

Case 3349***Gnorimus* Le Peletier de Saint-Fargeau & Serville, 1828 and
Osmoderma Le Peletier de Saint-Fargeau & Serville, 1828 (Insecta,
Coleoptera): proposed conservation of the generic names**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the names *Gnorimus* Le Peletier de Saint-Fargeau & Serville, 1828, and *Osmoderma* Le Peletier de Saint-Fargeau & Serville, 1828, for dead-wood and pollen-feeding scarab beetles (SCARABAEIDAE) from the Palaearctic and North America. The names are threatened by two senior synonyms, the long forgotten but recently used names *Aleurostictus* Kirby, 1827 and *Gymnodus* Kirby, 1827, respectively. The suppression of the two senior synonyms is proposed.

Keywords. Nomenclature; taxonomy; Coleoptera; SCARABAEIDAE; *Gnorimus*; *Osmoderma*; *Aleurostictus*; *Gymnodus*; Acari; ASCIDAE; scarab beetles; mites; Palaearctic; North America.

1. Kirby (1827) introduced seven genus-group names as subgenera of *Trichius* Fabricius, 1775 (SCARABAEIDAE, TRICHIINAE): *Aleurostictus*, *Archimedi*, *Euclidi*, *Gymnodus*, *Legitimus*, *Tetrophthalmus* and *Trichinus*. He introduced these names as masculine nouns in the plural form (*Aleurosticti*, *Gymnodi*, etc.) but the most influential authors of the time either overlooked Kirby's names (Gory & Percheron, 1833) or treated them as synonyms (Burmeister & Schaum, 1840; Lacordaire, 1856, p. 557). Thus, these names either gained only limited acceptance during a short period after their introduction, or instantly fell into disuse (Smith, 2004). Case 3314 (BZN 62: 75–78) applied for the suppression of two of them, *Tetrophthalmus* Kirby

and *Trichinus* Kirby, in favour of long established names. Recently another two of Kirby's names, *Aleurostictus* Kirby, 1827 (p. 157) and *Gymnodus* Kirby, 1827 (p. 157), reappeared in the literature as valid names for the well-known Holarctic genera *Gnorimus* and *Osmoderma* respectively (see paras. 3 and 4 below).

2. These two names, *Gnorimus* and *Osmoderma*, were published the year after Kirby's paper by Le Peletier de Saint-Fargeau & Serville (1828, p. 702) as subgenera ('subdivisions') of *Trichius* Fabricius. The authors did not refer to Kirby's paper and did not designate type species.

3. MacLeay (1838, p. 16) designated *Scarabaeus eremita* Scopoli, 1763 (p. 7) (which he referred to as *Trichius eremita* Fabricius, 1792) as the type species of *Osmoderma* Le Peletier de Saint-Fargeau & Serville, 1828, making it a junior objective synonym of *Gymnodus* Kirby, 1827, because the latter has the same type species by monotypy. However, MacLeay treated *Osmoderma* as a valid name and *Gymnodus* as an invalid synonym. This was followed by all subsequent authors for over 150 years – 35 references of articles and books published between 1958 and 2003 are listed by Smith (2004, p. 287) and more than 150 references from the last 130 years by Ranius et al. (2005, pp. 22–30). Recently, however, *Gymnodus* has been treated as a valid name by Ádám (1994; 2003, p. 129) and Gusakov (2002). Smith (2004) intended to reverse the precedence of *Gymnodus* and placed it as a junior synonym of *Osmoderma*. However, the conditions for prevailing usage (Article 23.9.2 of the Code) were arguably not met because Ádám (1994, p. 10) used it as a valid name. Smith (2004) considered Ádám's paper a 'list of names' that 'must not be taken into account in determining usage under Article 23.9.1.1' (Article 23.9.6.). However, the other three authors of this Case believe that Ádám's list is not covered by Article 23.9.6 because it is not a 'list of names' but a list of taxa (i.e. containing information about the species beyond their names, namely their occurrence in Hungary), thus being valid for determining usage. Actually, it has already been followed by several authors (see above and para. 4 below).

4. MacLeay (1838, p. 15) synonymized *Gnorimus* Le Peletier de Saint-Fargeau & Serville with *Aleurostictus* Kirby while keeping the latter ('*Aleurosticti*') as a valid name. However, at that time *Gnorimus* had already been in common use (Stephens, 1830, p. 231; Gory & Percheron, 1833, p. 100; Curtis, 1837, p. 21). Blanchard (1845, p. 233) designated *Scarabaeus nobilis* Linnaeus, 1758 (p. 353) (currently *Gnormius nobilis*) as the type species of *Gnorimus*. By designating *Scarabaeus nobilis* Linnaeus, 1758 the type species of *Aleurostictus*, Smith (2004, p. 286) made *Aleurostictus* an objective synonym of *Gnorimus*. After Stephens (1839, p. 170), who was the last to use *Aleurostictus* as valid before 1994, *Gnorimus* has been considered a valid name by all authors. However, in 1994, Ádám used *Aleurostictus* in his Hungarian checklist of Scarabaeoidea, which was then followed by Tauzin (2000, 2004a, b), Fujioka (2001, p. 126), Gusakov (2002), Uguarte San Vicente & Uguarte Arrue (2002), Ádám (2003, p. 129) and Whitehead (2003). However, Tauzin (2004a, b) obviously was not fully sure about his intentional use of the virtually unused name *Aleurostictus*, because he mentioned having sent an application to 'Entomological Records' to decide whether his usage is permissible and acceptable (Tauzin, 2004a, p. 33; 2004b, p. 78). *Gnorimus* is still the predominant name (Tremblay, 2000, p. 87; Cooter, 2001; Gebicki, 2001; Lo Cascio, 2001, p. 185f; Brechtel & Kostenbader, 2002, p. 565; Frank & Konzelmann, 2002, p. 131; Micó & Galante, 2002, p. 59f; Nilsson et al., 2002, p. 84; Ranius &

Jansson, 2002, p. 1763; Ruta, 2002; Telnov, 2002; Ballerio, 2003, pp. 68, 79; Jansson & Antonsson, 2003, p. 43; Recalde & San Martín, 2003, p. 66; Schaffrath, 2003, p. 174; Smith, 2003, p. 47; Pino & Pino, 2003; Vignon & Orabi, 2003; Voolma & Randveer, 2003, p. 51; Pesarini, 2004, p. 96; Renault et al., 2004) and it is used in the recently published data bank of the Fauna Europaea Project (Krell, 2004). Dechambre (2001) listed 34 additional references covering the years 1952–2000 to meet Article 23.9.1.2 and declared *Aleurostictus* a nomen nudum. However, Ádám's (1994, p. 10) use of *Aleurostictus* as a valid name prevents the application of Article 23.9.2.

5. Both *Gnorimus* and *Osmoderma* are in wide use for well-known species of importance in conservation. *Osmoderma eremita* (Scopoli, 1763) is a priority species of the habitat directive of the European Union (92/43/EEC), is listed in the Bern Convention (Luce 1996) and classified as vulnerable on the IUCN Red List of Threatened Species (www.redlist.org). Two widespread European *Gnorimus* species, *G. nobilis* (Linnaeus, 1758) and *G. variabilis* (Linnaeus, 1758), are on the Priority Species List of the UK Biodiversity Action Plan (www.english-nature.org.uk/baps/pdf/Priority.pdf) and on the Red Lists of most European countries; the third known European species, *G. decempunctatus* Helfer, 1834 (endemic to Sicily), will be established as a focal species in the Italian Red List, with Sicilian endemic *Osmoderma cristinae* Sparacio, 1994 (Audisio et al., 2003; Brustel, 2004). We agree with Tauzin's (2002, p. 147) conclusion that there is no need or advantage in replacing those names by long-forgotten senior synonyms. A change of the generic names *Gnorimus* and *Osmoderma* would not only cause confusion amongst the large community of conservationists and ecologists dealing with these species, but also threatens the legal protection of the species since *Gymnodus* and *Aleurostictus* are not included in legal documents.

6. Chaudhri (1975, p. 100), described the mite genus *Gnorimus* (Acari: Mesostigmata; ASCIDAE) (type species by monotypy: *Gnorimus tabella* Chaudhri, 1975). This genus has been rarely mentioned in literature (Gupta & Ray, 1981, p. 267; Wu & Wang, 1982; Zhang & Lin, 1986, p. 84; Moraes et al., 1986, p. 153; Zhang & Lin, 1989, 1991). In 1994, Chant & McMurtry (p. 225) synonymised *Gnorimus* Chaudhri with *Lasioseius* Berlese which was agreed by Walter & Lindquist (1997, p. 526) who pointed out that Chaudhri's name was preoccupied by *Gnorimus* Le Peletier de Saint-Fargeau & Serville. In recent years, *Gnorimus* Chaudhri has occasionally been used as a valid name (Parvez et al., 2000; Moraes et al., 2004, p. 5), but is not threatening *Gnorimus* Le Peletier de Saint-Fargeau & Serville, and we are confident that its status as synonym and junior homonym will be accepted soon. Because of its synonymy with *Lasioseius*, a replacement name for *Gnorimus* Chaudhri is currently unnecessary.

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

- (1) to use its plenary power to suppress the following generic names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *Aleurostictus* Kirby, 1827;
 - (b) *Gymnodus* Kirby, 1827;
- (2) to place on the Official List of Generic Names in Zoology the following names:

- (a) *Gnorimus* Le Peletier de Saint-Fargeau & Serville, 1828 (gender: masculine), type species by subsequent designation by Blanchard (1845) *Scarabaeus nobilis* Linnaeus, 1758;
- (b) *Osmoderma* Le Peletier de Saint-Fargeau & Serville, 1828 (gender: neuter), type species by subsequent designation by MacLeay (1838) *Scarabaeus eremita* Scopoli, 1763;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *eremita* Scopoli, 1763, as published in the binomen *Scarabaeus eremita* (the type species of *Osmoderma* Le Peletier de Saint-Fargeau & Serville, 1828);
 - (b) *nobilis* Linnaeus, 1758, as published in the binomen *Scarabaeus nobilis* (the type species of *Gnorimus* Le Peletier de Saint-Fargeau & Serville, 1828);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
 - (a) *Aleurostictus* Kirby, 1827, as suppressed in (1)(a) above;
 - (b) *Gymnodus* Kirby, 1827, as suppressed in (1)(b) above;
 - (c) *Gnorimus* Chaudhri, 1975 (a junior homonym of *Gnorimus* Le Peletier de Saint-Fargeau & Serville, 1828).

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