), Staphyliniformia (Newton and Thayer 1992), Cucujoidea (Pakaluk et al. 1994), Tenebrionidae (Bouchard et al. 2005), and Curculionoidea (Alonso-Zarazaga and Lyal 1999). Lawrence and Newton (1995) also summarized all of the family and subfamilies of Coleoptera recognized in their classification. Until now, there has never been a serious effort to evaluate all the Scarabaeoidea family-group names using the International Code of Zoological Nomenclature (hereafter called the ICZN) (International Commission on Zoological Nomenclature 1999). Consequently, the state of affairs has been a disastrous mess! In this paper, all family-group names in the superfamily Scarabaeoidea that are available under the ICZN are listed with their current status (valid or invalid), original spelling, and type genus. Unavailable family-group names (nomina nuda, etc.) are not extensively reviewed in this paper, but some of the notable and/or better-known examples are briefly discussed.

Usage of family-group names in Scarabaeoidea follows the conventions of most other Coleoptera with taxa recognized at the levels of superfamily, family, subfamily, tribe, and subtribe. A total of 383 family-group names have been established for Scarabaeoidea in a code-compliant manner. In this paper, 12 families, 43 subfamilies, 118 tribes, and 94 subtribes are recognized as valid.
The purpose of this paper is to review the nomenclatural status and classification of all Scarabaeoidea family-group names. All names found were evaluated using the ICZN to determine if they were available for use. The ICZN was also used to determine the correct spelling, author, and date of all names. Then the current literature was consulted to determine and extrapolate what names were valid, what rank they should be classified at, and synonymy with other taxa. All of this information is summarized in the catalog below.

During the course of my research on Scarabaeoidea family-group names it was obvious that many family-group name nomenclatural acts lay hidden in old and sometimes obscure publications. I fully expect that a few additions and corrections will need to be made as more of these nomenclatural acts are rediscovered.

Family-Group Names and the ICZN

There is a specific set of rules in place for the validation of family-group names under the ICZN. For new names (published from 2000 to the present), the basic criteria for publication and derivation of the name must be met. Family-group names must be based on a valid genus within that family-group taxon, they must be explicitly indicated as intentionally new, and the type genus must be explicitly stated. The name must be formed using a stem based on the type genus (for example Lucan- for *Lucanus*) and a suffix for the appropriate family-group rank (-oidea for a superfamily, -idae for a family, -inae for a subfamily, -ini for a tribe, and -ina for a subtribe). Generally, the stem of a family-group name is formed by deleting the case ending of the appropriate genitive singular of a Greek, Latin, or Latinized genus-group name (for example: Scarabae- for *Scarabaeus*, Belohin- for *Belohina*, Aegiali- for *Aegialia*, etc.). However, this is not always straightforward (for example: Trog- for *Trox*, Heteronych- for *Heteronyx*, Osmodermat- for *Osmoderma*, etc.). Article 29 of the ICZN and Greek and Latin dictionaries should be carefully consulted before publishing new family-group names. Note that the stem of a family-group name must always be emended if the spelling of the type genus is altered or found to be incorrect.

When evaluating names that were published in the past, different rules apply for different periods of time. Some of the most relevant examples follow below. The dates below are explicitly cited in the current edition of the rules of nomenclature (ICZN 1999). Only the current edition of the rules of nomenclature should be used to evaluate names because this version overrides all previous versions.

1758–1900: Family-group names first published during this period in vernacular (non-Latinized) form (for example: Bolbocéraines, Pachypoden, Chasmatoptérides, etc.) are permitted only when they were subsequently Latinized and generally accepted as valid dating from the first publication in non-Latinized form. Latinized family-group names are available simply from their use during this period. No descriptions, definitions, or indications are necessary other than the requirement that the stem of the family-group name must be based on an available generic name.

1901–1930: Family-group names must be Latinized to be available during this period or any time later. Otherwise, a family-group name is available “by indication” simply by using an available generic name to form the stem. No description is necessary.

1931–1960: Family-group names must be accompanied by a description or definition (or bibliographic reference to such a published statement) that states characters that differentiate the taxon (unless the name is a replacement name). An exception to the preceding exists if a subsequent author validated the name from 1961–1999 using Article 13.
The family-group name must also be based on a genus-group name that was considered to be valid and within that family-group taxon when it was first proposed. **1961–1999:** Similar to 1931–1960 but without the Article 13 exception mentioned above.

There are many other rules regulating family-group names, and the ICZN (1999) should be consulted to determine the availability and validity of names previously published. Note that for family-group names published from 1758–1999, the stem can be emended if it was formed incorrectly (unless the incorrect version is in prevailing usage; see Article 29.5). For names published in 2000 or later, the stem should not be altered even if it was not formed correctly (Article 29.4).

The **Principle of Priority** (Article 23.1) generally applies to family-group names, but the rules are more flexible relative to generic and specific names. When it is discovered that a younger name is placed at a higher rank then an older name within that taxon, the older name should not replace the younger name if the younger name is in prevailing usage (Article 35.5) (for example: Melolonthidae Leach, 1819 containing Cetoniinae Leach, 1815 of some authors). The **Principal of Homonymy** applies to family-group names as with other names. If the stem of a family-group name is identical to the stem of another family-group name, the younger name is permanently invalid and must be replaced. Additionally, if the type genus of a family-group name is a junior homonym, the family-group name is permanently invalid and must be replaced.

Authorship of family-group names has been a source of confusion for some authors. According to the **Principle of Coordination** (Article 36), the author and date of a family-group name remains the same–even when the suffix must be changed when the taxon is raised or lowered in rank. For example, Geotrupidae Latreille, 1802; Geotrupinae Latreille, 1802; and Geotrupini Latreille, 1802 all simultaneously have the same author and date, regardless of what author first placed this family-group name at the family, subfamily, or tribal rank.

**Explanation of the Catalog Format**

The entries below are organized phylogenetically based largely on the current, prevailing classifications of the various groups. For many taxa, there have been recent overviews of the classification that were followed. Many other groups, however, have been sadly neglected when it comes to worldwide overviews of the classification (most notably Melolonthinae). For many of the more poorly known groups, it was necessary to use a patchwork of literature to try and piece together an overall classification. This was often complicated by the fact that authors working on the same groups do not always use the same classification scheme for their group, especially when determining the rank to use for a taxon. Although I had to make some of my own decisions about what classification scheme to use and what rank at which to place certain taxa, I think that the catalog below is a good reflection of the current literature. There are obvious problems with some groups, but these are beyond the scope of this paper. It is my hope that this review of scarab family-group names will be a catalyst for others to critically review and research higher-level scarab classification. The following works were used as a basis for the classification and phylogenetic order of some of the major groups of Scarabaeoidea: Scarabaeoidea–Browne and Scholtz 1995, Lawrence and Newton 1995; Passalidae–Boucher 2005; Ochodaeidae–Scholtz et al. 1988; Hybosoridae–Ocampo 2006; Scarabaeidae–Browne and Scholtz 1995, Ratcliffe et al. 2002; Aphodiinae–Dellacasa 1988; Scarabaeinae–Cambefort 1991; Melo-
Although the works above were used as a starting point, there are obvious problems and omissions in many of them, and several modifications were necessary based on more recently published papers. The classification of the families Geotrupidae and Lucanidae is more problematic. Because of the numerous and widely differing opinions about relationships within each of these groups, it was impossible to pick a single reference as the authority on either group. Therefore, I decided to take a somewhat conservative approach for each with some consideration given to molecular phylogenetics results (Smith et al. 2006). The Geotrupidae (including Bolboceratinae) were divided into three subfamilies with Bolboceratinae and Geotrupinae each further divided into several tribes loosely based on works such as Zunino (1984) and Nikolajev (2003). It is clear that more phylogenetics research must be done on this group before a strongly supported classification scheme can emerge for this group. Similarly, the family Lucanidae is in a state of taxonomic chaos at the higher levels. I based the classification loosely on Holloway (1968, 1997) and Howden and Lawrence (1974). The tribal classification within the subfamily Lucaninae was so haphazard that I decided to not recognize any of them in this work, even though there is undoubtedly merit in recognizing some of the groups as tribes (for example Platycerini, Chiasognathini, and Figulini). Since my expertise on this group is limited, I will leave it to future lucanid workers to develop a reasonable tribal classification scheme within the subfamily Lucaninae. Some of the phylogenetic order and classification decisions in this paper were based on a large-scale molecular phylogenetics project currently underway on Scarabaeoidea (introduced in Smith et al. 2006). Molecular data were only used in cases where there is no prevailing phylogenetic ordering or classification scheme used for a particular group. It should be noted that many more changes to higher-level scarab classification will be necessary once detailed reports on the findings of the molecular data are published. Until these detailed papers are published, I will refrain from making changes based solely on these findings.

Entries in the catalog are ordered by rank within a taxon, and there are multiple entries for family-group names with simultaneous ranks (for example: Scarabaeoidea: Scarabaeidae: Scarabaeinae: Scarabaeini). In cases where there are multiple entries, “Remarks” are most often given with highest ranked entry and synonyms are given only with the lowest ranked entry. Entries include the valid name for the taxon in bold followed by the original spelling and citation of the family-group name, the type genus, and when needed, remarks on the nomenclature or classification of the family-group or genus-group names dealt with in the entry. Any synonyms that exist for a taxon are also listed in separate entries after the entry for the valid name. Synonymy entries include the information mentioned above in addition to the correct stem and suffix for the taxonomic rank under which it is placed. An asterisk (*) indicates bibliographic references that I have not examined personally. The “†” symbol indicates extinct fossil taxa.

**Superfamily Scarabaeoidea Latreille, 1802**

Original spelling and citation: Scarabaeides Latreille 1802: 144
Type genus: *Scarabaeus* Linnaeus, 1758: 345
Remark: Scaraboides (von Laicharting 1781: II) was used prior to Latreille (1802) but does not fulfill the ICZN criteria for availability because it was used at the order rank not the family-group level. Scaraboides *sensu* von Laicharting was used as the name for all
beetles (=order Coleoptera). This name has not been adapted at the order level and is unavailable at the family-group level (Article 1.2.2).

**Family Pleocomidae LeConte, 1861**
Original spelling and citation: Pleocomini LeConte 1861: 128
Type genus: *Pleocoma* LeConte, 1856: 24 (LeConte 1856b)

**Subfamily Pleocominae LeConte, 1861**
Original spelling and citation: Pleocomini LeConte 1861: 128
Type genus: *Pleocoma* LeConte, 1856: 24 (LeConte 1856b)

†**Subfamily Cretocominae Nikolajev, 2002**
Original spelling and citation: Cretocomini Nikolajev 2002a: 53
Type genus: *Cretocoma* Nikolajev, 2002: 54 (Nikolajev 2002a)

**Family Geotrupidae Latreille, 1802**
Original spelling and citation: Geotrupini Latreille 1802: 142
Type genus: *Geotrupes* Latreille, 1797: 6

**Subfamily Taurocerastinae Germán, 1897**
Original spelling and citation: Taurocerastidae Germán 1897: 287
Type genus: *Taurocerastes* Philippi, 1866: 115

**Subfamily Bolboceratinæ Mulsant, 1842**
Original spelling and citation: Bolbocéraires Mulsant 1842: 347
Type genus: *Bolboceras* Kirby, 1819: 459 (Kirby 1819b)
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

**Tribe Bolboceratinæ Mulsant, 1842**
Original spelling and citation: Bolbocéraires Mulsant 1842: 347
Type genus: *Bolboceras* Kirby, 1819: 459 (Kirby 1819b)

**Tribe Athyræini Howden and Martínez, 1963**
Original spelling and citation: Athyræini Howden and Martínez 1963: 346
Type genus: *Athyreus* MacLeay, 1819: 123
Remark: Athyræites Blanchard 1845: 221 was not Latinized and was not subsequently Latinized until the tribe was formally described by Howden and Martínez (1963). Since Blanchard, 1845 has never been considered the author and date for this taxon, Article 11.7.2 does not apply and this family-group name should continue to be credited to Howden and Martínez, 1963. From the context of Blanchard (1845), all his “Famille” and “Groupe” names with the “–ides” and “–ites” suffixes respectively are French vernacular names (some have accents).

**Tribe Bolbochrominæ Nikolajev, 1970**
Original spelling and citation: Bolbochromini Nikolajev 1970: 34
Type genus: *Bolbochromus* Boucomont, 1909: 117

**Tribe Gilletinini Nikolajev, 1990**
Original spelling and citation: Gilletinini Nikolajev 1990: 99
Type genus: *Gilletinus* Boucomont, 1932: 264

**Tribe Eubolbitini Nikolajev, 1970**
Original spelling and citation: Eubolbitini Nikolajev 1970: 33
Type genus: *Eubolbitus* Reitter, 1892: 125

**Tribe Bolbelasmini Nikolajev, 1996**
Original spelling and citation: Bolbelasmini Nikolajev 1996: 96
Type genus: *Bolbelasmus* Boucomont, 1911: 335
Tribe Australobolbini Nikolajev, 1996
Original spelling and citation: Australobolbini Nikolajev 1996: 96
Type genus: Australobolbus Howden and Cooper, 1977: 19

Tribe Eucanthini Nikolajev, 2002
Original spelling and citation: Eucanthini Nikolajev 2002: 209 (Nikolajev 2002b)
Type genus: Eucanthus Westwood, 1848: 387 (Westwood 1848b)

Tribe Stenaspidini Nikolajev, 2003
Original spelling and citation: Stenaspidini Nikolajev 2003: 190
Type genus: Stenaspidius Westwood, 1848: 366 (Westwood 1848a)

Subfamily Geotrupinae Latreille, 1802
Original spelling and citation: Geotrupini Latreille 1802: 142
Type genus: Geotrupes Latreille, 1797: 6

Tribe Geotrupini Latreille, 1802
Original spelling and citation: Geotrupini Latreille 1802: 142
Type genus: Geotrupes Latreille, 1797: 6

†Tribe Cretogeotrupini Nikolajev, 1996
Original spelling and citation: Cretogeotrupini Nikolajev 1996: 97
Type genus: Cretogeotrupes Nikolajev, 1992: 80

Tribe Lethrini Mulsant and Rey, 1871
Original spelling and citation: Lethraires Mulsant and Rey 1871: 161
Type genus: Lethrus Scopoli, 1777: 439
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Tribe Chromogeotrupini Zunino, 1984
Original spelling and citation: Chromogeotrupini Zunino 1984: 30
Type genus: Chromogeotrupes Bovo and Zunino, 1983: 404

Tribe Ceratotrupini Zunino, 1984
Original spelling and citation: Ceratotrupini Zunino 1984: 89
Type genus: Ceratotrupes Jekel, 1866: 540

Family Belohinidae Paulian, 1959
Original spelling and citation: Belohininae Paulian 1959: 40
Type genus: Belohina Paulian, 1959: 42

Family Passalidae Leach, 1815
Original spelling and citation: Passalida Leach 1815a: 100
Type genus: Passalus Fabricius, 1792: XI

Subfamily Aulacocyclinae Kaup, 1868
Original spelling and citation: Aulacocyclinae Kaup 1868a: 4
Type genus: Aulacocyclus Kaup, 1868: 4 (Kaup 1868a)

Tribe Aulacocyclini Kaup, 1868
Original spelling and citation: Aulacocyclinae Kaup 1868a: 4
Type genus: Aulacocyclus Kaup, 1868: 4 (Kaup 1868a)

Tribe Ceracupini Boucher, 2005
Original spelling and citation: Ceracupini Boucher 2005: 319
Type genus: Ceracupes Kaup, 1871: 16

Subfamily Passalinae Leach, 1815
Original spelling and citation: Passalida Leach 1815a: 100
Type genus: Passalus Fabricius, 1792: XI
Tribe Proculini Kaup, 1868
Original spelling and citation: Proculinae Kaup 1868b: 8
Type genus: Proculus Kaup, 1868: 8 (Kaup 1868b)
Synonym: Pseudacanthini Kaup, 1871
Original spelling and citation: Pseudacantheae Kaup 1871: 73
Type genus: Pseudacanthus Kaup, 1869: 9
Synonym: Oileini Kuwert, 1891
Original spelling and citation: Oileinae Kuwert 1891: 192
Type genus: Oileus Kaup, 1869: 3
Synonym: Sertoriini Kuwert, 1891
Original spelling and citation: Sertorinae Kuwert 1891: 175
Type genus: Sertorius Kaup, 1871: 114
Remark: This family-group name is permanently invalid because the type genus, Sertorius Kaup, 1871, is a junior homonym of Sertorius Stål, 1866 (Hemiptera) (Article 39). Arrox Zang, 1905 was proposed as a replacement name for Sertorius Kaup, 1871.
Synonym: Unduliferini Kuwert, 1891
Original spelling and citation: Unduliferinae Kuwert 1891: 176
Type genus: Undulifer Kaup, 1869: 6
Synonym: Veturiini Kuwert, 1891
Original spelling and citation: Veturinae Kuwert 1891: 173
Type genus: Veturius Kaup, 1871: 110
Synonym: Popiliini Kuwert, 1896
Original spelling and citation: Popiliinae Kuwert 1896: 221
Type genus: Popilius Kaup, 1871: 75
Synonym: Proculejini Kuwert, 1896
Original spelling and citation: Proculejinae Kuwert 1896: 221
Type genus: Proculejus Kaup, 1868: 13 (Kaup 1868b)
Synonym: Spuriinae Kuwert, 1896
Original spelling and citation: Spuriinae Kuwert 1896: 221
Type genus: Spurius Kaup, 1871: 75
Synonym: Vindicini Kuwert, 1896
Original spelling and citation: Vindicinae Kuwert 1896: 227
Type genus: Vindex Kaup, 1871: 78

Tribe Passalini Leach, 1815
Original spelling and citation: Passalida Leach 1815a: 100
Type genus: Passalus Fabricius, 1792: XI
Synonym: Neleini Kaup, 1869
Original spelling and citation: Neleinae Kaup 1869: 28
Type genus: Neleus Kaup, 1869: 30
Remark: This family-group name is permanently invalid because the type genus, Neleus Kaup, 1869, is a junior homonym of Neleus Desbonne and Schramm, 1867 (Crustacea) (Article 39).
Synonym: Pertinacini Kaup, 1871
Original spelling and citation: Pertinaceae Kaup 1871: 89
Type genus: Pertinax Kaup, 1869: 21
Synonym: Phoroneini Kaup, 1871
Original spelling and citation: Phoroneae Kaup 1871: 97
Type genus: Phoroneus Kaup, 1869: 10
Remark: This family-group name is permanently invalid because the type genus, *Phoroneus* Kaup, 1869, is a junior homonym of *Phoroneus* Stål, 1865 (Hemiptera) (Article 39). *Macrolobus* Zang, 1905 was proposed as a replacement name for *Phoroneus* Kaup, 1869.

**Synonym:** Mitrorhini Kuwert, 1891
Original spelling and citation: *Mitrorhinae* Kuwert 1891: 190
Type genus: *Mitrorhinus* Kaup, 1871: 79

**Synonym:** Paxillini Kuwert, 1891
Original spelling and citation: *Paxillinae* Kuwert 1891: 182
Type genus: *Paxillus* MacLeay, 1819: 105

**Synonym:** Petrejini Kuwert, 1891
Original spelling and citation: *Petrejinae* Kuwert 1891: 176
Type genus: *Petrejus* Kaup, 1869: 36

**Synonym:** Neleidini Kuwert, 1896
Original spelling and citation: *Neleidinae* Kuwert 1896: 222
Type genus: *Neleides* Kaup, 1869: 33

**Synonym:** Ptichopodini Kuwert, 1896
Original spelling and citation: *Ptichopinae* Kuwert 1896: 224
Type genus: *Ptichopus* Kaup, 1869: 27

**Synonym:** Rhodocanthopini Kuwert, 1896
Original spelling and citation: *Rhodacanthopinae* Kuwert 1896: 222
Type genus: *Rhodocanthopus* Kaup, 1871: 90

**Synonym:** Vatiniini Kuwert, 1896
Original spelling and citation: *Vatiniinae* Kuwert 1896: 226
Type genus: *Vatinius* Kaup, 1869: 35
Remark: This family-group name is permanently invalid because the type genus, *Vatinius* Kaup, 1869, is a junior homonym of *Vatinius* Stål, 1865 (Hemiptera) (Article 39). *Zosterothrix* Zang, 1905 was proposed as a replacement name for *Vatinius* Kaup, 1869.

**Tribe Solenocyclini Kaup, 1871**
Original spelling and citation: *Solenocycleae* Kaup 1871: 24
Type genus: *Solenocyclus* Kaup, 1868: 10 (Kaup 1868a)

**Synonym:** Eriocnemini Kaup, 1871
Original spelling and citation: *Eriocnemiae* Kaup 1871: 35
Type genus: *Eriocnemis* Kaup, 1868: 21 (Kaup 1868a)
Remark: This family-group name is permanently invalid because the type genus, *Eriocnemis* Kaup, 1868, is a junior homonym of *Eriocnemis* Reichenbach, 1849 (Aves) (Article 39). *Gnaphalocnemis* Heller, 1900 was proposed as a replacement name for *Eriocnemis* Kaup, 1868.

**Synonym:** Stephanocephalini Kaup, 1871: 78
Original spelling and citation: *Stephanocephaleae* Kaup 1871: 78
Type genus: *Stephanocephalus* Kaup, 1868: 19 (Kaup 1868b)

**Synonym:** Ciceroniini Kuwert, 1891
Original spelling and citation: *Ciceroninae* Kuwert 1891: 183
Type genus: *Ciceronius* Kaup, 1871: 29

**Synonym:** Erionomini Kuwert, 1891
Original spelling and citation: *Erionominae* Kuwert 1891: 176
Type genus: *Erionomus* Kaup, 1868: 16 (Kaup 1868a)

**Synonym:** Flaminini Kuwert, 1891
Original spelling and citation: *Flaminininae* Kuwert 1891: 185
Type genus: *Flaminius* Kuwert, 1891: 185

Synonym: Semicyclini Kuwert, 1891
Original spelling and citation: Semicyclinae Kuwert 1891: 177

Type genus: *Semicyclus* Kaup, 1871: 28

Synonym: Gnaphalocnemini Gravely, 1914
Original spelling and citation: Gnaphalocneminae Gravely 1914: 194

Type genus: *Gnaphalocnemis* Heller, 1900: 10

***Tribe Leptaulanini Kaup, 1871***
Original spelling and citation: Leptaulaceae Kaup 1871: 28
Type genus: *Leptaulax* Kaup, 1868: 11 (Kaup 1868a)

***Tribe Macrolinini Kaup, 1871***
Original spelling and citation: Macrolineae Kaup 1871: 42
Type genus: *Macrolinus* Kaup, 1868: 18 (Kaup 1868a)

Synonym: Aceraiini Kaup, 1871
Original spelling and citation: Aceraiaea Kaup 1871: 47
Type genus: *Aceraius* Kaup, 1868: 26 (Kaup 1868a)

Synonym: Gonatini Kuwert, 1891
Original spelling and citation: Gonatinae Kuwert 1891: 169
Type genus: *Gonatus* Kaup, 1871: 50

Synonym: Mastachilini Kuwert, 1891
Original spelling and citation: Mastachilinae Kuwert 1891: 167
Type genus: *Mastachilus* Kaup, 1868: 19 (Kaup 1868a)

Synonym: Pharochilini Kuwert, 1891
Original spelling and citation: Pharochilinae Kuwert 1891: 166
Type genus: *Pharochilus* Kaup, 1868: 20 (Kaup 1868a)

Synonym: Tarquiniini Kuwert, 1891
Original spelling and citation: Tarquiniinae Kuwert 1891: 164
Type genus: *Tarquinius* Kuwert, 1891: 164

Synonym: Vellejini Kuwert, 1891
Original spelling and citation: Vellejinae Kuwert 1891: 167
Type genus: *Vellejus* Kaup, 1871: 35

Remark: This family-group name is permanently invalid because the type genus, *Vellejus* Kaup, 1871, is a junior homonym of *Vellejus* Mannerheim, 1830 (Coleoptera: Staphylinidae) and *Vellejus* Stål, 1865 (Hemiptera) (Article 39). *Kaupiolus* Zang, 1903 was proposed as a replacement name for *Vellejus* Kaup, 1871.

Synonym: Aureliini Kuwert, 1896
Original spelling and citation: Aureliinae Kuwert 1896: 230
Type genus: *Aurelius* Kuwert, 1891: 168

Synonym: Lachini Kuwert, 1896
Original spelling and citation: Lachinae Kuwert 1896: 230
Type genus: *Laches* Kaup, 1871: 48

Remark: This family-group name is permanently invalid because the type genus, *Laches* Kaup, 1871, is a junior homonym of *Laches* Gistl, 1848 (Hymenoptera) and *Laches* Thorell, 1869 (Arachnida) (Article 39). *Chilomazus* Zang, 1905 was proposed as a replacement name for *Laches* Kaup, 1871.

Synonym: Pelopini Kuwert, 1896
Original spelling and citation: Pelopinae Kuwert 1896: 229
Type genus: *Pelopides* Kuwert, 1896: 229
Synonym: Pleurariini Kuwert, 1896
Original spelling and citation: Pleurariinae Kuwert 1896: 224
Type genus: Pleurarius Kaup, 1868: 1 (Kaup 1868b)

Synonym: Austropassalini Mjöberg, 1917
Original spelling and citation: Austropassalinae Mjöberg 1917: 11
Type genus: Austropassalus Mjöberg, 1917: 11

**Family Trogidae MacLeay, 1819**
Original spelling and citation: Trogidae MacLeay 1819: 59
Type genus: Trox Fabricius, 1775: 31

**Subfamily Troginae MacLeay, 1819**
Original spelling and citation: Trogidae MacLeay 1819: 59
Type genus: Trox Fabricius, 1775: 31

**Subfamily Omorginae Nikolajev, 2005**
Original spelling and citation: Omorgini Nikolajev 2005a: 322
Type genus: Omorgus Erichson, 1847: 107 (Erichson 1847a)

**Family Glaresidae Kolbe, 1905**
Original spelling and citation: Glaresini Kolbe 1905: 543
Type genus: Glaresis Erichson, 1848: 925

**Family Diphyllostomatidae Holloway, 1972**
Original spelling and citation: Diphyllostomatidae Holloway 1972: 38
Type genus: Diphyllostoma Fall, 1901: 324

**Family Lucanidae Latreille, 1804**
Original spelling and citation: Lucanides Latreille 1804: 234
Type genus: Lucanus Scopoli, 1763: 1

**Subfamily Aesalinae MacLeay, 1819**
Original spelling and citation: Aesalidae MacLeay 1819: 102
Type genus: Aesalus Fabricius, 1801: 254

**Tribe Aesalini MacLeay, 1819**
Original spelling and citation: Aesalidae MacLeay 1819: 102
Type genus: Aesalus Fabricius, 1801: 254

**Tribe Ceratognathini Sharp, 1899**
Original spelling and citation: Ceratognathini Sharp 1899: 194
Type genus: Ceratognathus Westwood, 1838: 260

**Tribe Nicagini LeConte, 1861**
Original spelling and citation: Nicagini LeConte 1861: 130
Type genus: Nicagus LeConte, 1861: 130

**Subfamily Syndesinae MacLeay, 1819**
Original spelling and citation: Syndesidae MacLeay 1819: 103
Type genus: Syndesus MacLeay, 1819: 104

Synonym: Sinodendrinae Mulsant, 1842
Original spelling and citation: Sinodendriens Mulsant 1842: 600
Type genus: Sinodendron Hellwig, 1792: 391
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Synonym: Ceruchinae Jacquelin du Val and Fairmaire, 1859
Original spelling and citation: Ceruchites Jacquelin du Val and Fairmaire 1859: 4
Type genus: Ceruchus MacLeay, 1819: 115
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2. From the context of Jacquelin du Val and Fairmaire (1859), all their “Groupe” names are French vernacular names (some have accents) even though they have the “–ites” suffix.

**Subfamily Lampriminae MacLeay, 1819**
Original spelling and citation: Lamprimidae MacLeay 1819: 97
Type genus: Lamprima Latreille, 1804: 238

**Tribe Lamprimini MacLeay, 1819**
Original spelling and citation: Lamprimidae MacLeay 1819: 97
Type genus: Lamprima Latreille, 1804: 238

**Tribe Streptocerini Kikuta, 1986**
Original spelling and citation: Streptocerini Kikuta 1986: 131
Type genus: Streptocerus Fairmaire, 1850: 53

**Subfamily Lucaninae Latreille, 1804**
Original spelling and citation: Lucanides Latreille 1804: 234
Type genus: Lucanus Scopoli, 1763: 1
Remark: Several family-group names have been used for taxa within this subfamily that were never made available under the ICZN. These names were first used after 1930 but do not satisfy Article 13.1 (accompanied by a description or definition etc.): Aegini (Maes 1992b), Allotopini (Maes 1992a), Casignetini (Maes 1992b), Chalcodinae (Didier and Séguy 1953, Lacroix 1979), Colophonini (Maes 1992b), Cyclommatini (Maes 1992a), Homoderini (Maes 1992b), Neoprosopocoiolini (Maes 1992b) (which is also not based on an available generic name), Nigidiini (Benesh 1960), Prosopocoiolini (Benesh 1960), Pseudodorcini (Benesh 1960), and Rhyssonotini (Benesh 1960).

Synonym: Platycerinae Mulsant, 1842
Original spelling and citation: Platyceraires Mulsant 1842: 593
Type genus: Platycerus Geoffroy, 1762: 87
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Synonym: Chiasognathinae Burmeister, 1847
Original spelling and citation: Chiasognathidae Burmeister 1847: 334
Type genus: Chiasognathus Stephens, 1831: 213

Synonym: Figulinae Burmeister, 1847
Original spelling and citation: Figulidae Burmeister 1847: 428
Type genus: Figulus MacLeay, 1819: 109

Synonym: Dorcinae Parry, 1864
Original spelling and citation: Dorcidae Parry 1864: 86
Type genus: Dorcus MacLeay, 1819: 111

Synonym: Cladognathinae Parry, 1870
Original spelling and citation: Cladognathidae Parry 1870: 75
Type genus: Cladognathus Burmeister, 1847: 364

Synonym: Odontolabinae Parry, 1870
Original spelling and citation: Odontolabidae Parry 1870: 106
Type genus: Odontolabis Hope, 1842: 247 (Hope 1842a)

Synonym: Rhaetulinae Miwa, 1931
Original spelling and citation: Rhaetulinae Miwa 1931: 323
Type genus: Rhaetulus Parry, 1871: 353 (Westwood 1871)
Synonym: Systenocerinae Portevin, 1931
Original spelling and citation: Systenocerini Portevin 1931: 3
Type genus: Systenocerus Weise, 1883: 93 (Heyden et al. 1883)

Synonym: Penichrolucaninae Arrow, 1950
Original spelling and citation: Penichrolucaninae Arrow 1950: 233
Type genus: Penichrolucanus Deyrolle, 1863: 485

Synonym: Dendeziinae Benesh, 1955
Original spelling and citation: Dendeziini Benesh 1955b: 72
Type genus: Dendezia Basilewsky, 1952: 36

Synonym: Lissotinae Benesh, 1955
Original spelling and citation: Lissotini Benesh 1955a: 103
Type genus: Lissotes Westwood, 1855: 213

Synonym: Sclerostominae Benesh, 1955
Original spelling and citation: Sclerostomini Benesh 1955a: 79
Type genus: Sclerostomus Burmeister, 1847: 423

Synonym: Scortizinae Benesh, 1955
Original spelling and citation: Scortizini Benesh 1955a: 171
Type genus: Scortizus Westwood, 1834: 119

Synonym: Pholidotinae Kikuta, 1986
Original spelling and citation: Pholidotini Kikuta 1986: 131
Type genus: Pholidotus MacLeay, 1819: 97
Remark: This family-group name is permanently invalid because the type genus, Pholidotus MacLeay, 1819, is a junior homonym of Pholidotus Brisson, 1762 (Mammalia) (Article 39). Pholidotus Hope, 1843 was proposed as a replacement name for Pholidotus MacLeay, 1819.

Synonym: Brasilucaninae Nikolajev, 1999
Original spelling and citation: Brasilucanini Nikolajev 1999a: 171
Type genus: Brasilucanus Vulcano and Pereira, 1961: 473

†Subfamily Paralucaninae Nikolajev, 2000
Original spelling and citation: Paralucaninae Nikolajev 2000b: S328
Type genus: Paralucanus Nikolajev, 2000: S328 (Nikolajev 2000b)

Family Ochodaeidae Mulsant and Rey, 1871
Original spelling and citation: Ochodéens Mulsant and Rey 1871: 236
Type genus: Ochodaeus Dejean, 1821: 56
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

†Subfamily Cretochodaenae Nikolajev, 1995
Original spelling and citation: Cretochodaenii Nikolajev 1995a: 78
Type genus: Cretochodaenus Nikolajev, 1995: 79 (Nikolajev 1995a)

Subfamily Ochodaeinae Mulsant and Rey, 1871
Original spelling and citation: Ochodéens Mulsant and Rey 1871: 236
Type genus: Ochodaeus Dejean, 1821: 56

Tribe Ochodaeini Mulsant and Rey, 1871
Original spelling and citation: Ochodéens Mulsant and Rey 1871: 236
Type genus: Ochodaeus Dejean, 1821: 56

Tribe Endognathini Scholtz, 1988
Original spelling and citation: Endognathini Scholtz in Scholtz et al. 1988: 228
Type genus: Endognathus Benderitter, 1920: 112
Remark: Scholtz (1991) corrected Endognathini to Enodognathini to correct a misspelling of the type genus.

Subfamily Chaetocanthinae Scholtz, 1988
Original spelling and citation: Chaetocanthinae Scholtz in Scholtz et al. 1988: 231
Type genus: Chaetocanthus Péringuey, 1901: 495

Tribe Chaetocanthini Scholtz, 1988
Original spelling and citation: Chaetocanthini Scholtz in Scholtz et al. 1988: 231
Type genus: Chaetocanthus Péringuey, 1901: 495

Tribe Pseudochodaeini Scholtz, 1988
Original spelling and citation: Pseudochodaeini Scholtz in Scholtz et al. 1988: 235
Type genus: Pseudochodaeus Carlson and Ritcher, 1974: 99

Tribe Synochodaeini Scholtz, 1988
Original spelling and citation: Synochodaeini Scholtz in Scholtz et al. 1988: 237
Type genus: Synochodaeus Kolbe, 1907: 27

Family Hybosoridae Erichson, 1847
Original spelling and citation: Hybosoridae Erichson 1847a: 104
Type genus: Hybosorus MacLeay, 1819: 120

Subfamily Anaidinae Nikolajev, 1996
Original spelling and citation: Anaidini Nikolajev 1996: 94
Type genus: Anaides Westwood, 1842: 457 (Westwood 1842a)

Synonym: Cryptogeniinae Howden, 2001
Original spelling and citation: Cryptogeniini Howden 2001: 199
Type genus: Cryptogenius Westwood, 1842: 457 (Westwood 1842a)

Subfamily Ceratocanthinae Martínez, 1968
Original spelling and citation: Ceratocanthini Martínez 1968: 14
Type genus: Ceratocanthus White, 1842: 93

Tribe Ceratocanthini Martínez, 1968
Original spelling and citation: Ceratocanthini Martínez 1968: 14
Type genus: Ceratocanthus White, 1842: 93

Synonym: Acanthocerini Lacordaire, 1856
Original spelling and citation: Acanthocérides Lacordaire 1856: 155
Type genus: Acanthocerus MacLeay, 1819: 136
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2. This family-group name is permanently invalid because the type genus, Acanthocerus MacLeay, 1819, is a junior homonym of Acanthocerus Palisot de Beauvois, 1818 (Hemiptera) (Article 39). Ceratocanthus White, 1842 was proposed as a replacement name for Acanthocerus MacLeay, 1819.

Tribe Scarabatermitini Nikolajev, 1999
Original spelling and citation: Scarabatermitini Nikolajev 1999b: 175
Type genus: Scarabatermes Howden, 1973: 29

Tribe Ivieolini Howden and Gill, 2000
Original spelling and citation: Ivieolini Howden and Gill 2000: 315
Type genus: Ivieolus Howden and Gill, 1988: 2077

Subfamily Hybosorinae Erichson, 1847
Original spelling and citation: Hybosoridae Erichson 1847a: 104
Type genus: Hybosorus MacLeay, 1819: 120
Subfamily Liparochrinæ Ocampo, 2006
Original spelling and citation: Liparochrinae Ocampo 2006: 29
Type genus: Liparochrus Erichson, 1848: 925

Subfamily Pachyplectrinæ Ocampo, 2006
Original spelling and citation: Pachyplectrinae Ocampo 2006: 30
Type genus: Pachyplectrus LeConte, 1874: 53

Family Glaphyridæ MacLeay, 1819
Original spelling and citation: Glaphyridæ MacLeay 1819: 76
Type genus: Glaphyrus Latreille, 1802: 150

Subfamily Glaphyrinæ MacLeay, 1819
Original spelling and citation: Glaphyridæ MacLeay 1819: 76
Type genus: Glaphyrus Latreille, 1802: 150
Remark: Amphicomites (Blanchard 1845: 211) was also used but was not subsequently Latinized and is therefore unavailable. From the context of Blanchard (1845), all his “Famille” and “Groupe” names with the “–ides” and “–ites” suffixes respectively are French vernacular names (some have accents).

†Subfamily Cretoglaphyrinæ Nikolajev, 2005
Original spelling and citation: Cretoglaphyrini Nikolajev 2005b: 70
Type genus: Cretoglaphyrus Nikolajev, 2005: 70 (Nikolajev 2005b)

Family Scarabæidae Latreille, 1802
Original spelling and citation: Scarabaëides Latreille 1802: 144
Type genus: Scarabaeus Linnaeus, 1758: 345

†Subfamily Lithoscarabaëinæ Nikolajev, 1992
Original spelling and citation: Lithoscarabaeinae Nikolajev 1992: 76
Type genus Lithoscarabaeus Nikolajev, 1992: 78

Subfamily Chironinæ Blanchard, 1845
Original spelling and citation: Chironites Blanchard 1845: 225
Type genus: Chiron MacLeay, 1819: 107
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2. The stem of this family-group name may be formed incorrectly but this spelling is in prevailing usage and must be maintained (Article 29.5).

Subfamily Aegialinæ Laporte, 1840
Original spelling and citation: Aegialites Laporte 1840: 99
Type genus: Aegialia Latreille, 1807: 96
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Synonym: Silluviinae Landin, 1949
Original spelling and citation: Silluviinae Landin 1949: 3
Type genus: Silluvia Landin, 1949: 5

Subfamily Eremazinæ Iablokoff-Khnzorian, 1977
Original spelling and citation: Eremazini Iablokoff-Khnzorian 1977: 168
Type genus: Eremacus Mulsant, 1851: 139
Remark: Eremazina (Stebnicka, 1977: 488) was also used in the same year but with a later publication date.

Subfamily Aphodinæ Leach, 1815
Original spelling and citation: Aphodida Leach 1815: 97
Type genus: Aphodius Illiger, 1798: 15 (Kugelann and Illiger 1798)
Remark: Several family-group names have been used for taxa within this subfamily that were not originally Latinized and have not been subsequently Latinized and accepted as valid. These names (and others like them) are unavailable: Ammoeoeciates (Mulsant 1842: 301), Heptaulacates (Mulsant and Rey 1870: 385), Hexalates (Mulsant and Rey 1870: 385), Plagiogonates (Mulsant and Rey 1870: 609), and Pleurophorates (Mulsant 1842: 304).

Tribe Aphodini Leach, 1815
Original spelling and citation: Aphodida Leach 1815a: 97
Type genus: Aphodius Illiger, 1798: 15 (Kugelann and Illiger 1798)

Subtribe Aphodina Leach, 1815
Original spelling and citation: Aphodida Leach 1815a: 97
Type genus: Aphodius Illiger, 1798: 15 (Kugelann and Illiger 1798)

Subtribe Didactyliina Pittino, 1985
Original spelling and citation: Didactyiina Pittino 1985: 270
Type genus: Didactylia d’Orbigny, 1896: 247

Subtribe Proctophanina Stebnicka and Howden, 1995
Original spelling and citation: Proctophanini Stebnicka and Howden 1995: 742
Type genus: Proctophanes Harold, 1861: 111

Tribe Corythoderini Schmidt, 1910
Original spelling and citation: Corythoderina Schmidt 1910: 137
Type genus: Corythoderus Klug, 1845: [8]

Tribe Euparini Schmidt, 1910
Original spelling and citation: Euparini Schmidt 1910: 102
Type genus: Euparia LePeletier and Serville, 1828: 357 (LePeletier and Serville, 1828a)

Synonym: Ataeniini Harold, 1868
Original spelling and citation: Ataenidae Harold 1868: 278
Type genus: Ataenius Harold, 1867: 82 (Harold 1867b)
Remark: Although Ataeniini has priority over Euparini, the latter is in prevailing usage and must be considered the valid using a reversal of precedence (Article 23.9). Ataeniini has not been used as a valid name since it was first proposed. Therefore, I invoke Article 23.9.2 and provide evidence that Euparini has been used as a valid name in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years. In compliance with the requirements of the Code, the following list of qualified publications, in chronological order, used Euparini (with any recognized family-group suffix) as a valid family-group name, which is sufficient evidence that it is in prevailing usage: Balthasar 1964; Cartwright 1977; Endrödi and Rakovič 1981; Chalumeau 1983; Ratcliffe 1991; Chalumeau 1992; Deloya 1994; Stebnicka and Howden 1996; Stebnicka 1997; Stebnicka 2001a; Stebnicka 2001b; Dellacasa and Stebnicka 2001; Martinez, Deloya, and Dellacasa 2001; Cruz and Martinez 2002; Skelley and Gordon 2002; Stebnicka 2002a; Stebnicka 2002b; Gordon and McCleave 2003; Stebnicka 2003a; Stebnicka 2003b; Stebnicka 2003c; Ordoñez Resténdiz and Deloya 2004; Stebnicka 2004; Masumoto and Ochi 2005; Smith 2005; Stebnicka 2005a; Stebnicka 2005b; and Stebnicka and Lago 2005.

Synonym: Lomanoxiini Stebnicka, 1999
Original spelling and citation: Lomanoxiini Stebnicka 1999: 280
Type genus: Lomanoxia Martinez, 1951: 29

Tribe Odontolochini Stebnicka and Howden, 1996
Original spelling and citation: Odontolochini Stebnicka and Howden 1996: 99
Type genus: Odontolochus Schmidt, 1916: 99
Tribe **Odochilini** Raković, 1987
Original spelling and citation: Odochilini Raković 1987: 29
Type genus: *Odochilus* Harold, 1877: 97

Tribe **Psammodini** Mulsant, 1842
Original spelling and citation: Psammodiaires Mulsant 1842: 317
Type genus: *Psammodius* Falle, 1807: 37
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Subtribe **Psammodina** Mulsant, 1842
Original spelling and citation: Psammodiaires Mulsant 1842: 317
Type genus: *Psammodius* Falle, 1807: 37
Synonym: *Psammobiina* Schmidt, 1910: 115
Original spelling and citation: Psammobiina Schmidt 1910: 115
Type genus: *Psammobius* Heer, 1841: 531

Subtribe **Rhyssemina** Pittino and Mariani, 1986
Original spelling and citation: Rhyssemina Pittino and Mariani 1986: 17
Type genus: *Rhyssemus* Mulsant, 1842: 314

Tribe **Rhyparini** Schmidt, 1910
Original spelling and citation: Rhyparina Schmidt 1910: 130
Type genus: *Rhyparus* Westwood, 1845: xciii (Westwood 1845b*)
Remark: The original spelling of the type genus is *Ryparus* and Agassiz (1847) later made the unjustified emendation to *Rhyparus*. Since this unjustified emendation is in prevailing usage, it should be considered a justified emendation (Article 33.2.3.1). The emended spelling avoids homonymy with *Ryparus* Spinola, 1844 (Coleoptera: Cleridae). *Rhyparus* Westwood, 1845 is a senior homonym of *Rhyparus* Agassiz, 1847 (Coleoptera: Cleridae). The later name is an unjustified emendation of *Ryparus* Spinola, 1844 and is not in prevailing usage. Since the emended spelling is not in prevailing usage for the Cleridae name, *Ryparus* Spinola, 1844 and the Cleridae *Rhyparus* Agassiz, 1847 should both be treated as separate names.

Tribe **Stereomerini** Howden and Storey, 1992
Original spelling and citation: Stereomerini Howden and Storey 1992: 1811
Type genus: *Stereomera* Arrow, 1905: 534

Tribe **Termitoderini** Tangelder and Krikken, 1982
Original spelling and citation: Termitoderini Tangelder and Krikken 1982: 10
Type genus: *Termitoderus* Mateu, 1966: 718

Tribe **Thinorycterini** Semenov-Tian-Shanski and Reichardt, 1925
Original spelling and citation: Thinorycterina Semenov-Tian-Shanski and Reichardt 1925: 86
Type genus: *Thinorycter* Semenov-Tian-Shanski and Reichardt, 1925: 83

Tribe **Phycochini** Landin, 1960
Original spelling and citation: Phycochini Landin 1960: 59
Type genus: *Phycochus* Broun, 1886: 770

Subfamily **Aulonocneminae** Janssens, 1946
Original spelling and citation: Aulonocneminae Janssens 1946: 7
Type genus: *Aulonocnemis* Klug, 1838: 70

Subfamily **Termitotroginae** Wasmann, 1918
Original spelling and citation: Termitotrogini Wasmann 1918: 4
Type genus: *Termitotrox* Reichensperger, 1915: 16
Subfamily Scarabaeinae Latreille, 1802
Original spelling and citation: Scarabaeides Latreille 1802: 144
Type genus: Scarabaeus Linnaeus, 1758: 345

 Tribe Eucranini Burmeister, 1873
Original spelling and citation: Eucraniaedes Burmeister 1873: 405
Type genus: Eucranium Brullé, 1837: 289 (Audouin and Brullé 1837)
Synonym: Ennearabdini Pereira and Martínez, 1956
Original spelling and citation: Ennearabdini Pereira and Martinez 1956: 238.
Type genus: Ennearabdus van Lansberge, 1874: CXLIII (van Lansberge 1874a)

 Tribe Gymnopleurini Lacordaire, 1856
Original spelling and citation: Gymnopleurides Lacordaire 1856: 72
Type genus: Gymnopleurus Illiger, 1803: 199
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

 Tribe Eurysternini Vulcano, Martínez, and Pereira, 1961
Original spelling and citation: Eurysternini Vulcano, Martínez, and Pereira 1961: 268
Type genus: Eurysternus Dalman, 1824: 8

 Tribe Anthonini van Lansberge, 1874
Original spelling and citation: Canthonides van Lansberge 1874b: 184
Type genus: Canthon Hoffmannsegg, 1817: 38
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2. Two family-group names have been used for taxa within this tribe that were not originally Latinized and have not been subsequently Latinized and accepted as valid. These names are unavailable: Epirinides (van Lansberge 1874b: 189) and Minthophilides (Lacordaire 1856: 80). From the context of van Lansberge (1874b), all his “tribu” names with the “–ides” suffix are French vernacular names (some have accents).

 Synonym: Deltochilini Lacordaire, 1856
Original spelling and citation: Deltochilides Lacordaire, 1856: 78
Type genus: Deltochilum Eschscholtz, 1822: 37
Remark: Although this family-group name was not originally proposed in a Latinized form, it was subsequently Latinized by Germain (1903: 354) and should be considered available under Article 11.7.2. Although Deltochilini has priority over Canthonini, the latter is in prevailing usage at the tribal level and must not be displaced by the older name (Article 35.5).

 Synonym: Epilissini van Lansberge, 1874
Original spelling and citation: Epilissides van Lansberge, 1874: 188 (van Lansberge 1874b)
Type genus: Epilissus Dejean, 1836: 151
Remark: Although this family-group name was not originally proposed in a Latinized form, it was subsequently Latinized by Lebis (1953: 107) and should be considered available under Article 11.7.2.

 Synonym: Panelini Arrow, 1931
Original spelling and citation: Panelini Arrow 1931: 404
Type genus: Panelus Lewis, 1895: 375

 Tribe Coprini Leach, 1815
Original spelling and citation: Coprides Leach 1815a: 96
Type genus: Copris Geoffroy, 1762: 59
Synonym: Coptodactylini Janssens, 1946
Original spelling and citation: Coptodactylides Janssens 1946: 13
Type genus: Coptodactyla Burmeister, 1846: [3]

**Tribe ATEUCHINI Laporte, 1840**
Original spelling and citation: Ateuchites Laporte 1840: 63
Type genus: Ateuchus Weber, 1801: 10
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2. Dichotomides (Halffter 1961: 228) and Dichotomiini (Halffter and Matthews 1966: 256) were used as a family-group name for taxa within this tribe but neither was described or validated in any code compliant way, therefore the name is unavailable.

Synonym: Scatonomini Lacordaire, 1856
Original spelling and citation: Scatonomides Lacordaire, 1856: 87
Type genus: Scatonomus Erichson, 1835: 256
Remark: Although this family-group name was not originally proposed in a Latinized form, it was subsequently been Latinized by Harold (1867a: 9) and should be considered available under Article 11.7.2.

Synonym: Choeridiini Harold, 1867
Original spelling and citation: Choerididae Harold 1867a: 9
Type genus: Choeridium LePeletier and Serville, 1828: 536 (LePeletier and Serville, 1828a)

Synonym: Pinotini Kolbe, 1905
Original spelling and citation: Pinotinae Kolbe 1905: 548
Type genus: Pinotus Erichson, 1847: 108 (Erichson 1847a)

**Tribe ONITICELLINI Kolbe, 1905**
Original spelling and citation: Oniticellini Kolbe 1905: 547
Type genus: Oniticellus Dejean, 1821: 53

**Subtribe Drepanocerina van Lansberge, 1875**
Original spelling and citation: Drépanocérides van Lansberge 1875: 14
Type genus: Drepanocerus Kirby, 1828: 521
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2. Although Drepanocerina has priority over Oniticellini, the later is in prevailing usage at the tribal level and must not be displaced by the older name (Article 35.5).

**Subtribe Oniticellina Kolbe, 1905**
Original spelling and citation: Oniticellini Kolbe 1905: 547
Type genus: Oniticellus Dejean, 1821: 53

**Subtribe Helictopleurina Janssens, 1946**
Original spelling and citation: Helictopleurides Janssens 1946: 11
Type genus: Helictopleurus d’Orbigny, 1915: 402

**Tribe ONITINI Laporte, 1840**
Original spelling and citation: Onitides Laporte 1840: 88
Type genus: Onitis Fabricius, 1798: 25
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

**Tribe ONTHOPHAGINI Burmeister, 1846**
Original spelling and citation: Onthophagidae Burmeister 1846: [1]
Type genus: Onthophagus Latreille, 1802: 141
Synonym: Alloscelini Janssens, 1946  
Original spelling and citation: Alloscelides Janssens 1946: 10  
Type genus: *Alloscelus* Boucomont, 1923: 1

**Tribe Scarabaeini Latreille, 1802**  
Original spelling and citation: Scarabaeides Latreille 1802: 144  
Type genus: *Scarabaeus* Linnaeus, 1758: 345

Synonym: Pachysomatini Ferreira, 1953  
Original spelling and citation: Pachysomides Ferreira, 1953: 8  
Type genus: *Pachysoma* MacLeay, 1821: 507

Synonym: Actinophorini Ádám, 2003  
Original spelling and citation: Actinophorini Ádám 2003: 130  
Type genus: *Actinophorus* Creutzer, 1799: 79*  
Remark: The genus *Actinophorus* is a junior synonym of *Scarabaeus* therefore the family-group name Actinophorini is a synonym of Scarabaeini.

**Tribe Phanaeini Kolbe, 1905**  
Original spelling and citation: Phanaeinae Kolbe 1905: 550  
Type genus: *Phanaeus* MacLeay, 1819: 124

**Tribe Sisyphini Mulsant, 1842**  
Original spelling and citation: Sisyphaires Mulsant 1842: 41  
Type genus: *Sisyphus* Latreille, 1807: 79  
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2. The original spelling of the type genus is *Sisyphes*, however, the incorrect subsequent spelling *Sisyphus* is in prevailing usage and should be considered the correct original spelling (Article 33.3.1).

†**Subfamily Prototroginae Nikolajev, 2000**  
Original spelling and citation: Prototroginae Nikolajev 2000a: 63  
Type genus: *Prototrox* Nikolajev, 2000: 65 (Nikolajev 2000a)

†**Subfamily Cretoscarabaeinae Nikolajev, 1995**  
Original spelling and citation: Cretoscarabaeinae Nikolajev 1995b: 147  
Type genus: *Cretoscarabaeus* Nikolajev, 1995: 147 (Nikolajev 1995b)

**Subfamily Dynamopodinae Arrow, 1911**  
Original spelling and citation: Dynamopinæ Arrow 1911a: 611  
Type genus: *Dynamopus* Semenov-Tian-Shanskij, 1895: 336  
Remark: Lawrence and Newton (1995) corrected the stem of this family-group name.

**Subfamily Pfaenomeridinae Erichson, 1847**  
Original spelling and citation: Pfaenomerini Erichson 1847b: 655  
Type genus: *Pfaenomeris* Hope, 1833: 62  
Remark: The International Commission on Zoological Nomenclature (1962) emended the stem of this family-group name from Pfaenomer- to Pfaenomerid- thus removing it from homonymy with another family-group name. In this ruling, “Ohaus, 1913” was erroneously given as the original author of this family-group name.

**Subfamily Orphninae Erichson, 1847**  
Original spelling and citation: Orphnidae Erichson 1847a: 111  
Type genus: *Orphnus* MacLeay, 1819: 119

**Tribe Orphnini Erichson, 1847**  
Original spelling and citation: Orphnidae Erichson 1847a: 111  
Type genus: *Orphnus* MacLeay, 1819: 119
Remark: Hybalites (Jacquelin du Val and Fairmaire 1859: 31) was used for taxa within this tribe but this family-group name was not originally Latinized and has not been subsequently Latinized and accepted as valid, therefore it is unavailable. From the context of Jacquelin du Val and Fairmaire (1859), all their “Groupe” names are French vernacular names (some have accents) even though they have the “–ites” suffix.

**Tribe AEGIDIINI Paulian, 1984**
Original spelling and citation: Aegidiinae Paulian 1984: 68
Type genus: *Aegidium* Westwood, 1845: 440 (Westwood 1845a)
Remark: The type genus was described three times in 1845 by Westwood (1845a: 440, 1845c: 158) and Blanchard (1845: 221). The earliest know publication dates for these papers are as follows: Westwood 1845a: 1 June 1845 (Evenhuis 2003), Blanchard 1845: 28 June 1845 (Evenhuis 1997), and Westwood 1845c: 25 November 1845 (Wheeler 1912). Therefore Westwood (1845a) has priority and must be considered the publication that first made *Aegidium* available under the ICZN.

**Subfamily ALLIDIOSTOMATINAES Arrow, 1940**
Original spelling and citation: Allidiostomidae Arrow 1940: 16
Type genus: *Allidiostoma* Arrow, 1940: 16
Remark: Lawrence and Newton (1995) corrected the stem of this family-group name.

Synonym: Idiostomatinæ Arrow, 1904
Original spelling and citation: Idiostominae Arrow 1904: 747
Type genus: *Idiostoma* Arrow, 1904: 740
Remark: This family-group name is permanently invalid because the type genus, *Idiostoma* Arrow, 1904, is a junior homonym of *Idiostoma* Walsingham, 1882 (Lepidoptera) (Article 39). *Allidiostoma* Arrow, 1940 was proposed as a replacement name for *Idiostoma* Arrow, 1904.

**Subfamily ACLOPINAE Blanchard, 1850**
Original spelling and citation: Aclopitae Blanchard 1850: 96
Type genus: *Aclopus* Erichson, 1835: 259

**Tribe ACLOPINI Blanchard, 1850**
Original spelling and citation: Aclopitae Blanchard 1850: 96
Type genus: *Aclopus* Erichson, 1835: 259

**Tribe PHAENOGNATHINI Lablokoff-Khnzorian, 1977**
Original spelling and citation: Phaenognathini Lablokoff-Khnzorian 1977: 137
Type genus: *Phaenognatha* Hope, 1842: 45 (Hope 1842b)
Remark: The genus was spelled *Phaenognathus* and *Phaenognatha* in the paper validating the name but the later spelling is in prevailing usage and is the correct spelling (Allsopp 1981).

†**Tribe HOLCOROBEINI Nikolajev, 1992**
Original spelling and citation: Holcorobeini Nikolajev 1992: 81
Type genus: *Holcorobeus* Nikritin, 1977: 127
Remark: The type genus was spelled both *Holcorobeus* (6 times) and *Holcoribeus* (1 time) in the paper containing the original description. *Holcorobeus* is obviously the intended spelling and has been adapted by subsequent authors, therefore this should be considered the correct spelling.

**Subfamily MELOLONTHINAE Leach, 1819**
Original spelling and citation: Melolonthidae Leach in Samouelle 1819: 189
Type genus: *Melolontha* Fabricius, 1775: 31
Remark: This family-group name was proposed in a publication by Samouelle (1819) but was attributed by Samouelle to Leach. Therefore Leach is the author of the name but “Leach in Samouelle” can also be used to facilitate information retrieval as
suggested in Recommendation 51E of the ICZN. Leach (Samouelle 1819) and MacLeay (1819) both used Melolonthidae in the same year. Samouelle was published first (June 1819) and MacLeay later (November 1819) so Leach in Samouelle has priority and should be credited with authorship of this name. The publication dates of these references were reported in the “Catalogue of the Library of the Linnean Society” in Transactions of the Linnean Society and in Evenhuis (1997) (both from independent sources). The type genus, Melolontha Fabricius, 1775, is not a junior homonym of Melolontha Geoffroy, 1762. The Geoffroy name was suppressed for the purposes of the Principle of Priority and the Principle of Homonymy (ICZN 1994).

**Tribe Pachypodini Erichson, 1840**
Original spelling and citation: Pachypoden Erichson 1840: 29
Type genus: *Pachypus* Dejean, 1821: 57
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2. Billberg (1820: 390) used the name *Pachypus* prior to Dejean (1821), but this name was not made available under the ICZN in that publication. Therefore, Dejean (1821) is the author of the genus and it is not a junior homonym.

**Tribe Lichniini Burmeister, 1844**
Original spelling and citation: Lichniidae Burmeister 1844: 8
Type genus: *Lichnia* Erichson, 1835: 269

**Tribe Euchirini Hope, 1840**
Original spelling and citation: Eucheiriidae Hope 1840: 300
Type genus: *Euchirus* Kirby, 1828: 636 (Kirby and Spence 1828)
Remark: The incorrect subsequent spelling *Eucheirus* originated with Hope (1837: 24) and should not be used.

**Tribe Systellopinii Sharp, 1877**
Original spelling and citation: Systellopides Sharp 1877: 311
Type genus: *Systellopus* Sharp, 1877: 315

**Tribe Chasmatopteri Lacordaire, 1856**
Original spelling and citation: Chasmatoptérides Lacordaire 1856: 220
Type genus: *Chasmatopterus* Dejean, 1821: 60
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

**Tribe Oncerini LeConte, 1861**
Original spelling and citation: Oncerini LeConte 1861: 133
Type genus: *Oncerus* LeConte, 1856: 283 (LeConte 1856a)

**Tribe Podolasiini Howden, 1997**
Original spelling and citation: Podolasiini Howden 1997: 224
Type genus: *Podolasia* Harold, 1869: 122
Synonym: Lasiopodini LeConte, 1856
Original spelling and citation: Lasiopodes LeConte 1856a: 282
Type genus: *Lasiopus* LeConte, 1856: 282 (LeConte 1856a)
Remark: This family-group name is permanently invalid because the type genus, *Lasiopus* LeConte, 1856, is a junior homonym of *Lasiopus* Schönherr, 1823 (Coleoptera: Curculionidae) and *Lasiopus* Geoffroy, 1835 (Mammalia) (Article 39). *Podolasia* Harold, 1869 was proposed as a replacement name for *Lasiopus* LeConte, 1856.

**Tribe Ablaberini Blanchard, 1850**
Original spelling and citation: Ablaberitae Blanchard 1850: 100
Type genus: *Ablabera* Dejean, 1833: 159
Synonym: Camentini Machatschke, 1959
Original spelling and citation: Camentini Machatschke 1959: 743
Type genus: Camenta Erichson, 1847: 695 (Erichson 1847b)

**Tribe Sericini Kirby, 1837**
Original spelling and citation: Sericidae Kirby 1837: 128
Type genus: Serica MacLeay, 1819: 146
Remark: Hope (1837) and Kirby (1837) both used Sericidae in the same year and the Hope (1837) paper refers to the Kirby (1837) paper. This is internal evidence in Hope (1837) that the Kirby (1837) paper was published first so Kirby should be credited with authorship of this family-group name.

**Subtribe Phyllotocina Burmeister, 1855**
Original spelling and citation: Phyllotocidae Burmeister 1855: 182
Type genus: Phyllotocus Fisher von Waldheim, 1823: 255

**Subtribe Sericina Kirby, 1837**
Original spelling and citation: Sericinae Kirby 1837: 128
Type genus: Serica MacLeay, 1819: 146
Remark: Omaloplites (Blanchard 1845: 212) was used for taxa within this tribe but this family-group name was not originally Latinized and has not been subsequently Latinized and accepted as valid, therefore it is unavailable. From the context of Blanchard (1845), all his “Famille” and “Groupe” names with the “-ides” and “-ites” suffixes respectively are French vernacular names (some have accents).

Synonym: Homalopliina Burmeister, 1855
Original spelling and citation: Homalopiidae Burmeister 1855: 147
Type genus: Homaloplia Agassiz, 1847: 258
Remark: The type genus is an unjustified emendation of Omaloplia Schönherr, 1817. Since the emended spelling is not in prevailing usage this name should be considered as a separate, available name. Erichson (1847b: 700) used Homaloplia in the same year as Agassiz (1847) but the exact publication dates of these works are unclear. Agassiz (1847) is dated 1846 on the cover page so I am assuming that it came out early in the following year.

Synonym: Astaenina Burmeister, 1855
Original spelling and citation: Astaenidae Burmeister 1855: 123
Type genus: Astaena Erichson, 1847: 101 (Erichson 1847a)

**Subtribe Trochalina Brenske, 1898**
Original spelling and citation: Trochalinae Brenske 1898: 354
Type genus: Trochalus Laporte, 1832: [1] (Laporte 1832c)

**Tribe Phyllotocidiini Britton, 1957**
Original spelling and citation: Phyllotocidiini Britton 1957: 9
Type genus: Phyllotocidium Blackburn, 1898: 24

**Tribe Diphucephalini Laporte, 1840**
Original spelling and citation: Diphucephalites Laporte 1840: 145
Type genus: Diphucephala Dejean, 1821: 58
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

**Tribe Comophorini Britton, 1957**
Original spelling and citation: Comophorini Britton 1957: 10
Type genus: Comophorina Strand, 1928: 3

**Tribe Stethaspini Burmeister, 1855**
Original spelling and citation: Stethaspidae Burmeister 1855: 218
Type genus: Stethaspis Hope, 1837: 40
Remark: Although Stethaspini has not been used in any publication since before 1900 and Xylonichini has been used recently as a valid tribe, a reversal of precedence (Article 23.9) cannot be used to preserve the latter. Xylonichini has not been used as a valid name in at least 25 works published by at least 10 authors in the immediately preceding 50 years. Therefore, Stethaspini must be considered the valid name for this tribe.

Synonym: Xylonichini Britton, 1957
Original spelling and citation: Xylonychini Britton 1957: 9
Type genus: Xylonichus Boisdouval, 1835: 186
Remark: Two spellings have been used for the type genus: Xylonichus, the original spelling and Xylonychus, an incorrect subsequent spelling. The incorrect subsequent spelling was used to form the family-group name. Since neither spelling is in prevailing usage (Britton 1957, Houston and Weir 1992) the original spelling should be used as the correct one. Therefore, the family-group name must be emended to match the original and correct spelling of the type genus (Article 35.4.1).

Tribe **Automoliini** Britton, 1978
Original spelling and citation: Automoliini Britton 1978: 7
Type genus: Automolus Britton, 1978: 7
Remark: This genus-group name and family-group name are replacement names for Automolus Burmeister, 1855 (a junior homonym) and Automolini Britton, 1957.

Synonym: Caulobiini Burmeister, 1855
Original spelling and citation: Caulobiina Burmeister 1855: 204
Type genus: Caulobius Le Guillou, 1844: 224
Remark: This family-group name is permanently invalid because the type genus, Caulobius Le Guillou, 1844, is a junior homonym of Caulobius Duponchel, 1838 (Lepidoptera) (Article 39). Deuterocaulobius Dalla Torre, 1912 was proposed as a replacement name for Caulobius Le Guillou, 1844.

Synonym: Automolini Britton, 1957
Original spelling and citation: Automolini Britton 1957: 9
Type genus: Automolus Burmeister, 1855: 202
Remark: This family-group name is permanently invalid because the type genus, Automolus Burmeister, 1855, is a junior homonym of Automolus Reichenbach, 1853 (Aves). Consequently the genus-group name and associated family-group name were both replaced by Britton (1978) (see Automoliini above).

Tribe **Maechidiini** Burmeister, 1855
Original spelling and citation: Maechidiina Burmeister 1855: 208
Type genus: Maechidius MacLeay, 1819: 140

Tribe **Liparetrini** Burmeister, 1855
Original spelling and citation: Liparetridae Burmeister 1855: 187
Type genus: Liparetrus Guérin-Méneville, 1831: 3

Synonym: Haplonychini Burmeister, 1855
Original spelling and citation: Haplonychidae Burmeister 1855: 224
Type genus: Haplonycha Dejean, 1836: 179
Remark: The original spelling of the type genus is Aplonycha but Agassiz (1847: 29) made the unjustified emendation to Haplonycha. Since this unjustified emendation is in prevailing usage, it should be considered a justified emendation (Article 33.2.3.1). Britton (1986) commented that this generic name was not made available from where it first appeared in text (in Dejean 1833). Although this is correct, Britton overlooked the next edition (Dejean 1836) of the Dejean catalogue, which does properly validate this name. Haplonycha Dejean, 1836 is currently considered to be a junior synonym of Colpochila Erichson, 1843.
Synonym: Allarini Britton, 1955
Original spelling and citation: Allarini Britton 1955: 125
Type genus: Allara Britton, 1955: 124

Synonym: Colpochilini Britton, 1957
Original spelling and citation: Colpochilini Britton 1957: 10
Type genus: Colpochila Erichson, 1843: 195

**Tribe Scitalini Britton, 1957**
Original spelling and citation: Scitalini Britton 1957: 10
Type genus: Scitala Erichson, 1842: 166

**Tribe Pachytrichini Burmeister, 1855**
Original spelling and citation: Pachytrichiadae Burmeister 1855: 241
Type genus: Pachytricha Hope, 1841: 303

**Tribe Sericoideini Erichson, 1847**
Original spelling and citation: Sericoideae Erichson 1847a: 102
Type genus: Sericoides Guérin-Méneville, 1840: 301

**Tribe Heteronychini Lacordaire, 1856**
Original spelling and citation: Hétéronychides Lacordaire 1856: 225
Type genus: Heteronyx Guérin-Méneville, 1831: 3
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

**Tribe Diplotaxini Kirby, 1837**
Original spelling and citation: Diplotaxidae Kirby 1837: 129
Type genus: Diplotaxis Kirby, 1837: 129
Synonym: Apogoniini Blanchard, 1851
Original spelling and citation: Apogoniitae Blanchard 1851: 228
Type genus: Apogonia Kirby, 1819: 401 (Kirby 1819a)

Synonym: Liogenini Blanchard, 1851
Original spelling and citation: Liogenitae Blanchard 1851: 166
Type genus: Liogenys Guérin-Méneville, 1831: 3

**Tribe Melolonthini Leach, 1819**
Original spelling and citation: Melolonthidæ Leach in Samouelle 1819: 189
Type genus: Melolontha Fabricius, 1775: 31

**Subtribe Schizonychina Burmeister, 1855**
Original spelling and citation: Schizonychidae Burmeister 1855: 265
Type genus: Schizonycha Dejean, 1833: 161

**Subtribe Enarina Dewailly, 1950**
Original spelling and citation: Enarina Dewailly 1950: 323
Type genus: Enaria Erichson, 1847: 657 (Erichson 1847b)

**Subtribe Heptophyllina Medvedev, 1951**
Original spelling and citation: Heptophyllini Medvedev 1951: 197
Type genus: Heptophylla Motschulsky, 1858: 32

**Subtribe Pegylinia Lacroix, 1989**
Original spelling and citation: Pegyliniae Lacroix 1989: 115
Type genus: Pegylis Erichson, 1847: 657 (Erichson 1847b)

**Subtribe Rhizotrogina Burmeister, 1855**
Original spelling and citation: Rhizotrogidae Burmeister 1855: 308
Type genus: Rhizotrogus Latreille, 1825: 371
Remark: The original spelling of the type genus is *Rhizotrogue* but Berthold (1827) made the unjustified emendation to *Rhizotrogus*. Since this unjustified emendation is in prevailing usage, it should be considered a justified emendation (Article 33.2.3.1) (see Branco 2006 for more details).

**Subtribe Leucopholina Burmeister, 1855**

Original spelling and citation: Leucopholidae Burmeister 1855: 285
Type genus: *Leucopholis* Dejean, 1833: 160

**Subtribe Melolonthina Leach, 1819**

Original spelling and citation: Melolonthidae Leach in Samouelle 1819: 189
Type genus: *Melolontha* Fabricius, 1775: 31

Synonym: Polyphyllina Burmeister, 1855
Original spelling and citation: Polyphylldae Burmeister 1855: 397
Type genus: *Polyphylly* Harris, 1841: 30

Synonym: Tostegopterina LeConte, 1861
Original spelling and citation: Tostegopterae LeConte 1861: 139
Type genus: *Tostegoptera* Blanchard, 1851: 149

Synonym: Psilonychini Péringuey, 1904
Original spelling and citation: Psilonychides Péringuey, 1904: 184
Type genus: *Psilonychus* Burmeister, 1855: 288

**Tribe Pachydemini Burmeister, 1855**

Original spelling and citation: Pachydemidae Burmeister 1855: 437
Type genus: *Pachydena* Laporte, 1832: [1] (Laporte 1832b)

Remark: *Calcines* Blanchard 1845: 219 was used for taxa within this tribe but this family-group name was not originally Latinized and has not been subsequently Latinized and accepted as valid, therefore it is unavailable. From the context of Blanchard (1845), all his “Famille” and “Groupe” names with the “–ides” and “–ites” suffixes respectively are French vernacular names (some have accents).

Synonym: Elaphocerini Blanchard, 1851
Original spelling and citation: Elaphoceritae Blanchard 1851: 164
Type genus: *Elaphocera* Gené, 1836: 188

Remark: Although Elaphocerini has priority over Pachydemini, the later is in prevailing usage and must be considered the valid using a reversal of precedence (Article 23.9). Elaphocerini has not been used as a valid name after 1899. Therefore, I invoke Article 23.9.2 and provide evidence that Pachydemini has been used as a valid name in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years.

In compliance with the requirements of the Code, the following list of qualified publications, in chronological order, used Pachydemini as a valid family-group name, which is sufficient evidence that it is in prevailing usage: Petrovitz 1968; Martínez 1972; Martínez 1973; Frey 1974a; Frey 1974b; Martínez 1975; Hardy 1978; Baraud 1979; Baraud 1982; Martínez 1982; Baraud 1985; López Colón 1986; López Colón 1989; Baraud 1991; Baraud and Branco 1991; Chavanon and Zirari 1998; Sabatinelli and Pontuale 1998; Nikolajev 2000c; Lacroix 2001; Vincini, López, Alvarez-Castillo, Carmona, Manetti, and Morón 2001; Keith 2002; Miessen and Cludts 2002; Lacroix 2003; Montreuil 2003; Sanmartín 2003; Sanmartín and Martin-Piera 2003; Keith and Montreuil 2004; Lacroix 2004; Keith 2005; Lacroix 2005; Smith and Evans 2005.

Synonym: Achloini Burmeister, 1855
Original spelling and citation: Achloidae Burmeister 1855: 465
Type genus: *Achloa* Erichson, 1840: 41
Synonym: Cephalotrichiini Burmeister, 1855
Original spelling and citation: Cephalotrichiidae Burmeister 1855: 433
Type genus: Cephalotrichia Hope, 1837: 39

Synonym: Leptopodini Burmeister, 1855
Original spelling and citation: Leptopodidae Burmeister 1855: 428
Type genus: Leptopus Dejean, 1833: 159
Remark: This family-group name is permanently invalid because the type genus, Leptopus Dejean, 1833, is a junior homonym of Leptopus Latreille, 1809 (Hemiptera), Leptopus Rafinesque, 1814 (Pisces), Leptopus Lamarck, 1818 (Crustacea), and Leptopus Fallén, 1823 (Diptera) (Article 39).

Synonym: Macrophyllini Burmeister, 1855
Original spelling and citation: Macrophyllidae Burmeister 1855: 447
Type genus: Macrophylla Hope, 1837: 103

Synonym: Sparrmanniini Péringuey, 1904
Original spelling and citation: Sparrmannini Péringuey 1904: 115
Type genus: Sparrmannia Laporte, 1840: 132
Remark: Although Sparrmannia was the original spelling of this genus, Sparrmannia is in prevailing usage and should be considered the correct spelling (see Evans 1989).

Tribe Macrodactylini Kirby, 1837
Original spelling and citation: Macrodactylidae Kirby 1837: 133
Type genus: Macrodactylus Dejean, 1821: 58
Remark: Philochlénides (Lacordaire 1856: 256) was used for taxa within this tribe but was not originally Latinized and has not been subsequently Latinized and accepted as valid, therefore it is unavailable.

Synonym: Ceraspini Burmeister, 1855
Original spelling and citation: Ceraspididae Burmeister 1855: 91
Type genus: Ceraspis LePeletier and Serville, 1828: 370 (LePeletier and Serville, 1828a)

Synonym: Dichelonychini Burmeister, 1855
Original spelling and citation: Dichelonychidae Burmeister 1855: 70
Type genus: Dichelonyx Harris, 1827: 7

Synonym: Dicraniini Burmeister, 1855
Original spelling and citation: Dicraniidae Burmeister 1855: 65
Type genus: Dicrania LePeletier and Serville, 1828: 371 (LePeletier and Serville, 1828a)

Synonym: Isonychini Burmeister, 1855
Original spelling and citation: Isonychidae Burmeister 1855: 22
Type genus: Isonychus Mannerheim, 1829: 69

Synonym: Microcraniini Burmeister, 1855
Original spelling and citation: Microcraniidae Burmeister 1855: 75
Type genus: Microcrania Burmeister, 1855: 75

Synonym: Plectrini Burmeister, 1855
Original spelling and citation: Plectridae Burmeister 1855: 80
Type genus: Plectris LePeletier and Serville, 1828: 369 (LePeletier and Serville, 1828a)

Synonym: Clavipalpini Lacordaire, 1856
Original spelling and citation: Clavipalpides Lacordaire, 1856: 267
Type genus: Clavipalus Laporte, 1832: 406 (Laporte 1832a)
Remark: Clavipalpides (Lacordaire 1856: 267) and Clavipalpidae / Clavipalpides (Imhoff 1856: 12) were both used in the same year. The Imhoff (1856) paper refers to the Lacordaire (1856) paper numerous times. This is internal evidence in Imhoff (1856) that the Lacordaire (1856) paper was published first so Lacordaire should be credited with authorship of this family-group name. Although this family-group name was not originally proposed in a Latinized form it has subsequently been Latinized and should be considered available under Article 11.7.2.

**Tribe Diphycerini Medvedev, 1952**  
Original spelling and citation: Diphycerini Medvedev 1952: 186  
Type genus: *Diphycerus* Deyrolle and Fairmaire, 1878: 100

**Tribe Hoplini Latreille, 1829**  
Original spelling and citation: Hoplides Latreille 1829: 563  
Type genus: *Hoplia* Illiger, 1803: 226

**Subtribe Pachycnemina Laporte, 1840**  
Original spelling and citation: Pachycnémides Laporte 1840: 155  
Type genus: *Pachycnema* LePeletier and Servile, 1828: 375 (LePeletier and Serville 1828a)  
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.  
Synonym: Anisonychina Burmeister, 1844  
Original spelling and citation: Anisonychidae Burmeister 1844: 40  
Type genus: *Anisonyx* Latreille, 1807: 119

**Subtribe Hopliina Latreille, 1829**  
Original spelling and citation: Hoplides Latreille 1829: 563  
Type genus: *Hoplia* Illiger, 1803: 226  
Remark: Madahopliini Lacroix 1997: 21 was used but the family-group name was not based on an available genus-group name and is therefore unavailable. *Madahoplia* Lacroix, 1998: 551 was not described until the following year.  
Synonym: Gymnolomina Burmeister, 1844  
Original spelling and citation: Gymnolomidae Burmeister 1844: 138  
Type genus: *Gymnoloma* Dejean, 1833: 167  
Synonym: Heterochelina Burmeister, 1844  
Original spelling and citation: Heterochelidae Burmeister 1844: 86  
Type genus: *Heterochelus* Burmeister, 1844: 87  
Synonym: Lepisiina Burmeister, 1844  
Original spelling and citation: Lepisiidae Burmeister 1844: 166  
Type genus: *Lepisia* LePeletier and Servile, 1828: 374 (LePeletier and Serville 1828a)  
Synonym: Scelophysina Péringuey, 1902  
Original spelling and citation: Scelophysidae Péringuey, 1902: 624  
Type genus: *Scelophysa* Burmeister, 1844: 168

**Tribe Colymbomorphini Blanchard, 1850**  
Original spelling and citation: Colymbomorphitae Blanchard 1850: 97  
Type genus: *Colymbomorpha* Blanchard, 1850: 98

**Tribe Tanyproctini Erichson 1847**  
Original spelling and citation: Tanyproctini Erichson 1847b: 653  
Type genus: *Tanyproctus* Ménétries, 1832: 185

†**Tribe Cretomelolonthini Nikolajev, 1998**  
Original spelling and citation: Cretomelolonthini Nikolajev 1998: 80  
Type genus: *Cretomelolontha* Nikolajev, 1998: 81
Subfamily Rutelinae MacLeay, 1819
Original spelling and citation: Rutelidae MacLeay 1819: 69
Type genus: Rutela Latreille, 1802: 151

Tribe Rutelini MacLeay, 1819
Original spelling and citation: Rutelidae MacLeay 1819: 69
Type genus: Rutela Latreille, 1802: 151

Subtribe Areodina Burmeister, 1844
Original spelling and citation: Areodidae Burmeister 1844: 423
Type genus: Areoda MacLeay, 1819: 158

Subtribe Heterosternina Bates, 1888
Synonym: Macropnina Horn, 1866
Original spelling and citation: Macropni Horn 1866: 398
Type genus: Macropnus Horn, 1866: 397
Remark: Although Macropnina has priority over Heterosternina, the later is in prevailing usage and must be considered the valid using a reversal of precedence (Article 23.9). Macropnina has not been used as a valid name since it was first proposed. Therefore, I invoke Article 23.9.2 and provide evidence that Heterosternina has been used as a valid name in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years. In compliance with the requirements of the Code, the following list of qualified publications, in chronological order, used Heterosternina as a valid family-group name, which is sufficient evidence that it is in prevailing usage: Machatschke 1972; Morón 1979; Morón 1983; Morón, Villalobos, and Deloya 1985; Morón 1987; Sigwalt 1987; Jameson 1990; Morón 1990; Morón 1991; Morón and Howden 1992; Morón 1993; Morón 1994; Delgado and Blackaller-Bages 1997; Morón 1997; Morón and Blackaller 1997; Jameson 1998; Morón, Deloya, Ramírez-Campos, and Hernández-Rodríguez 1998; Soula 1998; Delgado, Pérez, and Blackaller 2000; Morón and Nogueira 2000; Morón-Ríos and Morón 2001; Curoe and Morón 2003; Smith and Morón 2003; Paucar-Cabrera 2005; and Reyes Novelo and Morón 2005.

Subtribe Didrepanephorina Ohaus, 1918
Original spelling and citation: Didrepanephorina Ohaus 1918: 14
Type genus: Didrepanephorus Wood-Mason, 1878: 423

Subtribe Lasiocalina Ohaus, 1918
Original spelling and citation: Lasiocalina Ohaus 1918: 30
Type genus: Lasiocala Blanchard, 1851: 220

Subtribe Parastasiina Burmeister, 1844
Original spelling and citation: Parastasiidae Burmeister 1844: 368
Type genus: Parastasia Westwood, 1841: 204 (Westwood 1841b)

Subtribe Oryctomorphina Burmeister, 1847
Original spelling and citation: Oryctomorphidae Burmeister 1847: 28
Type genus: Oryctomorphus Guérin-Méneville, 1831: 3

Subtribe Desmonychina Arrow, 1917
Original spelling and citation: Desmonychinæ Arrow 1917: 359
Type genus: Desmonyx Arrow, 1907: 355

Subtribe Rutelina MacLeay, 1819
Original spelling and citation: Rutelidae MacLeay 1819: 69
Type genus: Rutela Latreille, 1802: 151
Synonym: Chasmodiina Burmeister, 1844
Original spelling and citation: Chasmodiidae Burmeister 1844: 333
Type genus: Chasmodia MacLeay, 1819: 155

Synonym: CHRYSOPHORINA Burmeister, 1844
Original spelling and citation: CHRYSOPHORIDAE Burmeister 1844: 412
Type genus: CHRYSOPHORA Dejean, 1821: 60

Synonym: Macraspidina Burmeister, 1844
Original spelling and citation: Macraspididae Burmeister 1844: 343
Type genus: Macraspis MacLeay, 1819: 156

Synonym: Pelidnotina Burmeister, 1844
Original spelling and citation: Pelidnotidae Burmeister 1844: 388
Type genus: Pelidnota MacLeay, 1819: 157

Synonym: Anticheirina Lacordaire, 1856
Original spelling and citation: Antichirides Lacordaire 1856: 341
Type genus: Anticheira Eschscholtz, 1818: 475
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Synonym: Plusiotina Bates, 1888
Original spelling and citation: Plusiotina Bates 1888: 276
Type genus: Plusiotis Burmeister, 1844: 417

Synonym: Fruhstorferiina Ohaus, 1918
Original spelling and citation: Fruhstorferiina Ohaus 1918: 43
Type genus: Fruhstorferia Kolbe, 1894

Tribe ANATISTINI Imhoff, 1856
Original spelling and citation: Anatistidae Imhoff, 1856: xi
Type genus: Anatista Brème, 1844: 305
Remark: Although Anatistini has not been used in any publication since before 1900 and Spodochlamyini has been used recently as a valid tribe, a reversal of precedence (Article 23.9) cannot be used to preserve the latter. Spodochlamyini has not been used as a valid name in at least 25 works published by at least 10 authors in the immediately preceding 50 years. Therefore, Anatistini must be considered the valid name for this tribe.

Synonym: Spodochlamyini Ohaus, 1918: 166
Original spelling and citation: Spodochlamyini Ohaus 1918: 166
Type genus: Spodochlamys Burmeister, 1855: 528

Tribe ANOPLOGNATHINI MacLeay, 1819
Original spelling and citation: Anoplognathidae MacLeay 1819: 81
Type genus: Anoplognathus Leach, 1815: 156 (Leach 1815b)

Subtribe ANOPLOGNATHINA MacLeay, 1819
Original spelling and citation: Anoplognathidae MacLeay 1819: 81
Type genus: Anoplognathus Leach, 1815: 156 (Leach 1815b)

Subtribe SCHIZOGNATHINA Ohaus, 1918
Original spelling and citation: Schizognathina Ohaus 1918: 174
Type genus: Schizognathus Fischer von Waldheim, 1823: 263

Subtribe PHALANGOGONIINA Ohaus, 1918
Original spelling and citation: Phalangogoniina Ohaus 1918: 176
Type genus: Phalangogonia Burmeister, 1844: 451
Subtribe **Platycoeliina** Burmeister, 1844  
Original spelling and citation: Platycoeliidae Burmeister 1844: 451  
Type genus: *Platycoelia* Dejean, 1833: 154

Subtribe **Brachysternina** Burmeister, 1844  
Original spelling and citation: Brachysternidae Burmeister 1844: 455  
Type genus: *Brachysternus* Guérin-Méneville, 1831: 3

**Tribe Geniatinia** Burmeister, 1844  
Original spelling and citation: Geniatidae Burmeister 1844: 478  
Type genus: *Geniates* Kirby, 1819: 401 (Kirby 1819a)  
Synonym: *Leucothyreini* Burmeister, 1844  
Original spelling and citation: Leucothyreidae Burmeister 1844: 485  
Type genus: *Leucothyreus* MacLeay, 1819: 145

**Tribe Alvarengini** Frey, 1975  
Original spelling and citation: Alvarengiini Frey 1975: 84  
Type genus: *Alvarengius* Frey, 1975: 84  
Remark: *Pachylides* (Lacordaire 1856: 394) was used for taxa within this tribe but this family-group name was not originally Latinized and has not been subsequently Latinized and accepted as valid, therefore it is unavailable. Additionally, this name is based on the genus *Pachylus* Burmeister, 1847, which is a junior homonym.

**Tribe Anomalini** Streubel, 1839  
Original spelling and citation: Anomalidae Streubel 1839: 136  
Type genus: *Anomala* Samouelle, 1819: 191  
Remark: The type genus, *Anomala* Samouelle, 1819, is not a junior homonym of *Anomala* von Block, 1799. The von Block name was suppressed for the purposes of the Principle of Priority and the Principle of Homonymy (ICZN 1989).

Subtribe **Anomalina** Streubel, 1839  
Original spelling and citation: Anomalidae Streubel 1839: 136  
Type genus: *Anomala* Samouelle, 1819: 191  
Synonym: Euchlorina Hope, 1839  
Original spelling and citation: Euchloridae Hope 1839: 67  
Type genus: *Euchlora* MacLeay, 1819: 147  
Remark: Although Euchlorina has priority over Anomalina, the later is in prevailing usage and must be considered the valid using a reversal of precedence (Article 23.9). Euchlorina has not been used as a valid name since it was first proposed. Therefore, I invoke Article 23.9.2 and provide evidence that Anomalina has been used as a valid name in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years. In compliance with the requirements of the Code, the following list of qualified publications, in chronological order, used Anomalina (or this stem with any other family-group suffix) as a valid family-group name, which is sufficient evidence that it is in prevailing usage: Ritcher 1966; Howden and Hardy 1971; Machatschke 1971; Machatschke 1972; Machatschke 1973a; Machatschke 1973b; Woodruff 1973; Potts 1974; Potts 1977a; Potts 1977b; Jameson 1990; Ratcliffe 1991; Bader 1992; Cassis and Weir 1992; Morón 1997; Browne and Scholtz 1998; Jameson 1998; Harpootlian 2001; Micó, Verdú, and Galante 2001; Morón and Howden 2001; Ratcliffe, Jameson, and Smith 2002; Jameson, Paucar-Cabrera, and Solís 2003; Micó, Morón, and Galante 2003; Jameson and Hawkins 2005; Paucar-Cabrera 2005; Smith and Evans 2005; and Micó, Gómez, and Galante 2006.  
Synonym: Dilophochilina Ohaus, 1918  
Original spelling and citation: Dilophochilina Ohaus 1918: 133  
Type genus: *Dilophochila* Bates, 1888: 261
Subtribe Popilliina Ohaus, 1918
Original spelling and citation: Popilliina Ohaus 1918: 133
Type genus: Popilia Dejean, 1821: 60

Subtribe Isopliina Péringuey, 1902
Original spelling and citation: Isopliini Péringuey 1902: 564
Type genus: Isoplia Burmeister, 1855: 487

Subtribe Anisopliina Burmeister, 1844
Original spelling and citation: Anisopliiidae Burmeister 1844: 208
Type genus: Anisoplia Schönerr, 1817: 186

Subtribe Leptohipliina Potts, 1974
Original spelling and citation: Lepothopliini Potts 1974: 152
Type genus: Leptohiplia Saylor, 1935: 132
Remark: Potts (1974) inadvertently misspelled Leptohipliini when he erected the family-group name.

Tribe Adoretini Burmeister, 1844
Original spelling and citation: Adoretidae Burmeister 1844: 466
Type genus: Adoretus Laporte, 1840: 142

Subtribe Adorrhinyptina Arrow, 1917
Original spelling and citation: Adorrhinyptiiini Arrow 1917: 273
Type genus: Adorrhinyptia Arrow, 1917: 273

Subtribe Adoretina Burmeister, 1844
Original spelling and citation: Adoretidae Burmeister 1844: 466
Type genus: Adoretus Laporte, 1840: 142
Synonym: Adorocociina Ohaus, 1912
Original spelling and citation: Adorocociina Ohaus 1912a: 151
Type genus: Adorocociia Brenske, 1893: 1
Synonym: Adoroleptina Ohaus, 1912
Original spelling and citation: Adoroleptina Ohaus 1912a: 151
Type genus: Adoroleptus Brenske, 1893: 1
Synonym: Pseudadoretina Ohaus, 1912
Original spelling and citation: Pseudadoretina Ohaus 1912a: 151
Type genus: Pseudadoretus Semenov-Tian-Shanskij, 1889: 202
Synonym: Scaphorhinadoretina Ohaus, 1912
Original spelling and citation: Scaphorhinadoretina Ohaus 1912a: 151
Type genus: Scaphorhinadoretus Ohaus, 1912: 426 (Ohaus 1912a)

Subtribe Pachyrhinadoretina Ohaus, 1912
Original spelling and citation: Pachyrhinadoretina Ohaus 1912a: 151
Type genus: Pachyrhinadoretus Ohaus, 1912: 509 (Ohaus 1912a)

Subtribe Trigonostomina Ohaus, 1912
Original spelling and citation: Trigonostomina Ohaus 1912a: 151
Type genus: Trigonostomum Burmeister, 1844: 466

Subtribe Prodoretina Ohaus, 1912
Original spelling and citation: Prodoretina Ohaus 1912a: 151
Type genus: Prodoretus Brenske, 1893: 1

Subfamily Dynastinae MacLeay, 1819
Original spelling and citation: Dynastidae MacLeay 1819: 64
Type genus: Dynastes MacLeay, 1819: 22
Tribe **HEXODONTINI** Lacordaire, 1856

Original spelling and citation: Hexodontides Lacordaire 1856: 391
Type genus: *Hexodon* Olivier, 1789: 1
Remark: Lacordaire (1856: 391) and Imhoff (1856: 17) both used Hexodontides in the same year and the Imhoff (1856) paper refers to the Lacordaire (1856) paper (numerous times). This is internal evidence in Imhoff (1856) that the Lacordaire (1856) paper was published first so Lacordaire should be credited with authorship of this family-group name. Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Tribe **CYCLOCEPHALINI** Laporte, 1840

Original spelling and citation: Cyclocephalites Laporte 1840: 124
Type genus: *Cyclocephala* Dejean, 1821: 57
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Synonym: Chalepini Burmeister, 1847
Original spelling and citation: Chalepidae Burmeister 1847: 71
Type genus: *Chalepus* MacLeay 1819: 149

Synonym: Peltonotini Arrow, 1917
Original spelling and citation: Peltonotini Arrow 1917: 27
Type genus: *Peltonotus* Burmeister, 1847: 75

Synonym: Acrobolbiini Ohaus, 1918
Original spelling and citation: Acrobolbiina Ohaus 1918: 13
Type genus: *Acrobolbia* Ohaus, 1912: 316 (Ohaus 1912b)

Tribe **DYNASTINI** MacLeay, 1819

Original spelling and citation: Dynastidae MacLeay 1819: 64
Type genus: *Dynastes* MacLeay, 1819: 22

Synonym: Xylotrupini Hope, 1845
Original spelling and citation: Xylotrupidae Hope 1845: 7
Type genus: *Xylotrupes* Hope, 1837: ix

Synonym: Megasomatidae Imhoff, 1856
Original spelling and citation: Megasomidae Imhoff 1856: 19
Type genus: *Megasoma* Kirby, 1825: 566

Tribe **ORYCTINI** Mulsant, 1842

Original spelling and citation: Oryctésaires Mulsant 1842: 372
Type genus: *Oryctes* Illiger, 1798: 11 (Kugelann and Illiger 1798)
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Synonym: Megacerini Burmeister, 1847
Original spelling and citation: Megaceridae Burmeister 1847: 212
Type genus: *Megaceras* Hope, 1837: 82

Synonym: Strategini Burmeister, 1847
Original spelling and citation: Strategidae Burmeister 1847: 87
Type genus: *Strategus* Kirby, 1828: 644 (Kirby and Spence 1828)

Tribe **ORYCTODERINI** Endrödi, 1966

Original spelling and citation: Oryctoderini Endrödi 1966: 25
Type genus: *Oryctoderus* Boisduval, 1835: 160
Tribe **Pentodontini** Mulsant, 1842
Original spelling and citation: Pentodonaires Mulsant 1842: 372
Type genus: *Pentodon* Hope, 1837: 30
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Subtribe **Pentodontina** Mulsant, 1842
Original spelling and citation: Pentodonaires Mulsant 1842: 372
Type genus: *Pentodon* Hope, 1837: 30
Synonym: *Bothynina* Burmeister, 1847
Original spelling and citation: Bothynidae Burmeister 1847: 90
Type genus: *Bothynus* Hope, 1837: 30
Synonym: *Pimelopodina* Burmeister, 1847
Original spelling and citation: Pimelopodea Burmeister 1847: 172
Type genus: *Pimelopus* Erichson, 1842: 159
Synonym: *Podalgina* Burmeister, 1847
Original spelling and citation: Podalgidae Burmeister 1847: 90
Type genus: *Podalgus* Burmeister, 1847: 117
Synonym: *Metanastina* Carne, 1957
Original spelling and citation: Metanastini Carne 1957: 32
Type genus: *Metanastes* Arrow, 1911: 166 (Arrow 1911a)
Remark: When Carne (1957) erected this family-group name, he placed the genus *Pentodon* in it. Since *Pentodon* is the type genus of Pentodontina, Metanastini is unnecessary and should be considered a synonym of Pentodontina.

Subtribe **Cheiroplatina** Carne, 1957
Original spelling and citation: Cheiroplatina Carne 1957: 61
Type genus: *Cheiroplatys* Hope, 1837: 29

Subtribe **Dipelicina** Carne, 1957
Original spelling and citation: Dipelicina Carne 1957: 117
Type genus: *Dipelicus* Hope, 1843: 62

Subtribe **Pseudoryctina** Carne, 1957
Original spelling and citation: Pseudoryctina Carne 1957: 121
Type genus: *Pseudoryctes* Sharp, 1873: 267

Tribe **Agaocephalini** Burmeister, 1847
Original spelling and citation: Agaocephalidae Burmeister 1847: 280
Type genus: *Agaocephala* LePeletier and Serville, 1828: 570 (LePeletier and Serville, 1828a)
Remark: The original spelling of this genus is *Agacephala*, but it was later spelled *Agaocephala* by Mannerheim (1829: 56) and almost all authors since (although a few recent authors have used the original spelling). Since the incorrect subsequent spelling is in prevailing usage, it is now considered the correct original spelling of the name under Article 33.3.1.

Tribe **Phileurini** Burmeister, 1847
Original spelling and citation: Phileuridae Burmeister 1847: 138
Type genus: *Phileurus* Latreille, 1807: 103

Subtribe **Phileurina** Burmeister, 1847
Original spelling and citation: Phileuridae Burmeister 1847: 138
Type genus: *Phileurus* Latreille, 1807: 103
Subtribe Cryptodina Burmeister and Schaum, 1840
Original spelling and citation: Cryptodinae Burmeister and Schaum 1840: 360
Type genus: Cryptodus MacLeay, 1819: 138

Subfamily Cetoniinae Leach, 1815
Original spelling and citation: Cetonida Leach 1815a: 99
Type genus: Cetonia Fabricius, 1775: 42
Remark: Although Cetoniinae has priority over Melolonthinae, the later is in prevailing usage at the family level and must not be displaced by the older name under Article 35.5. This is relevant for authors who consider Melolonthidae to be a family containing the subfamily Cetoniinae.

Tribe Valgini Mulsant, 1842
Original spelling and citation: Valguaires Mulsant 1842: 519
Type genus: Valgus Scriba, 1790: 66
Remark: Valguaires Mulsant (1842: 718) and Valgidae Burmeister (1842: 718) were both used in the same year. Mulsant (1842) was published in August 1842 (Sherborn 1922) and the introduction to Burmeister (1842) is dated September 1842. Therefore, Mulsant (1842) was published first and should be credited with authorship of this family-group name. Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Subtribe Microvalgina Kolbe, 1904
Original spelling and citation: Microvalginae Kolbe, 1904: 10
Type genus: Microvalgus Kraatz, 1883: 374

Subtribe Valgina Mulsant, 1842
Original spelling and citation: Valguaires Mulsant 1842: 519
Type genus: Valgus Scriba, 1790: 66
Synonym: Acanthovalgina Kolbe, 1904
Original spelling and citation: Acanthovalginae Kolbe 1904: 11
Type genus: Acanthovalgus Kraatz, 1895: 444
Synonym: Cosmovalgina Kolbe, 1904
Original spelling and citation: Cosmovalginae Kolbe 1904: 11
Type genus: Cosmovalgus Kolbe, 1897: 204
Synonym: Dasyvalgina Kolbe, 1904
Original spelling and citation: Dasyvalginae Kolbe 1904: 11
Type genus: Dasyvalgus Kolbe, 1904: 34
Synonym: Ischnovalgina Kolbe, 1904
Original spelling and citation: Ischnovalginae Kolbe 1904: 9
Type genus: Ischnovalgus Kolbe, 1897: 190
Synonym: Sphinctovalgina Kolbe, 1904
Original spelling and citation: Sphinctovalginae Kolbe 1904: 9
Type genus: Sphinctovalgus Kolbe, 1904: 51

Tribe Trichiini Fleming, 1821
Original spelling and citation: Trichiiae Fleming 1821: 50
Type genus: Trichius Fabricius, 1775: 40
Remark: Trichiinae Lozek, 1956 (Mollusca: Gastropoda) is a junior homonym of this family-group name. A recent case to the International Commission on Zoological Nomenclature to emend the spelling of the gastropod to remove it from homonymy was not approved (ICZN 2004).

Subtribe Cryptodontina Lacordaire, 1856
Original spelling and citation: Cryptodontides Lacordaire 1856: 462
Type genus: Cryptodontes Burmeister, 1847: 292
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Subtribe Platygenniina Krikken, 1984
Original spelling and citation: Platygeniini Krikken 1984: 18
Type genus: Platygenia MacLeay, 1819: 151

Subtribe Trichina Fleming, 1821
Original spelling and citation: Trichiidae Fleming 1821: 50
Type genus: Trichius Fabricius, 1775: 40
Synonym: Elpidina Péringuey, 1907
Original spelling and citation: Elpidides Péringuey, 1907: 314
Type genus: Elpidus Péringuey, 1907: 318
Synonym: Myodermina Péringuey, 1907
Original spelling and citation: Myodermini Péringuey 1907: 294
Type genus: Myodermum Burmeister and Schaum, 1840: 396

Subtribe Incaina Burmeister, 1842
Original spelling and citation: Incadae Burmeister 1842: 704
Type genus: Inca LePeletier and Serville, 1828: 380 (LePeletier and Serville, 1828a)

Subtribe Osmodermatina Schenkling, 1922
Original spelling and citation: Osmodermini Schenkling 1922: 3
Type genus: Osmoderma LePeletier and Serville, 1828: 702 (LePeletier and Serville, 1828b)

Tribe Cremastocheilini Burmeister and Schaum, 1841
Original spelling and citation: Cremastocheilidae Burmeister and Schaum 1841: 243
Type genus: Cremastocheilus Knoch, 1801: 115

Subtribe Spilophorina Krikken, 1984
Original spelling and citation: Spilophorina Krikken 1984: 25
Type genus: Spilophorus Schaum, 1848: 61*

Subtribe Macromina Burmeister and Schaum, 1840
Original spelling and citation: Macrominae Burmeister and Schaum 1840: 360
Type genus: Macroma Gory and Percheron, 1833: 35

Subtribe Trogodina Krikken, 1984
Original spelling and citation: Trogodina Krikken 1984: 27
Type genus: Trogodes Westwood, 1874: 30

Subtribe Nyassinina Krikken, 1984
Original spelling and citation: Nyassinina Krikken 1984: 25
Type genus: Nyassinus Westwood, 1879: 199

Subtribe Heterogeniina Krikken, 1984
Original spelling and citation: Heterogeniina Krikken 1984: 25
Type genus: Heterogenius Moser, 1911: 143

Subtribe Aspilina Krikken, 1984
Original spelling and citation: Aspilina Krikken 1984: 25
Type genus: Aspilus Schaum, 1848: 61*

Subtribe Coenochilina Burmeister, 1842
Original spelling and citation: Coenochilidae Burmeister 1842: 148
Type genus: Coenochilus Schaum, 1841: 268 (in Burmeister and Schaum 1841)
Subtribe CYMOPHORINA Krikken, 1984
   Original spelling and citation: Cymophorina Krikken 1984: 23
   Type genus: Cymophorus Kirby, 1827: 153

Subtribe TRICHOPLINA Krikken, 1984
   Original spelling and citation: Trichoplina Krikken 1984: 23
   Type genus: Trichopus Burmeister, 1842: 660

Subtribe OPLOSTOMATINA Krikken, 1984
   Original spelling and citation: Oplostomina Krikken 1984: 23
   Type genus: Oplostomus MacLeay, 1838: 20

Subtribe TEOCHILINA Krikken, 1984
   Original spelling and citation: Telochilina Krikken 1984: 21
   Type genus: Telochilus Krikken, 1975: 21

Subtribe GENUCHINA Krikken, 1984
   Original spelling and citation: Genuchina Krikken 1984: 21
   Type genus: Genuchus Kirby, 1825: 569

Subtribe PILINURGINA Krikken, 1984
   Original spelling and citation: Pilinurgina Krikken 1984: 25
   Type genus: Pilinurgus Burmeister, 1842: 658

Subtribe GOLIATHOPSIDINA Krikken, 1984
   Original spelling and citation: Goliathopsidina Krikken 1984: 25
   Type genus: Goliathopsis Janson, 1881: 609

Subtribe CREMASTOCHELINA Burmeister and Schaum, 1841
   Original spelling and citation: Cremastochilidae Burmeister and Schaum 1841: 243
   Type genus: Cremastochelus Knoch, 1801: 115

Subtribe LISSOGENININA Krikken, 1984
   Original spelling and citation: Lissogenina Krikken 1984: 25
   Type genus: Lissogenius Schaum, 1845: 420

Tribe XIPHOSCELIDINI Burmeister, 1842
   Original spelling and citation: Xiphoscelideae Burmeister 1842: 613
   Type genus: Xiphoscelis Burmeister, 1842: 613

Tribe STENOTARSINII Kraatz, 1880
   Original spelling and citation: Stenotarsiden Kraatz 1880b: 182
   Type genus: Stenotarsia Burmeister, 1842: 590
   Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Subtribe COPTOMIINA Schenkling, 1921
   Original spelling and citation: Coptomiini Schenkling 1921: 147
   Type genus: Coptomia Burmeister, 1842: 549

Subtribe ANOCHILIINA Krikken, 1984
   Original spelling and citation: Anochiliina Krikken 1984: 31
   Type genus: Anochilia Burmeister, 1842: 558
   Remark: Pouillaude (1916) used Anochiliens but this name was published after 1900 and not Latinized, therefore it is unavailable from this publication.

Subtribe PANTOLIINA Krikken, 1984
   Original spelling and citation: Pantoliina Krikken 1984: 33
   Type genus: Pantolia Burmeister, 1842: 567
   Remark: Pouillaude (1916) used Pantoliens but this name was published after 1900 and not Latinized, therefore it is unavailable from this publication.
Subtribe Stenotarsiina Kraatz, 1880
Original spelling and citation: Stenotarsiden Kraatz 1880b: 182
Type genus: Stenotarsia Burmeister, 1842: 590
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Subtribe Euchroeina Paulian and Descarpentries, 1982
Original spelling and citation: Euchroeina Paulian and Descarpentries 1982: 5
Type genus: Euchroea Burmeister, 1842: 571
Remark: Pouillaude (1916) used Euchroees but this name was published after 1900 and not Latinized, therefore it is unavailable from this publication.

Subtribe Doryscelina Krikken, 1984
Original spelling and citation: Doryscelina Krikken 1984: 33
Type genus: Doryscelis Dejean, 1836: 189
Remark: Pouillaude (1916) used Dorysceliens but this name was published after 1900 and not Latinized, therefore it is unavailable from this publication.

Subtribe Parachiliina Krikken, 1984
Original spelling and citation: Parachiliina Krikken 1984: 33
Type genus: Parachilia Burmeister, 1842: 556

Subtribe Heterophanna Schoch, 1894
Original spelling and citation: Heterophanae Schoch 1894: 173
Type genus: Heterophana Burmeister, 1842: 602

Subtribe Chromoptilina Krikken, 1984
Original spelling and citation: Chromoptiliina Krikken 1984: 31
Type genus: Chromoptilia Westwood, 1842: 128 (Westwood 1842d)

Subtribe Heterosomatina Krikken, 1984
Original spelling and citation: Heterosomatina Krikken 1984: 29
Type genus: Heterosoma Schaum, 1845: 390

Tribe Schizorrhini Burmeister, 1842
Original spelling and citation: Schizorrhinidae Burmeister 1842: 530
Type genus: Schizorhina Kirby, 1825: 570

Subtribe Schizorrhini Burmeister, 1842
Original spelling and citation: Schizorrhinidae Burmeister 1842: 530
Type genus: Schizorhina Kirby, 1825: 570
Synonym: Diaphoniina Kraatz, 1880
Original spelling and citation: Diaphoniadae Kraatz 1880b: 195
Type genus: Diaphonia Newman, 1840: 366
Synonym: Eupoecilina Kraatz, 1880
Original spelling and citation: Eupoecilidae Kraatz 1880b: 188
Type genus: Eupoecila Burmeister, 1842: 540
Synonym: Hemipharina Kraatz, 1880
Original spelling and citation: Hemipharidae Kraatz 1880b: 182
Type genus: Hemipharis Burmeister, 1842: 531

Subtribe Lomapterina Burmeister, 1842
Original spelling and citation: Lomapteridae Burmeister 1842: 310
Type genus: Lomaptera Gory and Percheron, 1833: 43
Synonym: Macronotina Burmeister, 1842
Original spelling and citation: Macronotidae Burmeister 1842: 318
Type genus: Macronota Hoffmannsegg, 1817: 15
Tribe *Goliathini* Griffith and Pidgeon, 1832
Original spelling and citation: Goliathidae Griffith and Pidgeon 1832: 492
Type genus: *Goliathus* Lamarck, 1801: 209

Subtribe *Goliathina* Griffith and Pidgeon, 1832
Original spelling and citation: Goliathidae Griffith and Pidgeon 1832: 492
Type genus: *Goliathus* Lamarck, 1801: 209
Synonym: Hypselogeniina Schoch, 1894
Original spelling and citation: Hypselogeniae Schoch 1894: 169
Type genus: *Hypselogenia* Burmeister, 1840: [1]

Subtribe *Dicronocephalina* Krikken, 1984
Original spelling and citation: Dicronocephalina Krikken 1984: 37
Type genus: *Dicronocephalus* Hope, 1831: 24
Remark: The original spelling of this genus is *Diceranocephalus*, but it was later spelled *Dicronocephalus* by Hope (1837: 61), Westwood (1842: 116), and most authors since (although a few recent authors have used the original spelling). Since the incorrect subsequent spelling is in prevailing usage, it is now considered the correct original spelling of the name under Article 33.3.1. The original spelling placed the name in homonymy with *Diceranocephalus* Hahn, 1826 (Hemiptera) but the adaptation of the subsequent spelling as the correct spelling avoids this homonymy problem.

Subtribe *Ichnestomatina* Burmeister, 1842
Original spelling and citation: Ischnostomidae Burmeister 1842: 600
Type genus: *Ichnestoma* Gory and Percheron, 1833: 41

Subtribe *Coryphocerina* Burmeister, 1842
Original spelling and citation: Coryphoceridae Burmeister 1842: 215
Type genus: *Coryphocera* Burmeister, 1842: 220
Synonym: Heterorhina Kraatz, 1880
Original spelling and citation: Heterorrhiniidae Kraatz 1880a: 21
Type genus: *Heterorhina* Westwood, 1842: 132 (Westwood 1842e)
Remark: Wallace (1868: 520) used “Heterorhinae” but from the context of the paper, it is clearly a lapsus calami for the genus *Heterorhina*. He did not intend to erect a new family-group name.
Synonym: Ceratorhina Kraatz, 1880
Original spelling and citation: Ceratorrhinidae Kraatz 1880a: 18
Type genus: *Ceratorhina* Westwood, 1843: 170
Synonym: Bothrorrhina Schoch, 1894
Original spelling and citation: Bothrorrhinae Schoch 1894: 173
Type genus: *Bothrorrhina* Burmeister, 1842: 200
Synonym: Gnathocerina Schoch, 1894
Original spelling and citation: Gnathoceridae Schoch 1894: 170
Type genus: *Gnathocera* Kirby, 1825: 571
Synonym: Ischnoscelina Schoch, 1894
Original spelling and citation: Ischnosceli Schoch 1894: 170
Type genus: *Ischnoscels* Burmeister, 1842: 179
Synonym: Coelorrhina Schoch, 1895
Original spelling and citation: Coelorrhinae Schoch 1895: III
Type genus: *Coelorrhina* Hope, 1841: 302
Remark: The original spelling of this genus is *Caelorhina*, but it was later spelled *Coelorrhina* by Burmeister (1842: 206) and most authors since. Because the incorrect subsequent spelling is in prevailing usage, it is now considered the correct original spelling of the name under Article 33.3.1.
Synonym: Rhomborhinina Schoch, 1894
Original spelling and citation: Rhomborrhinae Schoch 1894: 171
Type genus: Rhomborhina Hope, 1837: 120

Synonym: Tmesorrhinina Schoch, 1894
Original spelling and citation: Tmesorrhinae Schoch 1894: 170
Type genus: Tmesorrhina Westwood, 1842: 71 (Westwood 1842b)

Synonym: Mecynorhinina Schenkling, 1921
Original spelling and citation: Mecynorrhinina Schenkling 1921: 15
Type genus: Mecynorhina Hope, 1837: 119

Synonym: Stephanorrhinina Schenkling, 1921
Original spelling and citation: Stephanorrhinina Schenkling 1921: 35
Type genus: Stephanorrhina Burmeister, 1842: 208

Tribe Cetonini Leach, 1815
Original spelling and citation: Cetoniida Leach 1815: 99
Type genus: Cetonia Fabricius, 1775: 42

Subtribe Cetoniina Leach, 1815
Original spelling and citation: Cetoniida Leach 1815a: 99
Type genus: Cetonia Fabricius, 1775: 42

Synonym: Elaphinina Schoch, 1894
Original spelling and citation: Elaphinina Schoch 1894: 175
Type genus: Elaphinis Burmeister, 1842: 595

Synonym: Glycyphanina Schoch, 1894
Original spelling and citation: Glycyphanina Schoch 1894: 175
Type genus: Glycyphana Burmeister, 1842: 345

Synonym: Pachnodina Peringuey, 1907
Original spelling and citation: Pachnodii Peringuey 1907: 371
Type genus: Pachnoda Burmeister, 1842: 511

Synonym: Tephraeina Schenkling, 1921
Original spelling and citation: Tephraeides Schenkling, 1921: 313
Type genus: Tephraea Burmeister, 1842: 419

Subtribe Euphorina Schoch, 1894
Original spelling and citation: Euphoriae Schoch 1894: 175
Type genus: Euphoria Burmeister, 1842: 370

Subtribe Leucocelina Kraatz, 1882
Original spelling and citation: Leucoceliden Kraatz 1882b: 65
Type genus: Leucocelis Burmeister, 1842: 421
Remark: Although this family-group name was not originally proposed in a Latinized form, it has subsequently been Latinized by numerous authors and should be considered available under Article 11.7.2.

Tribe Gymnetini Kirby, 1827
Original spelling and citation: Gymnetidae Kirby 1827: 150
Type genus: Gymnetis MacLeay, 1819: 152

Subtribe Gymnetina Kirby, 1827
Original spelling and citation: Gymnetidae Kirby 1827: 150
Type genus: Gymnetis MacLeay, 1819: 152

Synonym: Clinteriina Kraatz, 1882
Original spelling and citation: Clinteriidae Kraatz 1882a: 49
Type genus: Clinteria Burmeister, 1842: 299
Synonym: Stethodesmatina Schoch, 1894
Original spelling and citation: Stethodesmae Schoch 1894: 172
Type genus: Stethodesma Bainbridge, 1841: 482

Subtribe Blaesina Schoch, 1895
Original spelling and citation: Blaesiina Schoch, 1895: III
Type genus: Blaesia Burmeister, 1842: 615

Tribe Diplognathini Burmeister, 1842
Original spelling and citation: Diplognathidae Burmeister 1842: 617
Type genus: Diplognatha Gory and Percheron, 1833: 31
Remark: The type genus was spelled both Diplognatha and Diplognata in Gory and Percheron (1833). The former spelling was used multiple times and is obviously the intended spelling of the name. Diplognatha has also been adapted by all subsequent authors and should be considered the correct spelling.

Synonym: Porphyronotini Péringsuey, 1907
Original spelling and citation: Porphyronotii Péringsuey 1907: 371
Type genus: Porphyronota Burmeister, 1842: 622

Tribe Phaedimini Schoch, 1894
Original spelling and citation: Phaedimi Schoch 1894: 169
Type genus: Phaedinus Westwood, 1841: 5 (Westwood 1841a)

Tribe Taenioderini Mikšić, 1976
Original spelling and citation: Taenioderina Mikšić 1976: 29
Type genus: Taenioidera Burmeister, 1842: 325

Subtribe Taenioderina Mikšić, 1976
Original spelling and citation: Taenioderina Mikšić 1976: 29
Type genus: Taenioidera Burmeister, 1842: 325

Subtribe Chalcotheina Mikšić, 1976
Original spelling and citation: Chalcotheina Mikšić 1976: 29
Type genus: Chalcothea Burmeister, 1842: 319

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References Cited


Blackburn, T. 1898. Further notes on Australian Coleoptera, with descriptions of new genera and species. XXIII. Transactions of the Royal Society of South Australia 22:18–64.


Kirby, W. 1819a. A century of insects, including several new genera described from his cabinet. Transactions of the Linnean Society of London 12:375–453. [Dated 1818.]


Kirby, W. 1825. A description of such genera and species of insects, alluded to in the “Introduction to Entomology” of Messrs. Kirby and Spence, as appear not to have before sufficiently noticed of described. Transactions of the Linnean Society of London 14:563–572.


Knoch, A. W. 1801. Neue Beyträäge zur Insectenkunde. Leipzig, Germany.


Nikolajev, G. V. 1970. [Taxonomic position of groups included in the subfamily Geotrupinae (Col., Scarabaeidae)] [pp. 31–34]. In: Materials of the Second Scientific Session of Young Specialists and PhD Candidates (Thesis of Lectures). Kazakhstan, Russia, [In Russian.]


Nikolajev, G. V. 1999a. [On the polyphyly of the subfamily Penichrolucaninae (Coleoptera, Lucanidae), with the erection of the new monotypic tribe Brasilucanini]. Tethys Entomological Research 1999: 171–172. [In Russian.]

Nikolajev, G. V. 1999b. [New data on the systematics of the scarab beetles of the subfamily Hybosorinae (Coleoptera, Scarabaeidae): the establishment of the new tribe comprising four monotypic South American genera, and description of some new taxa from the Lower Cretaceous of Transbaikalia]. Tethys Entomological Research 1999: 173–182. [In Russian.]


Nikolajev, G. V. 2003. [The taxonomic composition of the subfamily Bolboceratinae (Coleoptera, Scarabaeidae) from Palaearctic faunistic region]. Tethys Entomological Research 8: 187–206. [In Russian.]


Nikolajev, G. V. 2005b. [Scaraboid beetles of the subfamily Glaphyrinae (Coleoptera, Scarabaeidae) from the Lower Cretaceous of Transbaikalia]. Zhivotny Mir Dal’nego Vostoka [Animal World of the Far East] 5: 69–78. [In Russian.]


*Schaum, H. R. 1848. Verzeichnis der Lamellicornia Mellitophila. Stettin, Poland.


Westwood, J. O. 1842a. Maechidius, MacL., a genus of Lamellicorn beetles, with descriptions and figures of some new genera belonging to the same tribe. Annals and Magazine of Natural History (series 1) 8:457–458.


