



New genera of Palaeotropical Xyleborini (Coleoptera: Curculionidae: Scolytinae) based on congruence between morphological and molecular characters

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Abstract

As part of an ongoing genus-level revision of Xyleborini (Coleoptera, Curculionidae: Scolytinae), we combined a recent molecular phylogenetic analysis of the tribe (Cognato *et al.*, 2011) with extensive analysis of morphological characters (over 44,000 representatives of 281 putative species of Xyleborini examined, including 264 types). For the first time, an operational species concept of Xyleborini is explicitly addressed.

The following new genera are proposed:

Debus Hulcr and Cognato, **gen. n.**
Fortiborus Hulcr and Cognato, **gen. n.**
Planiculus Hulcr and Cognato, **gen. n.**
Truncaudum Hulcr and Cognato, **gen. n.**
Wallacellus Hulcr and Cognato, **gen. n.**

Thirty one new combinations and 29 synonymies are given.

Cyclorhipidion pelliculosum (Eichhoff), **comb. n.**
Cyclorhipidion sus (Schedl), **comb. n.**
Debus adusticollis (Motschulsky), **comb. n.**
Debus emarginatus (Eichhoff), **comb. n.**
Debus fallax (Eichhoff), **comb. n.** (= *Xyleborus fastigatus* Schedl, **syn. n.**)
Debus pseudocylindricus (Eggers) **comb. n.**
Debus pumilus (Eggers), **comb. n.** (= *Xyleborus ipidia* Schedl, **syn. n.**, = *Xyleborus cylindricus* Eggers, **syn. n.**)
Debus spinicornis (Schedl), **comb. n.**
Euwallacea funereus (Lea), **comb. n.**
Fortiborus anisopterae (Browne), **comb. n.**
Fortiborus indigens (Schedl), **comb. n.**
Fortiborus major (Stebbing), **comb. n.** (= *Xyleborus siclus* Schedl **syn. n.**)
Fortiborus pilifer (Eggers), **comb. n.** (= *Xyleborus pseudopilifer* Schedl, **syn. n.**)
Fortiborus sulcinoides (Schedl), **comb. n.**
Microperus diversicolor (Eggers), **comb. n.** (*Coptodryas atava* (Schedl), **syn. n.**, = *Microperus myristicae* (Schedl) **syn. n.**)
Microperus intermedius (Eggers), **comb. n.** (= *Coptodryas nitella* (Browne), **syn. n.**)
Microperus parvus (Lea), **comb. n.** (= *Coptodryas libra* (Eggers), **syn. n.**, = *Coptodryas pubipennis* (Schedl), **syn. n.**)
Microperus pomelianus (Schedl), **comb. n.**
Planiculus aries (Schedl), **comb. n.**
Planiculus bicolor (Blandford), **comb. n.** (= *Euwallacea filiformis* (Schedl), **syn. n.**, = *Euwallacea laevis* (Eggers), **syn. n.**, = *Euwallacea tumidus* (Schedl), **syn. n.**, = *Xyleborus glabratulus* Browne, **syn. n.**)
Planiculus immersus (Schedl), **comb. n.** (= *Xyleborus hashimotoi* Browne, **syn. n.**)
Planiculus limatus (Schedl), **comb. n.** (= *Euwallacea subemarginatus* (Eggers), **syn. n.**, = *Euwallacea subparallelus* (Eggers), **syn. n.**)
Truncaudum agnatum (Eggers), **comb. n.** (= *Cyclorhipidion delicatum* (Schedl), **syn. n.**, = *Cyclorhipidion subagnatum* Wood, **syn. n.**, = *Xyleborus gratiosus* Schedl, **syn. n.**)
Truncaudum impexum (Schedl), **comb. n.** (= *Xyleborus dentatulus* Browne, **syn. n.**, = *Xyleborus circumspinosus* Schedl, **syn. n.**, = *Xyleborus falcarius* Schedl, **syn. n.**, = *Xyleborus subdentatulus* Browne, **syn. n.**, = *Xyleborus vernaculus* Schedl, **syn. n.**, = *Xyleborus putputensis* Browne, **syn. n.**)
Truncaudum longior (Eggers), **comb. n.** (= *Xyleborus canarivorus* Browne, **syn. n.**, = *Xyleborus protii* Browne, **syn. n.**, = *Xyleborus viaticus* Schedl, **syn. n.**)
Wallacellus piceus (Motschulsky), **comb. n.**