

Case 3517**LATRIDIIDAE Erichson, 1842 (Insecta, Coleoptera): proposed precedence over CORTICARIIDAE Curtis, 1829; and *Corticaria* Marsham, 1802: proposed conservation of usage by designation of *Corticaria ferruginea* Marsham, 1802 as the type species**

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Abstract. The purpose of this application, under Articles 23.9.3 and 70.2 of the Code, is to conserve the usage of the CUCUJOIDEA family name LATRIDIIDAE Erichson, 1842 by giving it precedence over the senior name CORTICARIIDAE Curtis, 1829, and to conserve the current usage of the widely used name *Corticaria* Marsham, 1802 by designation of *Corticaria ferruginea* Marsham, 1802 as the type species.

Keywords. Nomenclature; taxonomy; Coleoptera; CUCUJOIDEA; LATHRIDIIDAE; LATRIDIIDAE; CORTICARIIDAE; *Corticaria*; *Lathridius*; *Latridius*; *Corticaria ferruginea*.

1. In conjunction with an illustration (Curtis, 1829, pl. 283) and description (unpaginated pages related to pl. 283) of *Bitoma crenata* (Fabricius, 1775), Curtis introduced without comment the family-group name CORTICARIDAE, based on *Corticaria* Marsham, 1802. Because of the incorrect original stem formation, the spelling of the family-group name was subsequently corrected to CORTICARIIDAE. As seen by searches through the Zoological Record, the corrected spelling is in prevailing usage and is to be maintained under Article 29.5 of the Code.

2. Erichson (1842, p. 122) proposed the family-group name Lathridien based on the genus *Lathridius*, established originally by Herbst (1793, p. 2) under the spelling *Lathridius*. The original generic name was subsequently emended to *Lathridius* by Illiger (1802, p. 140) who mentioned that the etymology of the name was from the Greek λατρίδιος, meaning obscure, secretive.

3. Despite having been proposed as a vernacular name, Erichson's name Lathridien is available because it has been latinised by later authors and is generally accepted by authors interested in the group as valid and as dating from that first publication as a vernacular name (Article 11.7.2 of the Code). For example, the family-group name LATRIDIIDAE OF LATRIDIINAE Erichson, 1842 has been listed as valid in the following recent publications: Lawrence & Newton (1995, p. 886); Hansen

(1996, p. 166); Andrews (2002, p. 395); Johnson (2007b, p. 635); Bouget & Vincent (2008, p. 101); Hartley & McHugh (2010, p. 481).

4. Since Melsheimer (1853) and Lacordaire (1854), virtually all authors have placed *Corticaria* and *Latridius* in the same family and until 1994 used LATRIDIIDAE (often under the spelling LATHRIDIIDAE) as the valid name. The type species of *Latridius* Herbst, 1793 is *Latridius porcatus* Herbst, 1793 (p. 6) by subsequent designation by Latreille (1810, p. 431).

5. Pakaluk et al. (1994, pp. 227, 252) established that the family-group name CORTICARIIDAE was older than that of LATRIDIIDAE and used it as the valid name of the family. Subsequently, CORTICARIIDAE has been used as the valid name for the beetle family by a small number of authors (e.g. Lundberg, 1995; Hansen, 1996; Vorst & Cuppen, 2000; Mika, 2000; Hürka, 2005). In the same period, the name LATRIDIIDAE has also been used, much more extensively (as seen by searches through the Zoological Record between 1995 and 2010), as the valid name of the family, including in some significant recent contributions (e.g. Lawrence & Newton, 1995; Andrews, 2002; Beutel & Leschen, 2005; Johnson, 2007b; Johnson & Rucker, 2007; Bouget & Vincent, 2008; Hartley & McHugh, 2010).

6. No type species was originally designated for *Corticaria*. The first valid type species designation for *Corticaria* Marsham, 1802 is that of Gozis (1886, p. 10), who selected *Lyctus politus* Fabricius, 1793, a junior subjective synonym of *Ips picipes* Olivier, 1790, one of the numerous available species listed by Marsham (1802, pp. 106–113) in his new genus *Corticaria*. This species is currently included in the genus *Rhizophagus* Redtenbacher, 1845 of the family MONOTOMIDAE Laporte, 1840. Prior to Gozis's action, the type species mentioned by some authors (e.g. Westwood, 1838, p. 15; Duponchel, 1843, p. 258; Thomson 1859, p. 94) was *Latridius pubescens* Gyllenhal, 1827, a species not originally included in *Corticaria*. As far as we know, the next valid type species designation for *Corticaria* is that of Dajoz (1967, p. 604), who designated *Dermestes longicornis* Herbst, 1783 (p. 23) as the type species. This species was originally included in *Corticaria*, as a synonym of *Ips impressa* Olivier, 1790, but has been misidentified by all authors, including Marsham (1802), until Johnson (2007a, p. 76) selected a lectotype and pointed out that the name is a senior synonym of *Corticaria abietorum* Motschulsky, 1867. Because of the past confusion, usage of this species as type species of *Corticaria* is not in the best interests of nomenclatural stability. Subsequently, Dajoz (1975, p. 205) designated *Corticaria ferruginea* Marsham, 1802 as the type species, also a species originally included in *Corticaria*, and *C. ferruginea* is the taxon currently considered to be as type species of *Corticaria* (e.g. Johnson, 2007, p. 641). Acceptance of the first valid type species designation, that of Gozis (1886, p. 10), would not promote stability since the genus *Corticaria* as currently defined, which includes more than 130 species in the Palaearctic and Nearctic Regions alone, would take the next available name *Parascheva* Gozis, 1886 (type species by original designation *Latridius pubescens* Gyllenhal, 1827). To our knowledge, this generic name has never been used as valid subsequent to Gozis (1886). In addition, the generic name *Rhizophagus* Redtenbacher, 1845, which comprises about 50 species in the Nearctic, Palaearctic and Oriental Regions, would become a subjective junior synonym of *Corticaria* Marsham, 1802 because *Lyctus bipustulatus* Fabricius, 1793, the type species of *Rhizophagus*, is congeneric with *Lyctus politus* Fabricius, 1793.

7. Until the early 1990s, the unjustified emendation *Lathridius* was in prevailing usage as seen by searches through the Zoological Record. Since then, the original spelling *Latridius* is in prevailing usage and has been used in all significant publications (e.g. Lawrence & Newton, 1995, p. 886; Andrews, 2002, p. 395; Johnson, 2007, p. 635; Hartley & McHugh, 2010, p. 481).

8. The family LATRIDIIDAE, the minute brown scavenger beetles, is moderately diverse, with over a thousand species in the world. Many of them are regularly associated with stored products as the adults and larvae feed on the conidia of fungi and Myxomycetes (Andrews, 2002) often found on damp and mouldy products. There is an extensive taxonomic, faunistic, and ecological literature on these beetles dating back to the middle of the 19th century. Consequently, to use the senior name CORTICARIIDAE instead of LATRIDIIDAE for the family name would not promote stability.

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

- (1) to use its plenary power:
 - (a) to rule that the family-group name LATRIDIIDAE Erichson, 1842 and other family-group names based on *Latridius* Herbst, 1793 are to be given precedence over CORTICARIIDAE Curtis, 1829 and other family-group names based on *Corticaria* Marsham, 1802 whenever their type genera are placed in the same family-group taxon;
 - (b) to set aside all type species designations for *Corticaria* Marsham, 1802 prior to that of *Corticaria ferruginea* Marsham, 1802 by Dajoz (1975);
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Latridius* Herbst, 1793 (gender: masculine), type species by subsequent designation by Latreille (1810) *Latridius porcatus* Herbst, 1793;
 - (b) *Corticaria* Marsham, 1802 (gender: feminine), type species by subsequent designation of Dajoz (1975) *Corticaria ferruginea* Marsham, 1802 as ruled in (1) above;
- (3) to place on the Official List of Specific Names in Zoology the name *ferruginea* Marsham, 1802 as published in the binomen *Corticaria ferruginea* (specific name of the type species of *Corticaria* Marsham, 1802);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) CORTICARIIDAE Curtis, 1829, type genus *Corticaria* Marsham, 1802, with the endorsement that it and other family-group names based on *Corticaria* are not to be given priority over LATRIDIIDAE Erichson, 1842 and other family-group names based on *Latridius* Herbst, 1793 whenever their type genera are placed in the same family-group taxon;
 - (b) LATRIDIIDAE Erichson, 1842, type genus *Latridius* Herbst, 1793, with the endorsement that it and other family-group names based on *Latridius* are to be given precedence over CORTICARIIDAE Curtis, 1829 and other family-group names based on *Corticaria* Marsham, 1802 whenever their type genera are placed in the same family-group taxon;
- (5) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology LATHRIDIIEN Erichson, 1842 (an incorrect original spelling for LATRIDIIDAE Erichson, 1842).

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