

# New synonymy and taxonomic changes in bark and ambrosia beetles (Coleoptera: Curculionidae: Scolytinae, Platypodinae)

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## Abstract

New synonymy is proposed as follows: Scolytinae: Cryphalini: *Cryphalus submuricatus* EICHHOFF (= *C. tuberculatus* SCHEDL); *Hypothenemus birmanus* (EICHHOFF) (= *Stylotenus dubius* SCHEDL); *Hypothenemus brevicollis* (EGGERS) (= *Stephanoderes lamuensis* EGGERS); Dryocoetini: *Cyrtogenius STROHMEYER* (= *Dendrographus* SCHEDL); *Dryocoetiops kepongi* SCHEDL (= *Pseudopoecilips taradakensis* MURAYAMA); Hylesinini: *Hapalogenius africanus* (EGGERS) (= *Xylechinus uniformis* SCHEDL); Ipini: *Acanthotomicus insularis* (EGGERS) (= *Ips kepongi* SCHEDL, = *I. inclinans* SCHEDL); Micracini: *Lanurgus podocarpus* SCHEDL (= *L. bicolor* SCHEDL, = *Traglostus brevisetosus* SCHEDL); *Lanurgus rhusi* SCHEDL (= *Traglostus spatulatus* SCHEDL); *Lanurgus widdringtoniae* SCHEDL (= *Glostatus perplexus* SCHEDL); *Lanurgus xylographus* SCHEDL (= *L. oleaeformis* SCHEDL); Phloeosinini: *Hyledius cribratus* (BLANDFORD) (= *Phloeosinus australis* SCHEDL, = *P. tuberculosus* BROWNE); *Hyledius vilis* (BLANDFORD) (= *Hylurgulus sumatranus* EGGERS, = *Phloeosinus borneensis* SCHEDL); Xyleborini: *Ambrosiophilus metanepotulus* (EGGERS) (= *Xyleborus humanensis* BROWNE); *Arixyleborus imitator* (EGGERS) (= *A. dipterocarpi* BROWNE); *Cyclorhipidion circumcissum* (SAMPSON) (= *Xyleborus subobtusus* SCHEDL); *Cyclorhipidion fukiensis* (EGGERS) (= *Xyleborus ganshoensis* MURAYAMA); *Debus cavulus* (BROWNE) (= *Xyleborus cavuloides* BROWNE); *Debus detritus* (EGGERS) (= *Xyleborus maniensis* BROWNE); *Debus pumilus* (EGGERS) (= *Xyleborus neocylindricus* SCHEDL); *Fortiborus posticepilus* (SCHEDL) (= *Ozopemon major* STROHMEYER); *Microperus kadoyamaensis* (MURAYAMA) (= *Xyleborus huangi* BROWNE); *Xyleborus volvulus* (FABRICIUS) (= *X. continentalis* EGGERS); Xyloctonini: *Ctonoxylon uniseriatum* SCHEDL (= *C. capensis* SCHEDL); Platypodinae: Platypodini: *Platypus levannongi* SCHEDL (= *P. beaveri* BROWNE).

The following new combinations are given: *Debus cavulus* (BROWNE), *D. cylindricus* (EGGERS), *D. detritus* (EGGERS), *Fortiborus posticepilus* (SCHEDL) all from *Xyleborus*. The following new replacement names are proposed for junior homonyms: *Cyrtogenius borneanus* for *C. (Eidophelus) borneensis* (BROWNE), *Cyrtogenius gracilior* for *C. (Eidophelus) gracilis* (BROWNE). *Cyrtogenius longipennis* (BROWNE) is resurrected as the correct name for *C. elongatissimus* WOOD.

**Key words:** Curculionidae, Scolytinae, Platypodinae, Oriental Region, Afrotropical Region, new synonymy, new combination, new name.

## Introduction

Taxonomists working on the bark and ambrosia beetles of the weevil subfamilies Scolytinae and Platypodinae have been well-served by the work of WOOD & BRIGHT (1987, 1992) in their bibliography and catalogue, and its supplements (BRIGHT & SKIDMORE 1997, 2002), and more recently by ALONSO-ZARAZAGA & LYAL's (2009) catalogue of family and group names in the subfamilies. These works have clarified the nomenclature and taxonomic position of many taxa, but my continuing taxonomic studies have revealed further synonymy and shown that further changes in the assignment of species to genera are necessary. I deal here largely with species from the Oriental and Afrotropical Regions, but the distributions of some of the species extend to

other zoogeographical regions. The conclusions are based on the study of types and other specimens in the collections of European and American museums, particularly the Schedl collection in the Naturhistorisches Museum, Wien, supplemented by specimens in my own collection. The scolytine species are dealt with in the order of tribes and genera in which they appear in the classification of ALONSO-ZARAZAGA & LYAL (2009). Further information on the species can be found in the references given above.

The following abbreviations for collections are used in the text:

AKMB	Alexander König Museum, Bonn
DEI	Deutsches Entomologisches Institut, Müncheberg
HNHM	Hungarian Museum of Natural History, Budapest
IRSNB	Institut Royal des Sciences Naturelles de Belgique, Bruxelles
MIZW	Museum and Institute of Zoology, Polish Academy of Sciences, Warszawa
MNB	Museum für Naturkunde der Humboldt Universität, Berlin
MNHP	Museum of Natural History, Prague
NHMB	Naturhistorisches Museum, Basel
NHML	The Natural History Museum, London
NICP	National Insect Collection, Plant Protection Institute, Pretoria
NMW	Naturhistorisches Museum Wien
RAB	R.A. Beaver's private collection, Chiangmai
TMP	Transvaal Museum, Pretoria
USNM	United States National Museum, Washington

## SCOLYTINAE

### Cryphalini

#### *Cryphalus submuricatus* EICHHOFF

*Cryphalus submuricatus* EICHHOFF 1878a: 385.

*Cryphalus tuberculatus* SCHEDL 1943: 37 **syn.n.**

The syntypes of *C. submuricatus* were lost in the Hamburg Museum during World War II (WOOD & BRIGHT 1992). However, I have examined a specimen in MIZW from 'Birma' [= Myanmar] identified by Eichhoff. This has been compared with specimens from Thailand in my own collection (RAB) which had earlier been compared with the holotype of *C. tuberculatus* (NMW) from Tenasserim in Myanmar. Only a single species is present. It may be noted that EICHHOFF (1878a) gives the length as 1.7 mm, and the type locality as 'Hindustan'. In his later redescription of the species (EICHHOFF 1878b), the length is incorrectly given as 3 mm, and the type locality as 'Asiae India orientalis'. However, the short Latin description given by EICHHOFF (1878a) is identical with the diagnosis given by EICHHOFF (1878b), and the two descriptions evidently refer to the same species.

#### *Hypothenemus birmanus* (EICHHOFF)

*Triarmocerus birmanus* EICHHOFF 1878a: 384.

*Hypothenemus birmanus* (EICHHOFF): BROWNE 1970: 556.

*Styloleptus dubius* SCHEDL 1971a: 372 **syn.n.**

The holotype of *S. dubius* (NMW), described from Sri Lanka, has been examined, together with a specimen determined by Schedl from Vietnam (HNHM) (SCHEDL 1973). Both specimens, the only ones recorded, fall well within the morphological range of the well-known and widely distributed species, *H. birmanus*, numerous specimens of which from the Oriental and Pacific regions have been examined in NHML and RAB. The only difference is that the antennal funicle

of the holotype is three-segmented. (Both antennae of the Vietnamese specimen are missing.) The apical two segments of the funicle appear to have fused to each other and to the club. In all other respects, the antenna is typical of *Hypothenemus* with an oviform three-segmented club, the suture between the first and second segments with a septum on one side. SCHEDL (1971a) noted the similarity of the holotype to *H. birmanus*, but placed it in the genus *Stylotentus* SCHEDL because of the three-segmented antennal funicle. However, *H. birmanus* is known to have a variable number of funicle segments (3–5) in different populations (WOOD 1982, 2007). The genus *Stylotentus* was synonymised with *Hypothenemus* WESTWOOD by WOOD (1983), who noted that the funicle of both *Hypothenemus* and *Stylotentus* is unstable, that fusion or partial fusion of segments is frequent, and that the left and right antennae of a single specimen may occasionally have different numbers of funicular segments.

### *Hypothenemus brevicollis* (EGGERS)

*Stephanoderes brevicollis* EGGERS 1927a: 177.

*Hypothenemus brevicollis* (EGGERS): WOOD & BRIGHT 1992: 911.

*Stephanoderes lamuensis* EGGERS 1935: 304 **syn.n.**

I have examined the holotype of *H. brevicollis* (NMW) from Mozambique, and compared it with specimens in my own collection from Mozambique and South Africa which had earlier been compared to the holotype of *S. lamuensis* (NHML) from Kenya. EGGERS (1935) distinguished the two species on some comparative characters of the pronotum and elytra, but these are rather variable in the series from South Africa, and the two species intergrade. Accordingly, *S. lamuensis* is synonymised with *H. brevicollis*.

## Dryocoetini

### *Cyrtogenius* STROHMEYER

*Cyrtogenius* STROHMEYER 1910: 127. (Type species: *Cyrtogenius bicolor* STROHMEYER, 1910: 127; monotypic).

*Dendrographus* SCHEDL 1964a: 310. (Type species: *Pelicerus pygmaeus* EGGERS, 1923: 218; original des.) **syn.n.**

The genera of Dryocoetini are often difficult to separate because species occur that are morphologically intermediate between genera. As a result, different taxonomists have had rather different views on the generic division of the tribe, and the limits of the genera. *Cyrtogenius* has accumulated more and more synonyms in recent studies, and WOOD & BRIGHT (1992) list ten generic synonyms. WOOD (1984, 1986) distinguished *Dendrographus* from *Cyrtogenius* by characters of the antennae, procoxae and size. I have examined two syntypes (MNB) of the only species of *Dendrographus*, *D. pygmaeus* EGGERS from New Guinea, and compared them with conspecific specimens in RAB from Sulawesi, and with numerous species of *Cyrtogenius* in NHML, NMW and RAB. I find that the only character which distinguishes the genus from *Cyrtogenius* is the presence of two funicular segments rather than three, four or five. WOOD (1984) noted that *D. pygmaeus* would be placed in *Cyrtogenius* except for the two-segmented funicle and 'slightly different' antennal club, which has the procurved corneous part of the first segment covering more than three quarters of the anterior face. However, an identical antennal club is also found in other (unidentified) species of *Cyrtogenius* with more than two funicular segments. The number of funicular segments is known to be size-related in *Cyrtogenius* (WOOD 1984). The larger species have five segments, smaller species tend to have four or occasionally three. The number of funicular segments is size-related in some other genera of Scolytinae (e.g. *Hypothenemus*, *Hapalogenius* HAGEDORN), and is insufficient in itself to separate two genera. The other character used by WOOD (1986) to separate *Dendrographus* from related genera, the contiguous procoxae, is also found in species of *Cyrtogenius* with 3–5 funicular segments.

Accordingly, *Dendrographus* is here synonymised with *Cyrtogenius*, and its only species is automatically transferred to the latter genus. The genus *Protopythophthorus* SCHEDL, which was synonymised with *Dendrographus* by WOOD (1984), also automatically becomes a synonym of *Cyrtogenius*. *Protopythophthorus durus* SCHEDL was synonymised with *Dendrographus pygmaeus* by WOOD (1984).

### ***Cyrtogenius borneanus* BEAVER nom.n.**

*Eidophelus borneensis* BROWNE 1984: 153.

*Cyrtogenius borneensis* (BROWNE 1984, nec SCHEDL 1967): BEAVER 1995: 202.

BEAVER (1995) transferred *E. borneensis* to the genus *Cyrtogenius*, but overlooked the fact that this made the species a junior homonym of *C. borneensis* SCHEDL, 1967. A new name for *C. borneensis* is required, and the name *borneanus* is proposed.

### ***Cyrtogenius gracilior* BEAVER nom.n.**

*Eidophelus gracilis* BROWNE 1984: 152.

*Cyrtogenius gracilis* (BROWNE 1984, nec SCHEDL 1974b): BEAVER 1995: 202.

BEAVER (1995) transferred *E. gracilis* to the genus *Cyrtogenius*, but overlooked the fact that this made the species a junior homonym of *C. gracilis* (SCHEDL, 1974) originally described in the genus *Ozodendron* SCHEDL, a genus now considered to be a synonym of *Cyrtogenius* (WOOD, 1986). A new name for *C. gracilis* is required, and the name *gracilior* is proposed.

### ***Cyrtogenius longipennis* BROWNE**

*Cyrtogenius longipennis* BROWNE 1965: 195.

*Ozodendron elongatus* SCHEDL 1964b: 241.

*Cyrtogenius elongatissimus* WOOD 1988: 196 (new name for *O. elongatus* SCHEDL, 1964b, nec EGGERS, 1927c): BEAVER 1998: 180 (synonymy).

BEAVER (1998) synonymised *Cyrtogenius longipennis* with *C. elongatissimus*, but overlooked the fact that Browne's name is available and has priority. Therefore, *C. longipennis* is reinstated as the valid name for the species, with *C. elongatissimus* (= *Ozodendron elongatus*) as synonym.

### ***Dryocoetiops kepongi* (SCHEDL)**

*Dryocoetes kepongi* SCHEDL 1953: 296.

*Dryocoetiops kepongi* (SCHEDL): SCHEDL 1964a: 308.

*Pseudopoecilips taradakensis* MURAYAMA 1957: 618 **syn.n.**

I have examined a syntype of *D. kepongi* (NHML) from West Malaysia and compared it with specimens in RAB from Malaysia, Singapore, and Taiwan. These in turn have been compared with two specimens from Japan which had been compared to the holotype of *P. taradakensis* (USNM). Only a single species is represented. *Pseudopoecilips taradakensis* is included in the genus *Taphrorychus* EICHHOFF by WOOD & BRIGHT (1992), but does not belong in that genus. *Dryocoetiops kepongi* is closely related to *D. coffeae* (EGGERS), from which it differs in little more than size. The two species should possibly be synonymised, but further studies on the genus are needed.

## Hylesinini

### *Hapalogenius africanus* (EGGERS)

*Pseudophloeotribus africanus* EGGERS 1933: 19.

*Hapalogenius africanus* (EGGERS): ALONSO-ZARAZAGA & LYAL 2009: 69.

*Xylechinus uniformis* SCHEDL 1982: 281 **syn.n.**

The holotype of *H. africanus* (NHML) from Zambia, and other specimens from Zimbabwe (NHML) have been examined, and compared with specimens in RAB from Angola, Botswana, Namibia and South Africa, and these with a paratype of *X. uniformis* (NMW) from Zimbabwe. They are all conspecific. *Hapalogenius africanus* was included in the genus *Hylesinopsis* EGGERS by WOOD & BRIGHT (1992), but this placement is corrected by ALONSO-ZARAZAGA & LYAL (2009). Further synonyms are given by BEAVER (2010).

## Ipini

### *Acanthotomicus insularis* (EGGERS)

*Ips insularis* EGGERS 1923: 164.

*Acanthotomicus insularis* (EGGERS): WOOD & BRIGHT 1992: 481.

*Ips kepongi* SCHEDL 1942: 181 **syn.n.**

*Ips inclinans* SCHEDL 1972: 51 **syn.n.**

The male lectotype of *A. insularis* (USNM) from the 'Key Is.' (= Indonesia: Maluku, Kai Islands) has been directly compared with the male lectotype of *I. kepongi* (NMW) from West Malaysia, and with a male and a female of *I. inclinans* (NMW) from Papua New Guinea, which had earlier been compared with a male paratype (NMW) from Indonesia: Papua. Further specimens from Papua New Guinea in RAB have also been examined. There are small variations in the sculpture of the elytral declivity, but only one species is represented. WOOD & BRIGHT (1992) incorrectly cite a holotype for *I. kepongi*.

## Micracini

### *Lanurgus podocarpi* SCHEDL

*Lanurgus podocarpi* SCHEDL 1955: 216.

*Traglostus brevisetosus* SCHEDL 1957: 153 **syn.n.**

*Lanurgus bicolor* SCHEDL 1961: 350 **syn.n.**

I have compared syntypes of *L. podocarpi* (NHML) from Kenya with specimens from South Africa (TMP, RAB) which had earlier been compared with the holotype of *L. bicolor* (NICP) from South Africa, and the lectotype of *T. brevisetosus* (NMW) also from South Africa, and two specimens (NHML) with the same collection data as the type. There are minor differences in the size and colour of the scales of the elytral vestiture, but the specimens are conspecific.

### *Lanurgus rhusi* SCHEDL

*Lanurgus rhusi* SCHEDL 1963: 42.

*Traglostus spatulatus* SCHEDL 1982: 282 **syn.n.**

The holotype of *L. rhusi* (NICP) has been compared with specimens (TMP, RAB), which were compared with the allotype and male and female paratypes (NMW) of *T. spatulatus*. All specimens are from South Africa. Only a single species is represented.

***Lanurgus widdringtoniae* SCHEDL**

*Lanurgus widdringtoniae* SCHEDL 1962: 69.

*Glostatus perplexus* SCHEDL 1982: 281 **syn.n.**

The holotype of *L. widdringtoniae* (NICP) from South Africa has been directly compared with four paratypes of *G. perplexus* (TMP) also from South Africa. They are conspecific. It is evident that SCHEDL (1982) erred in placing *G. perplexus* in the tribe Xyloctonini. The species has the typical narrow, parallel-sided micracine protibiae without tibial grooves, and the same type of sexual dimorphism as in *Lanurgus*. It is here synonymised with *L. widdringtoniae*.

***Lanurgus xylographus* SCHEDL**

*Lanurgus xylographus* SCHEDL 1963: 46.

*Lanurgus oleaeformis* SCHEDL 1970: 178 **syn.n.**

The holotype of *L. oleaeformis* (NICP) from South Africa has been directly compared with three paratypes of *L. xylographus* (NMW) also from South Africa, and with specimens in RAB from the same country. There are minor differences in the proportions of the pronotum and elytra, and in the arrangement of the elytral setae, but these intergrade in the series. Accordingly, the two species are placed in synonymy.

**Phloeosinini*****Hyledius cribratus* (BLANDFORD)**

*Phloeosinus cribratus* BLANDFORD 1896: 198.

*Hyledius cribratus* (BLANDFORD): WOOD & BRIGHT 1992: 260.

*Phloeosinus australis* SCHEDL 1938: 36 **syn.n.**

*Phloeosinus tuberculosus* BROWNE 1970: 544 **syn.n.**

I have directly compared the holotype of *H. cribratus* (NHML) from Sumatra and other specimens in NHML with the type series of *Phloeosinus tuberculosus* (NHML) from Myanmar and West Malaysia, and with a series of specimens in RAB from Australia, East Malaysia, Papua New Guinea, Sulawesi, Thailand and West Malaysia. Not surprisingly, given the geographical range (Myanmar to Australia), there is some morphological variation. The type series of *P. tuberculosus* in particular has more strongly developed elytral tubercles than the other specimens, and a more strongly developed frontal carina. However, these specimens lie at one extreme and intergrade with more typical specimens of *H. cribratus* with weaker elytral tubercles and shorter frontal carina or tubercle. The separation of the upper and lower parts of the eye is also variable. In the type series of *P. tuberculosus* and specimens from Sulawesi, the eyes are not quite bipartite, but in most specimens the two halves are distinctly separated. Some of the specimens in RAB were also compared to the holotype of *P. australis* (NMW) from Australia. The latter is a normal specimen of *H. cribratus*. It is evident that there is a single, somewhat variable species, with a wide distribution in the Oriental Region, and extending East of Wallace's Line to New Guinea and tropical Australia.

***Hyledius vilis* (BLANDFORD)**

*Phloeosinus vilis* BLANDFORD 1896: 199.

*Hyledius vilis* (BLANDFORD): WOOD & BRIGHT 1992: 261.

*Hylurgulus sumatranus* EGGERS 1927b: 393 **syn.n.**

*Phloeosinus hylurgulus* EGGERS 1940: 6 (new name for *P. sumatranus* (EGGERS, 1927b, nec EGGERS, 1923)).

*Phloeosinus borneensis* SCHEDL 1942: 172 **syn.n.**

Male and female syntypes of *Hyledius vilis* (NHML) from Sumatra, and other specimens in IRSNB, NHMB, NHML, and RAB from Southeast Asia and Borneo, have been compared with a paralectotype of *Hylurgulus sumatranus* (MNHP) from Sumatra, and the holotype of *P. borneensis* from Borneo. Only a single species is represented. *Hyledius sumatranus* and *P. borneensis* are therefore placed in synonymy with *H. vilis*. *Hyledius sumatranus* is listed in WOOD & BRIGHT (1992) under the name *H. hylurgulus* but this is now a synonym.

## Xyleborini

### *Ambrosiophilus metanepotulus* (EGGERS)

*Xyleborus metanepotulus* EGGERS 1939: 119.

*Ambrosiophilus metanepotulus* (EGGERS): BEAVER & LIU 2010: 21.

*Xyleborus hunanensis* BROWNE 1983: 33 **syn.n.**

The holotype of *A. metanepotulus* (Taiwan Agricultural Research Institute, Taichung) from Taiwan was not available for loan, but I have examined high quality photographs taken by M. Sharkey. These have been compared with three specimens from Taiwan in RAB, which had earlier been compared with a paratype and another specimen of *X. hunanensis* (NHML) from Hunan province in China. All are clearly conspecific. The proportions and sculpture (including puncturation, asperities, surface texture and vestiture) of the pronotum and elytra show only minor intraspecific variation. The antenna is of the same form in all, the club with the first segment small and convex apically on the anterior face, the second segment corneous (antennal type 3 of HULCR et al. 2007). The foretibia has 6–7 socketed teeth confined to the apical half.

### *Arixyleborus imitator* (EGGERS)

*Webbia imitator* EGGERS 1927c: 105.

*Arixyleborus imitator* (EGGERS): SCHEDL 1958: 145.

*Arixyleborus dipterocarpi* BROWNE 1981: 133 **syn.n.**

The holotype of *A. imitator* (USNM) from the Philippines has been examined, and compared with a specimen (MNB) determined by Schedl from the Philippines, and with specimens in RAB from Sulawesi that had earlier been compared with the holotype (NHML) of *A. dipterocarpi*, a species also described from the Philippines. It is clear that *A. dipterocarpi* falls within the morphological range of *A. imitator*, and is here synonymised with that species.

### *Cyclorhipidion circumcisum* (SAMPSON)

*Xyleborus circumcisus* SAMPSON 1921: 30.

*Cyclorhipidion circumcisum* (SAMPSON): WOOD & BRIGHT 1992: 698.

*Xyleborus subobtusus* SCHEDL 1942: 192 **syn.n.**

The holotype of *C. circumcisum* (NHML) from West Malaysia has been compared with specimens in RAB from Brunei, East Malaysia and Thailand, and these with the lectotype of *Xyleborus subobtusus* (NMW) from West Malaysia. BROWNE (1961) noted that *X. subobtusus* was perhaps only a variety of *C. circumcisum*, and examination of specimens from a wider range of localities indicates that *X. subobtusus* falls within the morphological range of the latter species.

***Cyclorhipidion fukiensis* (EGGERS)**

*Xyleborus fukiensis* EGGERS 1941: 225.

*Cyclorhipidion fukiensis* (EGGERS): BEAVER & LIU 2010: 24.

*Xyleborus ganshoensis* MURAYAMA 1952: 16 **syn.n.**

Photographs of the holotype (AKMB) of *Cyclorhipidion fukiensis* from China (Fujian), and a specimen compared to the holotype by Schedl (NMW) have been examined, together with specimens in RAB from Taiwan and Thailand, and compared to the holotype of *X. ganshoensis* (USNM) from Japan, and a specimen of this species identified by Nobuchi in MIZW. The holotype of *X. ganshoensis* is damaged with the left elytron detached and mounted on a separate point, and the body partly covered with gum. However, it is recognisably conspecific with the MIZW specimen, and with the specimens of *X. fukiensis*.

***Debus cavulus* (BROWNE) comb.n.**

*Xyleborus cavulus* BROWNE 1974: 538.

*Xyleborus cavuloides* BROWNE 1984: 451 **syn.n.**

The holotype of *X. cavulus* (NHML) from West Malaysia has been examined. The species is clearly related to others in the *X. emarginatus* species-group which was recently given generic status by HULCR & COGNATO (2010) as *Debus* HULCR & COGNATO. It is here transferred to that genus. The holotype of *X. cavuloides* (NHML) from East Malaysia has been directly compared to that of *X. cavulus*, and also to three specimens from New Guinea (NMW, RAB). The latter are intermediate between the two holotypes, and bridge the morphological gap between the species. Accordingly, *X. cavuloides* is synonymised with *D. cavulus*.

***Debus detritus* (EGGERS) comb.n.**

*Xyleborus detritus* EGGERS 1927b: 402.

*Xyleborus maniensis* BROWNE 1981: 130 **syn.n.**

I have examined the holotype of *X. detritus* (NMW) from Java. This species too has to be transferred to the genus *Debus*. The holotype has been compared with specimens in RAB from East Malaysia that had previously been compared with the holotype of *X. maniensis* (NHML) described from specimens imported to Japan in timber from 'Borneo'. They are clearly conspecific. The species are therefore placed in synonymy.

***Debus pumilus* (EGGERS)**

*Xyleborus pumilus* EGGERS 1923: 209.

*Debus pumilus* (EGGERS): HULCR & COGNATO 2010: 15.

*Xyleborus cylindricus* EGGERS 1927: HULCR & COGNATO 2010: 15 (synonymy).

*Xyleborus neocylindricus* SCHEDL 1942: 196 **syn.n.**

The holotype of *X. neocylindricus* from West Malaysia is in NMW and not NHML (BEAVER 1998), contrary to the statements by SCHEDL (1942) and WOOD & BRIGHT (1992). It has been examined and compared with a series of specimens in RAB identified as *D. pumilus* by comparison with specimens in NHML and MNHP determined by Eggers, Schedl and Browne as either *X. pumilus* or its synonym *X. cylindricus*, and with the lectotype of *X. cylindricus* (USNM) from the Philippines. The holotype of *X. neocylindricus* is identical with the lectotype of *X. cylindricus* except for the rugulose surface sculpture of the elytra in the former. *Xyleborus cylindricus* is synonymised with *D. pumilus* by HULCR & COGNATO (2010). Only the holotype of *X. neocylindricus* is known, and it appears to be simply an aberration of the more widespread and rather variable *D. pumilus*.



***Fortiborus posticepilosus* (SCHEDL) comb.n.***Xyleborus posticepilosus* SCHEDL 1951: 92.*Ozopemon major* STROHMEYER 1911: 23 **syn.n.**

The holotype of *X. posticepilosus* (NMW) from the Philippines has been examined. It is related to species, including *X. major* STEBBING which have recently been placed in the genus *Fortiborus* HULCR & COGNATO (HULCR & COGNATO 2010), and is here transferred to that genus. A paratype of *O. major* (MNB) from the Philippines has been examined. It was previously examined in 1942 by Eggers, who determined it as *X. major* STEBBING, but never published his determination. However, the paratype is not conspecific with *F. major* (STEBBING), but with *F. posticepilosus*. Because *Fortiborus* (*Xyleborus*) *major* (STEBBING, 1909) has priority over the junior homonym *F. (Ozopemon) major* (STROHMEYER, 1911), the next available name for the species, *F. posticepilosus* (SCHEDL, 1951) is used for the endemic Philippine species. *Fortiborus major* has a wider, more westerly distribution from Northeast India to West Malaysia.

***Microperus kadoyamaensis* (MURAYAMA)***Xyleborus kadoyamaensis* MURAYAMA 1934: 290.*Microperus kadoyamaensis* (MURAYAMA): HULCR et al. 2007: 580.*Xyleborus huangi* BROWNE 1983: 34 **syn.n.**

Through the courtesy of R. Rabaglia, I have examined a specimen of *M. kadoyamaensis* from Japan that had previously been compared to the holotype (USNM) by M. Knižek, and compared it with a specimen in MIZW determined by Nobuchi, specimens in RAB from Taiwan and Vietnam, and a series of specimens from China (Guangxi) (NHMB). Some of the latter have been compared to a paratype from China (Fujian) of *X. huangi* (NHML). All are conspecific. *Xyleborus huangi* is therefore placed in synonymy with *Microperus kadoyamaensis*.

***Xyleborus volvulus* (FABRICIUS)***Bostrichus volvulus* FABRICIUS 1775: 454.*Xyleborus volvulus* (FABRICIUS): EGGERS 1929: 43.*Xyleborus continentalis* EGGERS 1920: 42 **syn.n.**

The holotype of *X. continentalis* (MNB) from South Africa has been compared with numerous specimens of *X. volvulus* in NHML and RAB from the Neotropical and Afrotropical Regions, including specimens determined by Wood, Schedl and Browne. The holotype falls well within the morphological range of *X. volvulus*, and is therefore placed in synonymy with that species.

**Xyloctonini*****Ctonoxylon uniseriatum* SCHEDL***Ctonoxylon uniseriatum* SCHEDL 1965: 114.*Ctonoxylon capensis* SCHEDL 1971b: 8 **syn.n.**

The holotypes of *C. uniseriatum* and *C. capensis* (NMW) from Namibia and South Africa respectively have been directly compared. The holotypes differ in size and to a minor extent in their elytral sculpture, but comparisons with a series of specimens from South Africa (TMP, RAB) show that there is a continuous intergradation in morphology. Consequently, *C. capensis* is placed in synonymy with *C. uniseriatum*.

## PLATYPODINAE

### Platypodini

#### *Platypus levannongi* SCHEDL

*Platypus levannongi* SCHEDL 1974a: 265.

*Platypus beaveri* BROWNE in BEAVER & BROWNE 1975: 306 **syn.n.**

A paratype of *P. levannongi* (NMW) from Vietnam has been directly compared with two paratypes of *P. beaveri* from Thailand in my own collection. Only a single species is represented. *Platypus beaveri* was previously synonymised with *Diapus formosanus* NIJIMA & MURAYAMA, 1925 and *Platypus keelungensis* BROWNE, 1985 from Taiwan by BEAVER (2000).

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