NEW GENERA AND NEW GENERIC SYNONYMY IN SCOLYTIDAE (COLEOPTERA)

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ABSTRACT.— New generic synonymy in the world fauna of Scolytidae includes: Acanthotomicus Blandford (=Isophthorus Schedl), Acrantus Broun (=Chaetophorous Fuchs, Chaetoptelius Fuchs), Cosmoderes Eichhoff (=Erioschidias Schedl), Ernoporicus Berger (=Ernopocerus Balachowsky), Ernoporus Thomson (=Euptilius Schedl), Hylurdrectonus Schedl (=Xylogopinus Schedl), Ozopemon Hagedorn (Dryocoetiops Schedl), Scolytogenes Eichhoff (=Cryphalomorphus Schaufuss), Stephanopodius Schedl (=Cryphalomimetes Browne), and Xylechinus Chapuis (=Squamasinulus Nunberg). Genera new to science and their type-species include: Anaxyleborus (Tomicus truncatus Erichson), Apoxyleborus (Xyleborus mancus Blandford), Cryphalogenes (Cryphalogenes euphorbiae Wood), Ernocladius (Cryphalus corpulentus Sampson), Hadrodemius (Xyleborus globus Blandford), Leptoxyleborus (Phloeotrogus sordicauda Motschulsky), Microperus (Xyleborus theae Eggers), Taphrodasus (Xyleborus percorthylus Schedl), and Taurodemus (Xyleborus sharpi Blandford). The new name Hylurdrectonus corticinus is presented to replace H. araucariae (Schedl 1972). Dryocoetes coffeae Eggers is transferred to Eulepiops. The following genera are treated in a revised context: Crytogenius, Dryocoetes, Eulepiops, Ernoporicus, Ernoporus, Xyleborus, and Xylechinus. Cryphalogenes euphorbiae and C. exiguus (Sri Lanka) are named as new to science.

In a review of the genera of Scolytidae in the world fauna, several problems that relate to synonymy were encountered. The new synonymy listed in the above abstract is reported here in order that names might be used in their new context before the generic revision is completed. In addition, several genera are treated in a sense somewhat different from the traditional. The basis for these departures is established. The genera are treated alphabetically for convenience of reference. They include representatives from the subfamily Hylesininae, tribe Tomicini (Acrantus, Hylurdrectonus, Xylechinus) and from the subfamily Scolytinae, the tribes Ipini (Acanthotomicus), Dryocoetini (Cyrtogenius, Eulepiops, Ozopemon), Xyleborini (Xyleborus), and Cryphalini (Cosmoderes, Ernoporicus, Ernoporus, Scolytogenes, Stephanopodius). Nine new genera represent the tribes Xyleborini (Anaxyleborus, Apoxyleborus, Hadrodemius, Leptoxyleborus, Micro-Taphrodasus, Taurodemus) and perus, Cryphalini (Cryphalogenes, Ernocladius). Xylechinosomus Schedl is removed from synonymy with Pteleobius. The new name Hylurdrectonus corticinus is presented to replace the junior homonym H. araucariae

(Schedl 1972). The species Cryphalogenes euphorbiae and C. exiguus (Sri Lanka) are named as new to science.

Acanthotomicus Blandford

Acanthotomicus Blandford, 1894, Trans. Ent. Soc. London 1894:89 (Type-species: Acanthotomicus spinosus Blandford, monobasic)

Isophthorus Schedl, 1938, Archiv Naturgesch. 7(2):173 (Type-species: Isophthorus quadrituberculatus Schedl, present designation). New synonymy

In the original description of Isophthorus Schedl, two species were definitely included and a third species was doubtful, but a typespecies was never designated. Since then, Schedl has transferred all three species elsewhere. To anchor the generic name, Isophthorus quadrituberculatus Schedl is here designated as the type-species of Isophthorus. Because this species and Myeloborus biconicus Schedl have been transferred to Acanthotomicus and the unrelated, doubtful species, Pityophthorus heveae Hagedorn, has been transferred to Cryptocarenus, the fixation of a type-species requires that Isophthorus be placed in synonymy under Acanthotomicus.

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Acrantus Broun

Homarus Broun, 1881, Manual of New Zealand Coleoptera 2:720 (Type-species: Homarus mundulus Broun, monobasic). Preoccupied

Acrantus Broun, 1882, Ann. Mag. Nat. Hist. (5)9:409.

Replacement name

Chaetophorus Fuchs, 1912, Morphologische studien über Borkenkäfer, II, die europäischen Hylesinen, p. 46 (Type-species: Hylesinus vestitus Mulsant & Rey, monobasic). Preoccupied

Chaetoptelius Fuchs, 1913, in Reitter, Wiener Ent. Zeit. 32(Beiheft):43. (Replacement name). New synon-

The names Acrantus Broun and Chaetoptelius Fuchs have been treated as synonyms of Pteleobius Bedel (Schedl 1963:262) and Pseudohylesinus Swaine (Schedl 1966:75), respectively. However, in a review of the characters of the type-species of these genera, it was demonstrated (Wood 1978) that Pteleobius must be placed in the tribe Hylesinini and that Chaetoptelius and Pseudohylesinus belong in the tribe Tomicini. For that study, Schedl's (1963:262) placement of Acrantus was not challenged.

In a subsequent review of the genera of Tomicini, dissection demonstrated that Homarus mundulus Broun, type-species of Acrantus, clearly belongs to the Tomicini and is quite unrelated to Pteleobius. Furthermore, Pseudohylesinus totally lacks pronotal asperities, it has three distinct sutures on the antennal club, and the male from is not noticeably impressed. Acrantus, Chaetoptelius, and Xylechinosomus all have numerous pronotal asperities, two or four poorly marked sutures on the antennal club, and the male from strongly impressed and, thus, form a group quite distinct from Pseudohylesinus. Xylechinosomus, which Schedl (1966:75) also placed in synonymy with Pteleobius, has the antennal club less elongate, less strongly compressed, and (apparently) with four obscure sutures and the frontal rectangle much more elongate. Acrantus and Chaetoptelius have the antennal club more elongate, strongly flattened, and marked by two sutures and the frontal rectangle comparatively broad. Biological differences also support the continued recognition of Xylechinosomus. However, I can find no characters that separate Acrantus and Chaetoptelius. For this reason, Chaetoptelius is placed in synonymy under Acrantus, as indicated above.

Acrantus includes mundulus and vestitus, cited above, and most if not all of the species from New Zealand, Australia, New Guinea, and neighboring areas placed by Schedl in Leperisinus and Xylechinus.

Anaxyleborus, n. gen.

This genus is distinguished from Euwallacea Hopkins and allied genera by the truncate, concave elytral declivity which has a complete, sharply elevated, circumdeclivital costa from base to apex. The discal interstrial punctures are uniseriate; in the superficially similar Apoxyleborus they are con-

Description.— Antennal club with one suture visible on posterior face, anterior face with segment 1 corneous, 2 conspicuous, sometimes rather large. Procoxae contiguous. Protibia armed by more than 11 socketed teeth. Declivity and discal punctures on interstriae as described in above diagnosis.

Type-species: Tomicus truncatus Erichson. Species assigned previously to the Xyleborus truncatus group belong here.

Apoxyleborus, n. gen.

This genus is distinguished from Taurodemus by the presence of only four to seven socketed teeth on the protibia, by the obliquely truncate elytral declivity, with an abrupt (not acute) circumdeclivital costa, and the face flat to weakly concave. It is distinguished from the superficially similar Anaxyleborus by the rather widely separated procoxae, by the strongly confused interstrial punctures on the disc, and by the less distinctly concave elytral declivity.

Description.— Body stouter than 1.9 times as long as wide. Antennal club with segment 1 corneous, with no sutures evident on posterior face, apical margin of segment 1 on anterior face acutely elevated into a continuous costa forming a complete circle. Procoxae moderately separated. Protibia armed by four to seven socketed teeth. Elytral disc with interstrial punctures strongly confused, declivity as described in above diagnosis.

Type-species: Xyleborus mancus Blandford.

Species assigned previously to the *Xyleborus mancus* group belong here.

Cosmoderes Eichhoff

Cosmoderes Eichhoff, 1878, preprint of Mém. Soc. Roy. Sci. Liége (2)8:495 (Type-species: Cosmoderes monillicollis Eichhoff, monobasic)

Erioschidias Schedl, 1938, Trans. Roy. Soc. S. Australia 62:42 (Type-species: Cryphalus setistriatus Lea, subsequent designation by Wood, 1960, Insects of Micronesia 18(1):21). New synonymy

The Beeson Collection at the Forest Research Institute, Dehra Dun, India, contains series of three species that were placed by Beeson in Cosmoderes. One, from Samsingh, Kalimpong, Bengal, is labeled monillicollis Eichhoff; the other two bear manuscript names not yet validated. Beeson's private notes, of which two volumes treating Scolytidae are in my possession, contain no indication under this name that he saw the type of monillicollis. However, elsewhere in his notes there are several indications that he saw the Eichhoff Collection at Hamburg before it was destroyed during World War II. Blandford also saw the Eichhoff Collection, but there is some doubt (Blandford 1894:86) that he actually examined the type of monillicollis.

Both the Beeson and Blandford specimens are congeneric with *Erioschidias* Schedl. Beeson's specimens of *monillicollis* match the distinctive characters of Eichhoff's description in every detail. It is, therefore, proposed that *Erioschidias* be placed in synonymy under Eichhoff's name, as indicated above.

Cryphalogenes, n. gen.

This genus is distinguished from the closely allied *Scolytogenes* Eichhoff by the 3-segmented antennal funicle, by the antennal club with sutures 1 and 2 weakly procurved, marked by setae, and 1 grooved and partly septate, and by the horizontal venter of the abdomen.

Description.— Frons convex, not sexually dimorphic. Eye elongate-oval, entire. Antennal scape elongate, simple; funicle 3-segmented; club oval, a slight constriction and groove at suture 1, sutures 1 and 2 moderately procurved, 1 partly septate at least on lateral half. Pronotum with basal and lateral

margins marked by a fine, raised line; anterior slope asperate, anterior margin armed by low, poorly formed serrations. Elytral punctures largely replaced by rows of rounded strial and interstrial granules; vestiture of rows of strial hair and interstrial scales. Protibia armed by four socketed teeth. Venter of abdomen horizontal. Sexes subequal in size.

Type-species: Cryphalogenes euphorbiae

Wood.

Cryphalogenes euphorbiae, n. sp.

This species is distinguished from *exiguus* Wood by the larger size, by the absence of reticulation of the pronotum (except in extreme lateral areas of some specimens), and by the comparatively smaller pronotal and elytral granules.

Male. - Length 1.2-1.4 mm, 2.3 times as

long as wide; color dark brown.

Frons broadly convex, very feebly so on longitudinal axis; surface largely reticulate, minute punctures moderately, uniformly abundant, most of them feebly granulate. Antennal club slightly longer than scape.

Pronotum 1.0 times as long as wide; sides almost straight and parallel on basal third, rather broadly rounded in front; anterior margin armed by about four to six irregular, poorly formed serrations; summit near middle; anterior slope rather coarsely asperate, punctured between asperities; posterior areas smooth, shining (except some reticulation present in extreme lateral areas of some specimens), with close, moderately large, rounded granules, anterior slope of each granule bearing a puncture (punctures usually visible only when light source cephalad). Vestiture of fine, short, semirecumbent hair.

Elytra 1.3 times as long as wide, 1.4 times as long as pronotum; sides almost straight and parallel on basal two-thirds, rather broadly rounded behind; striae not impressed, each puncture largely replaced by a large rounded granule as wide as striae, puncture confined to posterior slope of each granule; interstriae as wide as striae, smooth, shining, punctures largely replaced by rounded granules of same size and shape as those of striae. Declivity steep, convex; sculpture as on disc. Vestiture of rows of fine, short, strial hair and rows of

erect interstrial scales, each scale slightly shorter than distance between rows, spaced within a row by length of scale, each four to six times as long as wide on disc, two to four times on declivity.

Female. - Similar to male in all respects.

Type locality.- Thirty km southeast of

Puttalam, Sri Lanka (Ceylon).

Type material.— The male holotype, female allotype, and 34 paratypes were taken at the type locality on 18-VI-1975, No. 214, from Euphorbia antiquorum, by me; 28 paratypes bear the same data except they were taken 24 km SE Puttalam. Additional paratypes were taken in Sri Lanka as follows: 21 at 5 km SE Naula, 14-VI-1975; 14 at 48 km N Naula, 14-VI-1975; 2 at 32 km N Habarana, 12-VI-1975; 1 at 8 km SW Kurunegala, 13-VI-1975; and 1 at 11 km W Kikirawa, 19-VI-1975; all from the same host and collector.

The holotype, allotype, and half the paratypes are in the U.S. National Museum. The remaining paratypes are in my collection.

Cryphalogenes exiguus, n. sp.

This species is distinguished from *euphorbiae* Wood by the smaller size, by the strongly reticulate pronotum, and by the comparatively larger pronotal and elytral granules.

Male. - Length 0.8-1.0 mm, 2.2 times as

long as wide; color dark brown.

Frons as in *euphorbiae* except more strongly convex, granules smaller, less conspicuous. Antennal club with septum in suture 1 less apparent.

Pronotum as in *euphorbiae* except reticulate, shining, granules in posterior areas

proportionately slightly larger.

Elytra as in *euphorbiae* except interstrial scales averaging more slender, those on declivity not less than four times as long as wide.

Female. - Similar to male in all respects.

Type locality.— Thirty km southeast of Puttalam, Sri Lanka (Ceylon).

Type material.— The male holotype, female allotype, and 43 paratypes were taken at the type locality on 18-VI-1975, No. 214, from Euphorbia antiquorum, by me. Addi-

tional paratypes were taken in Sri Lanka during 1975 from the same host, by me, as follows: 13 at 24 km SE Puttalam, 17-VI; 5 at 5 km SE Naula, 14-VI; 4 at 48 km N Naula, 14-VI. The specimens were taken in independent galleries in the same stems with *euphorbiae*.

The holotype, allotype, and half the paratypes are in the U.S. National Museum. The remaining paratypes are in my collection.

Cyrtogenius Strohmeyer

Kyrtogenius Strohmeyer, 1910, Ent. Blätt. 6:127 (Typespecies: Kyrtogenius bicolor Strohmeyer, monobasic)

Cyrtogenius Strohmeyer, 1911, Ent. Blätt. 7:116. Valid

emendation

Carposinus Hopkins, 1915, U.S. Dept. Agric. Rept. 99:9, 47 (Type-species: Carposinus pini Hopkins =Lepicerus nitidus Hagedorn, original designation)

Orosiotes Niisima, 1917, Coll. Essays Y. Nawa, p. 1 (Type-species: Orosiotes kumatoensis Niisima,

monobasic)

Metahylastes Eggers, 1922, Ent. Blätt. 18:165 (Type-species: Metahylastes africanus Eggers, monobasic)

Pelicerus Eggers, 1923, Zool. Meded. Roy. Mus. Nat. Hist. Leyden 7:216 (Type-species: Lepicerus nitidus Hagedorn, original designation)

Taphroborus Nunberg, 1961, Ann. Mag. Nat. Hist. (13)3:617 (Type-species: Taphroborus vaticae

Nunberg, original designation)

Much confusion exists in the literature relative to the identity of this tropical genus. It is characterized by five socketed teeth on the lateral margin of the protibia, by the posterior face of the antennal club with only one suture, sutures on anterior face procurved, with the pubescence extending to the base, by the narrowly separated procoxae, and by the slightly elevated or armed posterolateral margin of the elytral declivity. Dryocoetes differs from it by the recurved suture 1 on the antennal club, the pubescence never extending to the base, by the contiguous procoxae, and by the rounded, unarmed, posterolateral margins of the elytral declivity. Both genera are phloeophagous and have heterosanguineous polygenous breeding habits in which the male is subequal in size to the female and assists in the formation of new parental galleries. Both genera have been confused with *Eulepiops* (see below).

Ernocladius, n. gen.

This genus is distinguished from the closely allied *Ernoporus* Thomson by the 3-segmented antennal funicle, by the uniseriate interstrial setae (interstrial ground vestiture always absent on disc, a few setae sometimes present on declivity), and by the weakly procurved (often obscure) sutures of the antennal club.

Description. - Frons dimorphic, moderately impressed in male, convex in female. Eye elongate-oval, entire. Antennal scape elongate; funicle 3-segmented; club rather large, sutures weakly to moderately procurved, aseptate, marked by rows of setae, grooves present or not. Pronotum with basal margin marked by a fine, raised line, lateral margin rounded, without a raised line; asperities in concentric rows, their bases often contiguous or even reduced to a continuous costa. Elytra with basal margins rounded, strial punctures in rows, sculpture conservative; vestiture of rows of minute strial hair and rows of erect interstrial scales, interstrial ground vestiture absent on disc, a few short setae in ground cover sometimes present on declivity.

Type-species: Cryphalus corpulentus

Sampson.

Several additional species will be transferred to this genus as soon as their types can be examined. Schedl (1940:590) assigned Cryphalus corpulentus to Margadillius, apparently without appreciating the significance of the emarginate eye or the fine, raised line on the lateral margin of the pronotum of Margadillius species.

Ernoporicus Berger

Ernoporicus Berger, 1917, Rev. Russe d'Ent. 16:242 (Type-species: Ernoporicus spessivtzevi Berger, monobasic)

Eocryphalus Kurentzov, 1941, Acad. Sci. USSR, Komarov Sta. Sci., Orient, p. 230 (Type-species: Eocryphalus semenovi Kurentzov, monobasic)

Ernopocerus Balachowsky, 1949, Fauna de France 50:211 (Type-species: Ernoporus caucasicus Lindemann, subsequent designation by Wood, 1954, Univ. Kansas Sci. Bull. 36:986). New synonymy

The complex of genera allied to Ernoporus

Thomson have been poorly known and erroneously classified, largely due to the paucity of material for study. Following an examination of the type-species of Ernoporicus, Eocryphalus, and Ernopocerus, it was concluded that these three congeneric species have the basal and lateral margins of the pronotum rounded (without a fine, raised line), the procoxae narrowly separated, the eye short and entire, the antennal funicle 4-segmented, and the antennal club with the sutures procurved and marked only by setae or obsolete (never septate). Ernoporus kanawhae Hopkins of North American and E. fagi (Fabricius) and a few species from Asia also belong here. The genus Ernoporus is quite different, as indicated below.

Ernoporus Thomson

Ernoporus Thomson, 1859, Skandinaviens Coleoptera Synoptiskt Bearbitade, p. 147 (Type-species: Bostrichus tiliae Panzer, original designation)

Cryphalops Reitter, 1889, Wiener Ent. Zeit. 8:94 (Typespecies: Cryphalus lederi Reitter = Bostrichus

tiliae Panzer, monobasic)

Stephanorhopalus Hopkins, 1915, U.S. Dept. Agric. Rept. 99:35 (Type-species: Stephanorhopalus nulodori Hopkins, amended to melodori by Schedl, 1966, Ent. Abh. Mus. Dresden 35:19, original designation)

Euptilius Schedl, 1940, Mitt. Müncher Ent. Ges. 30:590 (Type-species: Ernoporus concentralis Eggers,

original designation). New synonymy

Ernoporus Thomson has the basal and lateral margins of the pronotum marked by a fine, raised line, the procoxae contiguous, most pronotal asperities arranged in concentric rows, the antennal funicle 4-segmented, the antennal club sutures strongly procurved to obsolete, and the elytral vestiture abundant and confused. Most of the species occur in tropical Asia except for tiliae, the type-species. In a review of the genera belonging to this complex, it was found that Ernoporus concentralis Eggers falls well within the range of variability for Ernoporus. Because concentralis is the type-species of Euptilius Schedl, it is, therefore, necessary to place Schedl's genus in synonymy as indicated above. The structure of the pronotum indicates that this genus is quite distinct from Ernoporicus, as noted above.

Eulepiops Schedl

Eulepiops Schedl, 1939, J. Fed. Malay St. Mus. 18(3):344 (Type-species: Eulipiops glaber Schedl, monobasic)

This genus has been confused with Cyrtogenius Strohmeyer and Dryocoetes Eichhoff. It differs by the protibia bearing only three socketed teeth on the lateral margin, by the posterior face of the antennal club with two sutures indicated, the anterior face with suture 1 straight to recurved and always on the basal fourth. The male is either unknown or dwarfed, deformed, flightless, and does not participate in the formation of new parental galleries. Reproduction is either by consanguineous polygyny or possibly by some form of parthenogenesis. The habit is myelophagy for the only species observed. Dryocoetes coffeae Eggers and its allies belong to this genus.

Hadrodemius, n. gen.

This genus is distinguished from *Eccoptopterus* Eichhoff by the tibiae being of normal size and all bearing socketed teeth, by the normal metatarsi (not compressed), by the declivity being restricted to the posterior half of the elytra, and by the convex to moderately impressed, unarmed elytral declivity.

Description.— Body very stout, less than 1.8 times as long as wide, usually black. Antennal club with posterior face unmarked by sutures, on anterior face costa marking apical margin of corneous area usually forming a complete ring. Scutellum visible only on anterior declivous slope of elytral margins. Declivity and tibiae as described in above diagnosis.

Type-species: *Xyleborus globus* Blandford. Members of the *Xyleborus globus* species group should be referred here.

Hylurdrectonus Schedl

Hylurdrectonus Schedl, 1938, Trans. Roy. Soc. S. Australia 62:40 (Type-species: Hylurdrectonus piniarius Schedl, monobasic)

Xylogopinus Schedl, 1972, Papua New Guinea Agric. J. 23:64 (Type-species: Xylogopinus araucariae Schedl = Hylurdrectonus corticinus Wood, monobasic). New synonymy

A review of long series of Hylurdrectonus piniarius Schedl, H. araucariae Schedl

(1964a:213), and *Xylogopinus araucariae* Schedl indicates the absence of characters that will separate these two genera. Consequently, it is necessary to place *Xylogopinus* in synonymy under the older name as indicated above. This act creates homonymy as indicated below.

Hylurdrectonus corticinus, new name

Xylogopinus araucariae Schedl, 1972, Papua New Guinea Agric. J. 23:64 (Bulolo, Morobe Distr., New Guinea)

A long series of this species was collected near Bulolo and compared to the holotype and paratypes in the Forest Research Laboratory collection at Bulolo. As indicated above, this species must be transferred to *Hylurdrectonus*. The transfer makes this species a junior homonym of *H. araucariae* Schedl, 1964. The new name *Hylurdrectonus corticinus* is proposed to replace *H. araucariae* (Schedl 1972).

Leptoxyleborus, n. gen.

This genus is distinguished from the allied *Theoborus* Hopkins and *Coptoborus* Hopkins by the declivity commencing anterior to the middle of the elytra, its lower half broadly impressed and either flat or shallowly concave. If the discal interstrial punctures are uniseriate, then the declivital surface is densely covered by small, confused scales; if the declivital setae are hairlike, then the discal interstrial punctures are confused.

Description.— Antennal club with two sutures indicated on posterior face, anterior face with segment 2 comparatively large, sclerotized, convex, apical portion beyond segment 2 flat to concave. Protibiae and metatibiae each armed by six or seven socketed teeth. Anterior coxae contiguous. Scutellum visible. Declivity as described in above diagnosis.

Type-species: *Phloeotrogus sordicauda* Motschulsky.

Other species placed previously in the *Xyleborus sordicauda* group also belong here.

Microperus, n. gen.

This genus is distinguished from *Taphrodasus* Wood by the convex elytral declivity that lacks a circumdeclivital costa, by the ab-

sence of declivital scales, and by the strial punctures that are arranged in definite rows.

Description.— Body slender, at least two times as long as wide, color yellowish or reddish brown. Posterior face of antennal club with at least one suture visible, apical margin of corneous area never costate. Scutellum not visible. Strial punctures usually in rows. Declivity convex, variously sculptured, without a costa.

Type-species: Xyleborus theae Eggers.

Members of the *Xyleborus theae* species group should be referred here. The name *Microperus* was originally coined by F. G. Browne for this group for use in an unpublished manuscript a decade ago.

Ozopemon Hagedorn

Ozopemon Hagedorn, 1908, Deutsche Ent. Zeitschr. 1908:382 (Type-species: Ozopemon regius Hagedorn, monobasic)

Dryocoetiops Schedl, 1957, Ann. Mus. Roy. Congo Belge, Tervuren, Ser. 8, Sci. Zool. 56:13 (Type-species: Ozopemon laevis Strohmeyer, monobasic). New synonymy

A series of *Ozopemon laevis* Strohmeyer was compared to Eggers's series of this species and to representatives of eight species of *Ozopemon*. Although the sculpturing of the pronotum is somewhat unique for the genus, this species appears to fall well within the limits of variability for *Ozopemon*. For this reason, *Dryocoetiops* is placed in synonymy as indicated above.

Scolytogenes Eichhoff

Scolytogenes Eichhoff, 1878, preprint of Mém Soc. Roy. Sci. Liége (2)8:475, 497 (Type-species: Scolytogenes darwinii Eichhoff, monobasic)

Cryphalomorphus Schaufuss, 1890 (1891), Tijdschr. Ent. 34:12 (preprint 1890 by Martinus Nijhoff, Hagg) (Type-species: Cryphalmorphus communis Schau-

fuss, monobasic). New synonymy

Eggers (1929:53) examined the type-specimens of the type-species of Scolytogenes and Lepicerus and compared them to the type-specimens of Negritus major Eggers and N. minor Eggers. He concluded that N. major and N. minor were congeneric with Scolytodes darwinii Eichhoff. The holotype of S. darwinii apparently was lost when the Stettin Museum was damaged during World War II. In the absence of that type, direct com-

parisons are not now possible; however, if it is assumed that Eggers was correct in his observations, then *N. major* and *S. darwinii* are congeneric. My examination of the lectotype of *N. major* and syntypes of *N. ater* (type-species of *Negritus*) demonstrates that these species are congeneric; consequently, *Negritus* must be a junior synonym of *Scolytogenes*. Because *N. major* and *N. ater* are also considered congeneric with *Cryphalomorphus communis* Schaufuss (type-species of *Cryphalomorphus*) (Schedl 1957:152), it must also be concluded that *Cryphalomorphus* is a junior synonym of *Scolytogenes*.

(Note added in press: The list of types in the Schedl Collection at the Vienna Museum, just received, includes the type of *S. darwinii*. It will be examined as soon as arrangements

can be completed.)

Stephanopodius Schedl

Stephanopodius Schedl, 1941, Rev. Zool. Bot. Afr. 34:396 (Type-species: Stephanoderes dispar Eggers, subsequent designation by Schedl, 1961, Rev. Ent. Moçambique 4:633)

Cryphalomimus Browne, 1962, West African Timber Borer Research Unit Rept. 5:75 (Type-species: Hypocryphalus ghanaensis Schedl, original designation)

Cryphalmomimetes Browne, 1963, Ann. Mag. Nat. Hist. (13)6:242 (Replacement name). New synonymy

When Schedl named Hypocryphalus ghanaensis and then later (Schedl 1964b:305) transferred this species from Cryphalomimetes back to Hypocryphalus, he overlooked some very important characters. In this species and in Stephanopodius, the basal margin of the pronotum bears a fine, raised line, but the lateral margin is rounded and lacks the fine, raised line of Hypocryphalus. In addition, the antennal club is quite different from Hypocryphalus. The species ghanaensis is congeneric with Stephanopodius dispar (Eggers) and, as indicated above, should be transferred to that genus. Cryphalomimetes is, therefore, a synonym of Stephanopodius Schedl and not of *Hypocryphalus* Hopkins.

Taphrodasus, n. gen.

This genus is distinguished from *Micro*perus Wood by the confused interstrial punctures, by the presence of scales on the elytral declivity, and by the strongly concave declivity that commences on the basal half of the elytra and is marked on its lateral margins in such a way as to form a blunt, elongate, circumdeclivital costa.

Description.— Body slender, at least 2.0 times as long as wide, color reddish brown. Posterior face of antennal club with one suture visible, apical margin of corneous area never costate. Scutellum not visible. Strial punctures on disc confused. Declivity as described in above diagnosis.

Type-species: Xyleborus percorthylus Schedl.

Taurodemus, n. gen.

This genus is distinguished from *Xyleborus* Eichhoff by the moderately to rather widely separated procoxae, by the rather stout body, by the presence of 9 to 12 socketed protibial teeth, and by the distinctive sculpture of the sulcate elytral declivity.

Description.— Body stout, less than 1.9 times as long as wide. Antennal club with segment 1 corneous, without any sutures evident on posterior face, apical margin of segment 1 on anterior face acutely elevated into a continuous costa forming a complete circle. Procoxae moderately to rather widely separated. Protibia armed by 9 to 12 socketed teeth. Elytral declivity moderately to very strongly sulcate on at least basal half, lateral margins armed by at least one major spine and several smaller tubercles.

Type-species: Xyleborus sharpi Blandford. The following species are transferred from Xyleborus to Taurodemus: bicornutus Wood, ebenus Wood, (Bostrichus) flavipes Fabricius, godmani Blandford, pandulus Wood, (Amphicaranus) perebeae Ferrari, salvini Blandford, sanguinicollis Blandford, sharpi Blandford, splendidus Schaufuss, (Bostrichus) varians Fabricius, and varus Wood.

Xyleborus Eichhoff

Xyleborus Eichhoff, 1864, Berliner Ent. Zeitschr. 8:37 (Type-species: Bostrichus monographus Fabricius, subsequent designation by Hopkins, 1914, Proc. U.S. Nat. Mus. 48:131)

The genus *Xyleborus* Eichhoff, as interpreted in recent years by Schedl, contains

more than 1400 nominate species, that is, virtually all the species in the tribe Xyleborini. However, the diversity of characters and habits within this group suggests the existence of several distinct clusters of species and species groups that could and should be characterized as genera. The difficulty in fragmenting the group piecemeal, as has been attempted by some workers, is that when one group is removed and elevated to generic rank, the remainder becomes unclassifiable on a logical, phylogenetic basis. In order to remedy this situation, a classification is being composed, based on such constant features as the location of mycetangia, structure of the antennal club, form and armature of the tibiae, characters of the scutellum, and many other features. A deliberate effort is being made to avoid use of adaptive characters such as the surface sculpturing of the pronotum and elytra.

Tentatively, 27 groups are being given generic status within the Xyleborini. Those described previously include: Ambrosiodmus (=Browneia, Phloeotrogus), Arixyleborus(=Xyleboricus), Cnestus (=Tosaxyleborus),Coptoborus (= Streptocranus), Cryptoxyleborus, Dryocoetoides, Eccoptopterus (=Eurydactylus, Platydactylus), Euwallacea, Kalantanius, Mesoscolytus, Notoxyleborus, Premnobius (= Premnophilus), Pseudoxyleborus, Sampsonius, Schedlia, Theoborus, Webbia (=Prowebbia, Pseudowebbia, Xelyborus), Xyleborinus, Xyleborus (=Anaeritus, Anisandrus, Boroxylon, Bufonus, Coptodryas, Cyclorhipidion, Heteroborips, Phloeotrogus, Progenius, Terminalinus, Xyleborips), and Xylosandrus. The above is mentioned to establish a context into which the seven genera in this tribe, described in this article, can fit. The seven include: Anaxyleborus, Apoxyleborus, Hadrodemius, Leptoxyleborus, Microperus, Taphrodasus, and Taurodemus.

Xylechinus Chapuis

- Xylechinus Chapuis, 1869, Synopsis des Scolytides, p. 36 (Type-species: Dendroctonus pilosus Knoch)
- Squamasinulus Nunberg, 1964, Ann. Hist.-Nat. Mus. Nat. Hungarici, Pars Zool. 56:431 (Type-species: Squamasinulus chiliensis Nunberg, original designation). New synonymy

When the holotype of Squamasinulus chiliensis Nunberg and several allied species from South American were examined, no characters could be found that distinguish this genus from *Xylechinus* Chapuis. As nearly as can be determined at the present time, the genus *Xylechinus* consists of 14 Central and South American, 2 North American, 5 Asian, and 1 European species. Schedl has referred four New Guinean and Australian species to this genus, all of which apparently should be transferred to *Acrantus*. One African species placed in *Xylechinus* by Schedl apparently belongs elsewhere.

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