

NEW SYNONYMY AND NEW SPECIES OF AMERICAN BARK BEETLES (COLEOPTERA: SCOLYTIDAE), PART IX

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ABSTRACT.— The following new synonymy in Scolytidae is proposed. *Acorthylus* Brèthes (= *Phacrylus* Schedl), *Amasa* Lea (= *Anaxyleborus* Wood), *Cryptocurus* Schedl (= *Hyloterus* Browne), *Hylesinopsis* Eggers (= *Trypographus* Schedl, *Chilodendron* Schedl), *Hypothenemus* Westwood (= *Stylotentus* Schedl), *Metahylesinus* Eggers (= *Glochicopterus* Schedl), *Phloeotribus* Latreille (= *Neophloeotribus* Eggers), *Pityophthorus* Eichhoff (= *Hypopityophthorus* Bright), *Scolytplatypus* Schaufuss (= *Spongocerus* Blandford, *Taeniocerus* Blandford, *Strophionocerus* Sampson), *Scolytus* Geoffroy (= *Confusoscolytus* Tsai & Hwang), *Styracoptinus* Wood (= *Afrotrypetus* Bright), *Sueus* Murayama (= *Neohyorrhynchus* Schedl), *Taphrorychus* Eichhoff (= *Pseudopoecilips* Murayama), *Webbia* Hopkins (= *Pseudowebbia* Browne), *Webbia dipterocarpi* Hopkins (= *Webbia 18-spinatus* Sampson), *Xyleborus* Eichhoff (= *Anaeretus* Dugès). A neotype is designated for *Anaeretus guanaguatensis* Dugès; this name becomes a junior synonym of *Xyleborus colvulus* (Fabricius). Species new to science are named from Mexico as follows: *Cactopinus atkinsoni*, *burjosi*, *granulatus*, *setosus*, *Carphobius pilifer*, *Chaetophloeus confinis*, *Chramesus exilis*, *exul*, *securus*, *tibialis*, *Cnemonyx equihuai*, *evidens*, *Cnesinus cornutus*, *nebulosus*, *parvicornis*, *Dendrosinus mexicanus*, *Liparthrum mexicanum*, *pruni*, *Phloeotribus geminus*, *Pycnarthrum amersum*, *Scolytodes plumericolens*, *retifer*.

A review of the holotypes of the type-species of several obscure genera of Scolytidae has led to the detection of several previously unpublished or obscured synonyms. These are presented below in alphabetical order of the senior generic name. The synonymy of *Webbia dipterocarpi* Hopkins is included.

The continuing faunal survey of Mexico of Dr. T. H. Atkinson, Chapingo, Mexico, has resulted in the discovery of a number of species new to science. Twenty-two species found during that survey are presented below. They represent: *Cactopinus* (4), *Carphobius* (1), *Chaetophloeus* (1), *Chramesus* (4), *Cnemonyx* (2), *Cnesinus* (3), *Dendrosinus* (1), *Liparthrum* (2), *Phloeotribus* (1), *Pycnarthrum* (1), and *Scolytodes* (2).

NEW SYNONYMY

Acorthylus Brèthes

Acorthylus Brèthes, 1922, Ann. Soc. Cien. Argentina 94:304 (Type-species: *Acorthylus asperatus* Brèthes, monobasic)

Phacrylus Schedl, 1938, Rev. Soc. Ent. Argentina 10:24 (Type-species: *Phacrylus bosqui* Schedl). *New synonymy*

The Argentine species *Acorthylus asperatus* Brèthes has stood as an unidentifiable

species since its description. However, the description clearly characterizes the 3-segmented antennal funicle with the middle segment enlarged and almost equal in length to the scape. Because no other genus shares this character and because the description of the type species matches in every detail those of Argentine species placed by Schedl in his *Phacrylus*, it must be concluded that *Phacrylus* is a junior synonym of *Acorthylus* as indicated above.

Amasa Lea

Amasa Lea, 1894, Proc. Linn. Soc. New South Wales (2) 8:322 (Type-species: *Amasa thoracicus* Lea = *Tomicus truncatus* Erichson, monobasic)

Anaxyleborus Wood, 1980, Great Basin Nat. 40:90 (Type-species: *Tomicus truncatus* Erichson, original designation). *New synonymy*

When the name *Anaxyleborus* Wood (1980) was proposed, I overlooked the synonymy (Lea, 1904, Linn. Soc. New South Wales 29:106) of the type-species, *Tomicus truncatus* Erichson, with *Amasa thoracicus* Lea. In view of this synonymy involving the type-species, *Anaxyleborus* automatically becomes a synonym of *Amasa*.

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Cryptocurus Schedl

Cryptocurus Schedl, 1957, Ann. Mag. Nat. Hist. (12) 10:869 (Type-species: *Cryptocurus spinipennis* Schedl, monobasic)

Hyloperus Browne, 1970, J. Nat. Hist. 4:546 (Type-species: *Hyloperus bicornis* Browne, original designation). *New synonymy*

The male holotype of *Cryptocurus spinipennis* Schedl and the female holotype of *Hyloperus bicornis* Browne were examined and compared directly to one another and to other members of this species. They represent opposite sexes of the same species. Consequently, *Hyloperus* becomes a junior synonym of the older name.

Hylesinopsis Eggers

Hylesinopsis Eggers, 1920, Ent. Blätt. 16:40 (Type-species: *Hylesinopsis dubius* Eggers, monobasic)

Trypographus Schedl, 1950, Rev. Francaise Ent. 17:213 (Type-species: *Trypographus joveri* Schedl, monobasic). *New synonymy*

Chilodendron Schedl, 1953, Mem. Inst. Sci. Madagascar (E) 3:74 (Type-species: *Chilodendron planicolle* Schedl, monobasic). *New synonymy*

When *Hylesinopsis* Eggers (1920), *Trypographus* Schedl (1950), and *Chilodendron* Schedl (1953) were named, there may have been some justification for the recognition of three genera. However, the subsequent discovery of additional species has closed the character gap used to distinguish them. I now see no justification for the recognition of more than one genus and place *Trypographus* and *Chilodendron* in synonymy under *Hylesinopsis* as indicated above.

Hypothenemus Westwood

Hypothenemus Westwood, 1836, Trans. Ent. Soc. London 1:34 (Type-species: *Hypothenemus eruditus* Westwood, monobasic)

Stylotentus Schedl, 1939, Rev. Zool. Bot. Afr. 32:380 (Type-species: *Hypothenemus concolor* Hagedorn, subsequent designation by Schedl, 1961, Rev. Ent. Moçambique 4:448). *New synonymy*

Schedl (1936:380) established the genus *Stylotentus* on the basis of a peculiarity in the antennal club and funicle. The club appears to have fused with funicular segments 4 and 5; funicular segments 1-3 are normal. The funicle in *Hypothenemus* is unstable, varying from three to five segments. Parital fusion of segments is a common feature, and occasionally the left and right antennae will

bear different numbers of segments. Of the three specimens of *concolor* Hagedorn in my collection, the funicle of one is 5-segmented, one 3-segmented, and one 2-segmented (all four flagellar segments are fused). Two of the three specimens of *ater* (Eggers), also assigned by Schedl to *Stylotentus*, have the funicle 4-segmented. In view of the instability of this character in these species, and the variability of funicular segmentation in other *Hypothenemus*, *Stylotentus* is placed in synonymy under the senior name *Hypothenemus*.

Metahylesinus Eggers

Metahylesinus Eggers, 1922, Ent. Blätt. 18:165 (Type-species: *Pseudohylesinus togonus* Eggers, automatic)

Glochicopterus Schedl, 1954, Rev. Zool. Bot. Afr. 50:75 (Type-species: *Glochicopterus baphiae* Schedl, monobasic). *New synonymy*

Following a study of *Metahylesinus togonus* (Eggers), of five other species currently assigned to *Metahylesinus* Eggers, and of *Glochicopterus baphiae* Schedl, I am unable to detect characters that separate these species into distinct genera. For this reason, *Glochicopterus* is placed in synonymy as indicated above.

Phloeotribus Latreille

Phloeotribus Latreille, 1797, Prec. caract. gen. insects, p. 50 (Type-species: *Hylesinus oleae* Fabricius = *Scolytus scarabacoides* Bernard, monobasic)

Neophloeotribus Eggers, 1943, Mitt. Münchner Ent. Ges. 33:349 (Type-species: *Phloeotribus nubilus* Blandford, present designation). *New synonymy*

Eggers (1943) proposed the subgeneric name *Neophloeotribus* for a group of species that included *Phloeotribus nubilus* Blandford and *Phloeotribus suturalis* Eggers. I designate *Phloeotribus nubilus* Blandford as the type-species of *Neophloeotribus*. At the present time, I see no need to subdivide *Phloeotribus* and therefore place *Neophloeotribus* in synonymy as indicated above.

Pityophthorus Eichhoff

Pityophthorus Eichhoff, 1864, Berliner Ent. Zeitschr. 8:39 (Type-species: *Bostrichus lichtensteini* Ratzeburg)

Hypopityophthorus Bright, 1981, Mem. Ent. Soc. Canada 118:14 (Type-species: *Pityophthorus inops* Wood). *New synonymy*

Bright (1981) established the subgenus *Hypopityophthorus* on the basis of degenerate sutures in the antennal club. The characters are exactly the same as those used by Blackman to characterize *Pityophthoroides*. Neotropical *Pityophthorus* exhibit varying degrees of suture deterioration on an antennal club that increases in thickness. The trend is gradual and is best seen in the smallest species. Because *Hypopityophthorus* was proposed for the same group as *Pityophthoroides*, which is no more than a species group of indefinite extent, it is placed in synonymy under *Pityophthorus*.

Scolytoplatypus Schaufuss

Scolytoplatypus Schaufuss, 1890, Beitrag zur Käferfauna Madagascars 2:31 (Type-species: *Scolytoplatypus permirus* Schaufuss, monobasic)

Spongocerus Blandford, 1893, Trans. Ent. Soc. London 1893:431 (Type-species: *Scolytoplatypus tycon* Blandford, subsequent designation by Hopkins, 1914, Proc. U.S. Nat. Mus. 48:129). *New synonymy*

Taeniocerus Blandford, 1893, Trans. Ent. Soc. London 1893:431 (Type-species: *Scolytoplatypus mikado* Blandford, subsequent designation by Hopkins, 1914, Proc. U.S. Nat. Mus. 48:431). Preoccupied by Kamp 1871

Strophionocerus Sampson, 1921, Ann. Mag. Nat. Hist. (9) 7:36. (Replacement name for *Taeniocerus* Blandford). *New synonymy*

Blandford (1893) proposed for the genus *Scolytoplatypus* Schaufuss the subgeneric names *Spongocerus* and *Taeniocerus*. The latter name was a homonym that was replaced by *Strophionocerus*. These names were unnecessary in the classification of the genus and have been ignored by subsequent workers treating the genus. Attention is called to them for the purpose of placing them in synonymy as indicated above.

Scolytus Geoffroy

Scolytus Geoffroy, 1762, Histoire abrégée des insectes, p. 309 (Type-species: *Bostrichus scolytus* Fabricius, subsequent designation by International Commission on Zoological Nomenclature)

Archaeoscolytus Butovitsch, 1929, Stettiner Ent. Zeit. 90:21, 23 (Species group name for *Scolytus claviger* Blandford). *No status*

Spinuloscolytus Butovitsch, 1929 Stettiner Ent. Zeit. 90:21, 24 (Species group name for *Ips multi-striatus* Marsham, *Scolytus orientalis* Eggers, *Scolytus ecksteini* Butovitsch). *No status*

Tubuloscolytus Butovitsch, 1929, Stettiner Ent. Zeit. 90:21, 24 (Species group name for *Eccoptogaster intricatus*, *Eccoptogaster carpiini* Ratzeburg, *Scolytus koenigi* Schevyrew). *No status*

Pygmaeoscolytus Butovitsch, 1929, Stettiner Ent. Zeit. 90:21, 28 (Species group name for *Scolytus kirschi* Skalitzy, *Scolytus fasciatus* Reitter, *Bostrichus pygmaeus* Fabricius, *Scolytus ensifer* Eichhoff, *Scolytus zaitzevi* Butovitsch). *No status*

Pinetoscolytus Butovitsch, 1929, Stettiner Ent. Zeit. 90:22, 48 (Species group name for *Scolytus morawitzi* Semenov). *No status*

Confusoscolytus Tsai & Hwang, 1962, Acta Ent. Sinica 11:4, 14 (Type-species: *Eccoptogaster confusus* Eggers). *New synonymy*

Several mononominal designations within the genus *Scolytus* Geoffroy have been published that have caused confusion in the literature treating Scolytidae. Five of these were published by Butovitsch (1929) in one paper, including *Archaeoscolytus*, *Spinuloscolytus*, *Tubuloscolytus*, *Pygmaeoscolytus*, and *Pinetoscolytus*, as species-group names. As such they have no status in nomenclature. They were not intended to be genus-group names and should not be cited as such.

The name *Confusoscolytus* Tsai & Hwang (1962) was presented as a subgenus of *Scolytus* and is of nomenclatural interest. However, because the *Scolytus* species of Europe, Asia, and North America are not divisible into recognizable subgenera, *Confusoscolytus* has value no greater than a species-group and, therefore, must be treated as a synonym of *Scolytus*.

Styracoptinus Wood

Styracoptinus Wood, 1962, Great Basin Nat. 22:77 (Replacement name for *Styracopterus* Blandford, preoccupied, Type-species: *Styracopterus murex* Blandford, automatic)

Afrotrypetus Bright, 1981, Coleopt. Bull. 35:113 (Type-species: *Afrotrypetus euphorbiae* Bright, original designation. *New synonymy*)

During a visit with Dr. K. E. Schedl in 1965, I showed him a pair of specimens from the same series Bright (1981) later named as *Afrotrypetus euphorbiae*. We agreed that the species represented *Styracoptinus*. He had a vague recollection of having named it in another genus from a unique specimen that was deposited in another collection. Since then, other *Styracoptinus* have been named that more fully bridge the gap between *murex* and *euphorbiae*. For this reason *Afrotrypetus* must become a junior synonym of *Styracoptinus*.

Sueus Murayama

Sueus Murayama, 1951, Bull. Facul. Agric. Yamaguti Univ. 2:1 (Type-species: *Sueus sphaerotrypoides* Murayama = *Hyorrhynchus niisimai* Eggers, original designation)

Neohyorrhynchus Schedl, 1962, Ent. Blätt. 58:202 (Type-species: *Hyorrhynchus niisimai* Eggers, monobasic). *New synonymy*

The female holotypes of *Sueus sphaerotrypoides* Murayama and *Hyorrhynchus niisimai* Eggers were examined and compared directly to my specimens. Because they represent the same species, *Neohyorrhynchus* Schedl becomes an objective junior synonym of the older name.

Taphrorychus Eichhoff

Taphrorychus Eichhoff, 1878, preprint of Mem. Soc. Roy. Sci. Liège (2) 8:49, 204 (Type-species: *Bostrichus bicolor* Herbst, subsequent designation by Hopkins, 1914, Proc. U.S. Nat. Mus. 43:130)

Pseudopoecilips Murayama, 1957, Bull. Facul. Agric. Yamaguti Univ. 8:614 (Type-species: *Pseudopoecilips mikuniyemensis* Murayama, original designation). *New synonymy*

Following my examination of authentic specimens of all species currently assigned to *Taphrorychus* Eichhoff and of the three species of *Pseudopoecilips* named by Murayama, it was concluded that *Pseudopoecilips* fits well within the anatomical and biological limits of *Taphrorychus*. Accordingly, *Pseudopoecilips* is placed in synonymy under *Taphrorychus* as indicated above.

Webbia Hopkins

Webbia Hopkins, 1915, U.S. Department of Agriculture Bur. Ent. Tech. Bull. 17(2):222 (Type-species: *Webbia dipterocarpi* Hopkins, original designation)

Pseudowebbia Browne, 1961, Sarawak Mus. J. 10:308 (Type-species: *Xyleborus trepanicauda* Eggers, original designation). *New synonymy*

In my review of the status of the genera of Scolytidae, the type specimens of the type species of *Webbia* Hopkins (*W. dipterocarpi* Hopkins) and *Pseudowebbia* Browne (*Xyleborus trepanicauda* Eggers) were examined along with almost all the other species in these genera. It is apparent that *dipterocarpi* and *trepanicauda* both represent the same species group within the genus. For this reason, the junior name, *Pseudowebbia*, must be placed in synonymy.

Webbia dipterocarpi Hopkins

Webbia dipterocarpi Hopkins, 1915, U.S. Department of Agriculture Bur. Ent. Tech. Bull. 17(2):223 (Holotype, female; near Pagbilao, Philippine Islands; U.S. Nat. Mus.)

Webbia 18-spinatus Sampson, 1921, Ann. Mag. Nat. Hist. (9)7:34 (Holotype, female; Penang, Bryant; British Mus. Nat. His.). *New synonymy*

The female holotypes of *Webbia dipterocarpi* Hopkins and *Webbia 18-spinatus* Sampson were both compared directly to my specimens from the Philippines and Malaya. Because they are identical in all respects, it is concluded that they represent the same species. For this reason, *18-spinatus* is placed in synonymy as indicated above.

Xyleborus Eichhoff

Xyleborus Eichhoff, 1864, Berliner Ent. Zeitschr. 8:37 (Type-species: *Bostrichus monographus* Fabricius, subsequent designation by Lacardaire, 1866, Hist. Gen. Coleopt. 7:381)

Anaeretus Dugès, 1887, Ann. Soc. Ent. Belgique 31:141 (Type-species: *Anaeretus guanaguatensis* Dugès = *Bostrichus volvulus* Fabricius). *New synonymy*

The genus *Anaeretus* Dugès was established for *guanaguatensis* Dugès and based on specimens deposited in the Museo Nacional de Historia Natural at Mexico City. The major portion of the Dugès collection was later moved to the Universidad Nacional Autónoma de México, also in Mexico City. Two unsuccessful searches were conducted for the types of *Anaeretus guanaguatensis*, first in 1974 by me, the second by W. F. Barr in February 1982. The specimens could not be found and are presumed to be lost.

From the rather complete description of *guanaguatensis*, it is apparent that the type series was of either *Xyleborus volvulus* (Fabricius) or, possibly, *X. affinis* Eichhoff, both of which are common throughout Mexico except for the very dry northern areas. In order to remove ambiguity from the placement of *Anaeretus* in the classification of Scolytidae, I here designate as the neotype of *Anaeretus guanaguatensis* Dugès the female lectotype of *Xyleborus volvulus* (Fabricius) that is in the Copenhagen museum.

CORRECTION

Cnesinus equihuai Wood, emendation

Cnesinus aquihuai Wood, 1982, Great Basin Nat. 42:226 (Holotype, female; between Cuetzalan and Pasa)

del Jardin, Puebla, Mexico; Wood Collection).
Lapsus calmi

A proofreading error occurred in the original spelling of the specific name of this species and in references to the name of the collector. Armando Equihua has been an enthusiastic student of the Scolytidae and an ardent collector of numerous rare forms, many of which have been named as new to science.

NEW TAXA

Cactopinus atkinsoni, n. sp.

This species is distinguished from *nausutus* Wood by the smaller size, by the less deeply excavated male frons with the upper margin more rounded, and by the steeper lower declivity.

Male.—Length 1.3 mm (paratypes 1.3–1.5 mm), 2.4 times as long as wide; color black.

Frons similar to *nausutus* except upper area of frons not as widely or as deeply excavated, upper margin much less acute; horn averaging smaller.

Pronotum as in *nausutus*.

Elytra as in *nausutus* except declivity steeper, more narrowly sulcate.

Female.—Similar to male except frons about as in female *nausutus*.

Type locality.—Estación de Biología, Chame-la, Jalisco, Mexico.

Type material.—The male holotype, female allotype, and 18 paratypes were taken at the type locality on 28-V-1982, 80 m, S-497, *Pachycerus*, T. H. Atkinson and A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Cactopinus burjosi, n. sp.

This species is distinguished from *niger* Wood by the less distinctly concave male frons, by the larger strial punctures, by the presence of interstitial tubercles, and by the very different declivity as described below.

Male.—Length 1.5 mm (paratypes 1.5–1.6 mm), 2.3 times as long as wide; color black.

Frons largely hidden by pronotum, impression apparently limited, if present; horns basally contiguous and of about same size and form as *cactophthorus* Wood. Antennal club

small, sutures weakly procurved, almost straight.

Pronotum about as in *niger* except asperities and tubercles in lateral areas larger.

Elytra 1.4 times as long as wide; sides almost straight and parallel on basal two-thirds, rather narrowly rounded behind; striae 1 weakly, others not impressed, punctures very coarse, deep, and poorly formed on basal half, decreasing posteriorly until obsolete by base of declivity, small granules between punctures on posterior half of disc gradually replace punctures posteriorly; interstriae about half as wide as striae, irregular, each armed by a uniseriate row of small tubercles except basal half of even-numbered interstriae indistinctly punctured. Declivity occupying posterior third, less abrupt and less strongly sulcate than in related species; striae and interstriae marked by small, acutely rounded tubercles, except on lower third of sulcus only obscure strial punctures indicated. Vestiture of sparse, confused, minute hairlike setae.

Female.—Similar to male except frons similar to females of related species.

Type locality.—Tepenene, Puebla, Mexico.

Type material.—The male holotype, female allotype, and two paratypes were taken on 1-X-1982, 1240 m, B-070, *Neobuxbaumia mezealensis*, A. Burjos and E. Saucedo.

The holotype, allotype, and paratypes are in my collection.

Cactopinus granulatus, n. sp.

This species is distinguished from *nausutus* Wood by the smaller pronotal asperities and by the presence of discal tubercles on the striae and interstriae.

Male.—Length 1.7 mm (paratypes 1.6–1.8 mm), 2.3 times as long as wide; color black.

Frons as in *nausutus* except excavated area not quite as wide above eyes.

Pronotum as in *nausutus* except asperities distinctly smaller.

Elytra about as in *nausutus* except strial punctures larger, deeper; interstriae irregular on basal half, posterior half armed by irregularly placed small tubercles, a few similar tubercles on striae between punctures. Declivity similar to *nausutus*, strial punctures

continue to apex, striae and interstriae tubercles absent except on interstriae 1 and 3. Vestiture sparse, short, of fine interstitial hair.

Female.— Similar to male except frons as in female *nausutus*.

Type locality.— Autlan, carr. Barra de Navidad km 163, Jalisco, Mexico.

Type material.— The male holotype, female allotype, and eight paratypes were taken at the type locality on 3-VII-1982, S-751, Cactaceae, A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Cactopinus setosus, n. sp.

This species is distinguished from *nausutus* Wood by the stout body form, by the smaller striae punctures, and by the rather abundant elytral vestiture.

Male.— Length 1.6 mm (paratypes 1.4–1.7 mm), 2.2 times as long as wide; color black.

Frons similar to *nausutus* except upper excavated area less strongly impressed; horn averaging slightly shorter, its apices usually blunt.

Pronotum similar to *nausutus* except asperities less numerous and smaller, median basal area more rounded and with fewer asperities.

Elytra similar to *nausutus* except declivity less strongly, more narrowly sulcate; discal surface largely obscured by incrustation, apparently striae punctures smaller, not as deep, interstriae smooth, uniseriate punctures small; a few small granules on odd-numbered interstriae toward declivity; declivital striae punctures larger and deeper than on disc. Vestiture of rows of rather coarse, erect interstitial setae, each seta very slightly longer than distance between rows or between setae within a row.

Female.— Similar to male except frons similar to female *nausutus*.

Type locality.— Estación de Biología, Chamela, Jalisco, Mexico.

Type material.— The male holotype, female allotype, and 13 paratypes were taken at the type locality on 28-V-1982, 80 m, S-498, Cactaceae, T. H. Atkinson and A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Carphobius pilifer, n. sp.

This species is distinguished from *cupressi* Wood by the much more abundant, longer vestiture throughout the body, by the finer pronotal punctures, and by other characters cited below.

Female.— Length 2.9 mm (paratypes 2.8–3.0 mm), 2.3 times as long as wide; color very dark brown, elytra rather dark brown.

Frons as in *cupressi* except epistomal process more conspicuous, vestiture more abundant and much coarser.

Pronotum as in *cupressi* except punctures half as large, closer, not as deep; vestiture obscurely subplumose, appearing much coarser, longer, more abundant.

Elytra as in *cupressi* except declivity steeper, striae punctures smaller, interstriae wider, with punctures more numerous and confused, vestiture obscurely subplumose, longer, much more abundant.

Type locality.— Trés Mariás, Morelos, Mexico.

Type material.— The female holotype and two female paratypes were taken at the type locality on 30-V-1982, 2790 m, B-029, *Cupressus lindleyi*, A. Burjos and E. Saucedo.

The holotype and paratypes are in my collection.

Chaetophloeus confinis, n. sp.

This species is distinguished from *struthanthi* Wood by the less strongly concave male frons, by the larger frontal granules in both sexes, and by the longer, more slender setae on the elytral declivity.

Male.— Length 1.7 mm (allotype 1.7 mm), 1.7 times as long as wide; color dark brown.

Frons shallowly concave to slightly above upper level of eyes; similar to *struthanthi* except concavity not as deep nor extending as high on vertex; long setae on upper margin shorter, not reaching middle of frons.

Pronotum as in *struthanthi* except vestiture distinctly longer, surface without any reticulation.

Elytra as in *struthanthi* except striae less distinctly impressed, punctures slightly larger, setae longer; longest setae at base of declivity six times as long as wide (in *struthanthi* not more than four times as long as wide.)

Female.— Similar to male except frons convex, frontal tubercles larger, frontal vestiture normal.

Type locality.— Cuernavaca, Morelos, Mexico.

Type material.— The male holotype was taken at the type locality on 28-VI-1982, 1500 m, AB-070 *Phoradendron*, by A. Burjos; the allotype from the same locality 4-VII-1982, 1519 m, SH-011, *Phoradendron* by E. Saucedo.

The holotype and allotype are in my collection.

Chramesus exilis, n. sp.

This species is distinguished from *gracilis* Wood by the smaller size, by the finer, more slender (but not longer) vestiture, by the more slender pronotum, and by the less strongly impressed male frons.

Male.— Length 1.7 mm (paratypes 1.6–1.8 mm), 2.3 times as long as wide, color very dark brown, vestiture pale.

Frons moderately, concavely impressed on median two-thirds of lower two-thirds; surface reticulate, punctures not clearly evident; tubercles smaller and vestiture finer than in *gracilis*.

Pronotum 0.94 times as long as wide; surface as in *gracilis* except granules more regularly present and vestiture finer.

Female.— Similar to male except frons convex, a slight transverse impression just above epistoma; frontal tubercles present, but smaller.

Type locality.— El Tuito, Jalisco, Mexico.

Type material.— The male holotype, female allotype, and 30 paratypes were taken at the type locality on 28-V-1982, 640 m, S-707, from *Smilax* by T. H. Atkinson and A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Chramesus exul, n. sp.

This species is distinguished from *vitiosus* Wood by the absence of pronotal reticulation and by the punctured male striae. Although it superficially resembles *vitiosus*, its true relationships are probably much closer to *xylophagus* Wood.

Male.— Length 1.3 mm (paratypes 1.1–1.5 mm), 1.5 times as long as wide; color very dark brown, with pale vestiture.

Frons moderately, somewhat narrowly concave from epistoma to upper level of eyes, lateral margins weakly elevated, armed immediately below level of antennal insertion by a small tubercle; surface almost smooth, obscurely rugose-reticulate; vestiture fine, short, inconspicuous.

Pronotum resembling *xylophagus* except more strongly arched, punctures closer, smaller, and deeper; vestiture short, rather stout (each at least six times as long as wide), moderately abundant.

Elytra about as in *xylophagus* except setae in ground cover much stouter, erect setae of equal width and about twice as long as ground setae; each erect seta about three to four times as long as wide.

Female.— Similar to male except frons convex, lateral tubercles absent.

Type locality.— Nine km southeast of Totolapan, Oaxaca, Mexico.

Type material.— The male holotype, female allotype, and 10 paratypes were taken at the type locality, 21-VI-1967, 1000 m, No. 70, from an unidentified shrub, by me; 16 paratypes are from Estación de Biología, Chamela, Jalisco, 19-VIII-1982, 100 m, S-758, from a Leguminosae, by A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Chramesus securus, n. sp.

This species is distinguished from *vitiosus* Wood by the smooth, shining surface of the pronotum (between the small tubercles), by the more strongly arched elytral declivity, and by the more slender, erect interstitial setae.

Male.— Length 1.5 mm (paratypes 1.5–1.7 mm), 1.5 times as long as wide; color dark reddish brown, vestiture pale.

Frons as in *vitiosus* except lateral margin at level of antennal insertion more strongly, acutely elevated, with tubercle slightly above level of antennal insertion.

Pronotum as in *vitiosus* except surface smooth, shining, punctures near median base very small.

Elytra as in *vitiosus* except declivity beginning at middle of elytra, more strongly

arched, steeper, erect interstrial setae slightly stouter.

Female.— Similar to male except frons convex, its lateral margins unarmed by tubercles.

Type locality.— Estación de Biología, Chame-la, Jalisco, Mexico.

Type material.— The male holotype, female allotype, and six paratypes were taken at the type locality on 4-III-1982, 100 m, S-365, from a Leguminosae, by A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Chramesus tibialis, n. sp.

Although the *Scolytodes*-like protibia is unique in the genus, this species is somewhat remotely allied to *incomptus* Wood. This and other unique characters are described below.

Male.— Length 1.6 mm (paratypes 1.6–1.8 mm), 2.1 times as long as wide; color very dark brown to almost black.

Frons broadly, moderately concave from epistoma to slightly below upper level of eyes; lateral margins rather abrupt, neither acute nor armed, epistoma normal; surface shining, subreticulate at vertex, gradually becoming minutely subrugose toward epistoma. Vestiture fine, moderately long, mostly on margins.

Pronotum 0.91 times as long as wide; shape typical of genus; surface finely reticulate; median basal area with fine, shallow punctures, these replaced by small, rounded tubercles anteriorly and laterally. Vestiture of fine, slender hair.

Elytra 1.3 times as long as wide; sides almost straight and parallel on basal two-thirds, broadly rounded behind; striae not impressed, punctures shallow, small; interstriae smooth, shining, about three times as wide as striae, uniseriate punctures largely replaced by small granules. Declivity steep, rather narrowly convex; sculpture about as on disc except surface rather dull, granules smaller. Vestiture of minute striaal hair and erect interstrial hairlike setae, each seta shorter than distance between rows.

Protibia with outer apical angle produced into dominant spine somewhat similar to *Scolytodes*, two minute socketed denticles on lateral margin above spine.

Female.— Similar to male except frons convex.

Type locality.— Urpanapan, Veracruz, Mexico.

Type material.— The male holotype, female allotype, and one male paratype were taken at Hidalgotitlan at the type locality, 27-IV-1982, S-442, from *Olmeca recta*, by T. H. Atkinson.

The holotype, allotype, and paratype are in my collection.

Cnemonyx equihuai, n. sp.

This species is distinguished from *liratus* Wood by the very different frons as described below, by the less deep, oval pronotal punctures, and by the somewhat more broadly flattened lower declivity.

Male.— Length 1.4 mm (paratypes 1.5 mm), 2.5 times as long as wide; color yellowish brown.

Frons convex except median third concavely impressed on triangular area from epistoma to upper level of eyes, concave area glabrous and reticulate except lateral margins with a row of rather fine, moderately long setae, lower margin of concavity marked by a low, straight, acute carina.

Pronotum about as in *liratus* except surface slightly shagreened, punctures oval, less strongly impressed.

Elytra similar to *liratus* except on disc striae less distinctly impressed, punctures not as close, declivity much more broadly convex on lower half, not as steep, tubercles similarly placed but averaging smaller, particularly in lateral areas; vestiture stouter, about half as long.

Female.— Similar to male except frontal impression very weak.

Type locality.— Km 150 carr. Melaque—Puerto Vallarta, Jalisco, Mexico.

Type material.— The male holotype, female allotype, and one male paratype were taken at the type locality on 6-III-1982, 300 m, S-383, *Hura polyandra*, A. Equihua.

The holotype, allotype, and paratype are in my collection.

Cnemonyx evidens, n. sp.

This species is distinguished from *vagabundus* Wood by the larger size, by the reticulate, more shallowly, more broadly im-

pressed frons, by the more closely spaced interstitial punctures, and by the declivital sculpture.

Male.—Length 1.8 mm (paratypes 1.7–1.9 mm), 2.5 times as long as wide; color very dark reddish brown.

Frons very shallowly concave almost from eye to eye from epistoma to slightly above upper level of eyes; surface reticulate, punctures minute, obscure; epistoma shining, slightly elevated, a feeble, transverse carina on its lower margin; vestiture on median two-thirds of lower two-thirds except reduced to almost absent on and near median line, consisting of abundant, stout, erect setae, each slightly longer than distance equal to width of scape.

Pronotum similar to *vagabundus*, except punctures slightly smaller.

Elytra outline about as in *vagabundus*; striae weakly impressed toward declivity, punctures small, moderately deep; interstriae twice as wide as striae, feebly convex, almost smooth, shining, punctures fine, distinctly impressed, almost uniseriate, more closely spaced than those of striae. Declivity convex, rather steep; striae narrower and more deeply impressed than on disc, interstriae more strongly convex, 1 slightly, 7 and 9 more distinctly elevated, 7 and 9 joining and continuing almost to 1; punctures on all interstriae largely replaced by fine, pointed tubercles, costal margin near apex finely serrate. Vestiture almost obsolete, consisting of very minute, rather stout interstitial setae.

Female.—Similar to male except frontal impression slightly less extensive, frontal vestiture slightly less abundant.

Type locality.—Las Granjas, Morelos, Mexico.

Type material.—The male holotype, female allotype, and six paratypes were taken at the type locality on 8–VI–1982, in *Ficus*, by E. Martinez.

The holotype, allotype, and paratypes are in my collection.

Cnesinus cornutus, n. sp.

This species is distinguished from *bicornis* Wood by the smaller size, by the less extensively, less deeply impressed frons, and by very different armature of the epistoma.

Female.—Length 2.8 mm (paratypes 2.8–2.9 mm), 2.7 times as long as wide; color dark reddish brown.

Frons strongly, broadly impressed to upper level of eyes (otherwise about as in *bicornis*); epistoma on median fourth strongly elevated into an almost hornlike process, this process as high as wide and equal in length to combined width of four facets of eye, its apex armed by a pair of small, transversely arranged tubercles.

Pronotum about as in *bicornis* except grooves between longitudinal elevations on disc slightly wider and somewhat subreticulate.

Elytra as in *bicornis* except ground vestiture slightly finer and shorter, erect setae very slightly stouter.

Male.—Similar to female except epistomal armature absent; vestiture apparently slightly longer and more abundant.

Type locality.—San Tlatotico, Morelos, Mexico.

Type material.—The female holotype, male allotype, and four paratypes were taken at the type locality on 27 May 1982, 2110 m, S–675, from a *Compositae*, by A. Burjos and E. Saucedo.

The holotype, allotype, and paratypes are in my collection.

Cnesinus nebulosus, n. sp.

This species is distinguished from *carinatus* Wood by the very different female frons and sculpture of the pronotum as described below.

Female.—Length 2.4 mm (paratypes 2.4–2.7 mm), 2.3 times as long as wide; color dark reddish brown, vestiture pale except tan on declivity.

Frons similar to *carinatus* except weak carina poorly formed, area above carina broader and distinctly impressed, more coarsely, closely, uniformly punctured; vestiture longer, more uniformly distributed, less specialized; eyes separated by 2.0 times width of an eye.

Pronotum similar to *carinatus* except rugae higher, shorter, much more tortuous.

Elytra similar to *carinatus* except not impressed or sulcate on declivity, ground setae stouter, erect setae stouter and shorter, not

longer on declivity and present on declivital interstriae 1 and 2; vestiture pale on the disc and sides, tan on declivity.

Male.— Similar to female except frons shallowly impressed on lower half, carina absent, frontal setae shorter.

Type locality.— Pachuca, Hidalgo, Mexico.

Type material.— The female holotype, male allotype, and one female paratype were taken at the type locality on 2 April 1982, 2400 m, S-463, by A. Equihua.

The holotype, allotype, and paratype are in my collection.

Cnesinus parvicornis, n. sp.

This species is distinguished from other members of the *elegans* group by the more extensive base and the more dorsal position of the epistomal tubercles, by the coarse, almost oval pronotal punctures, and by the uniformly rather short, almost scalelike elytral setae.

Female.— Length 2.8 mm (paratypes 2.8–3.3 mm), 2.3 times as long as wide; color reddish brown.

Frons moderately impressed on slightly more than lower half, impressed area partly filled by a low, triangular elevation arising on median half of episoma and extending dorsad almost to upper limits of impressed area; this elevated area armed by a pair of basally separate, small tubercles in a slightly more dorsal position than in related species; upper area convex, shining, impunctate in central area; vestiture of short, stout setae generally distributed except in upper impunctate area.

Pronotum 1.0 times as long as wide; surface smooth, shining, punctures rather coarse, elongate-oval, separated transversely by diameter of a puncture, longitudinally by one-fourth that distance; glabrous, except at margins.

Elytra 1.6 times as long as wide, 1.9 times as long as pronotum; sides straight and parallel on more than basal two-thirds, broadly rounded behind; striae narrowly impressed, punctures small, shallow, spaced by one and one-half diameters of a puncture; interstriae two to three times as wide as striae, weakly convex, almost smooth, shining, punctures almost uniseriate, rather small, their anterior margins weakly subcrenulate. Declivity

steep, convex, except shallowly sulcate on lower half between interstriae 3; sculpture about as on disc except interstitial tubercles not evident. Vestiture of minute stria hair and erect interstitial setae, these one-ranked on interstriae 1, 3-ranked on others, middle rank pale tan and half as long as distance between rows and slightly longer than pale marginal rows; all setae of uniformly short length throughout.

Male.— Similar to female except frontal elevation feeble, tubercle absent.

Type locality.— Ruinas de Xochicalco, Morelos, Mexico.

Type material.— The female holotype, male allotype, and nine paratypes were taken at the type locality on 21 February 1982, 1200 m, S-323, by T. H. Atkinson and A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Dendrosinus mexicanus, n. sp.

This species is distinguished from *globosus* Eichhoff by the shallowly concave, more coarsely punctured frons and by the much more coarsely, deeply punctured pronotum.

Male.— Length 3.5 mm (paratypes 3.0–3.9 mm), 2.3 times as long as wide; color black, with dark vestiture.

Frons very shallowly, broadly concave from epistoma to vertex; surface smooth, shining, and densely, rather coarsely punctured, except impunctate along epistomal margin and on median line on lower half; vestiture mostly pale, rather abundant, much longer than in *globosus*, setae equal in length to almost one-third distance between eyes. Antennal club slightly wider than in *globosus*.

Pronotum as in *globosus* except punctures distinctly larger and deeper and anterolateral areas always with two clusters of asperities (usually three in each cluster).

Elytra as in *globosus* except vestiture more slender.

Female.— Similar to male in all respects except for segmentation of abdominal terga.

Type locality.— Estación de Biología, Chamela, Jalisco, Mexico.

Type material.— The male holotype, female allotype, and six paratypes were taken on 5–III–1982, 60 m, S-372, by A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Liparthrum mexicanum, n. sp.

This species is distinguished from *thevetiae* Wood by the presence of six crenulations on the base of each elytron, by the much more closely set interstitial scales, and by the more slender pronotum.

Male.—Length 0.9 mm (paratypes 0.9–1.0 mm), 2.4 times as long as wide; color brown.

Frons as in *thevetiae*.

Pronotum 0.9 times as long as wide; more narrowly rounded in front and asperities distinctly larger than in *thevetiae*.

Elytra 1.5 times as long as wide; about as in *thevetiae* except stria punctures more deeply impressed, interstitial scales shorter, wider, much closer, spaced within a row by length of a scale; slender interstitial setae as long as scales, usually alternating with them on disc but not on declivity.

Female.—Similar to male except pronotal asperities mostly reduced, those on anterior margin absent.

Type locality.—Cuernavaca, Morelos, Mexico.

Type material.—The male holotype and two paratypes were taken at the type locality on 27-X-1982, 1670 m, B-077, by A. Burjos and E. Saucedo. The allotype and three paratypes are from Jesu. Sta. Ma. Chihuappa, Tlaczizapan, Morelos, 3-XII-1982, 1000 m, B-122, by the same collectors.

The holotype, allotype, and paratypes are in my collection.

Liparthrum pruni, n. sp.

This species is distinguished from *albosetosum* (Bright) by the smaller, shallower stria punctures, by the shorter, stouter interstitial scales, and by other characters cited below.

Male.—Length 1.1 mm (paratypes 1.0–1.3 mm), 2.2 times as long as wide; color black.

Frons convex, about as in *albosetosum*.

Pronotum about as in *albosetosum* except more strongly convex, asperities distinctly larger.

Elytra about as in *albosetosum* except stria punctures much smaller, not as deep, interstitial setae shorter, each about as wide as

long, spaced within a row by distances equal to about one and one-half times length of a scale.

Female.—Similar to male except pronotal asperities smaller.

Type locality.—Aranza, Michoacán, Mexico.

Type material.—The male holotype, female allotype, and 14 paratypes were taken at the type locality on 10-VII-1982, S-756, *Prunus serotina*, by A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Ten specimens that probably belong to this species are from El Tuito, Jalisco, Mexico, 28-V-1982, 640 m, S-710, T. H. Atkinson and A. Equihua.

Phloeotribus geminus, n. sp.

This species is distinguished from *demissus* Blandford by the more coarsely punctured pronotum, with no granules on the disc, by the more slender pronotal and elytral vestiture, and, in the male, by the presence of a transverse, epistomal carina and a pair of small tubercles on the lateral margin of the frons at the level of the antennal insertion. The Acatlan series was erroneously reported as *demissus* in my monograph.

Male.—Length 2.1 mm (paratypes 1.7–2.1 mm), 2.0 times as long as wide; color very dark brown to almost black, vestiture pale.

Frons more narrowly but as deeply impressed as in *demissus*, impression ending slightly below upper level of eyes; epistoma armed on median third by a low, acute, transverse carina; lateral margins at level of antennal insertion armed by a pair of small tubercles as in many other species of this genus. Segments of antenna club much more strongly produced than in *demissus*, each about nine times as wide as long.

Pronotum as in *demissus* except surface smooth, shining, punctures larger, more sharply, more strongly impressed, with no granules on disc.

Elytra about as in *demissus* except interstitial granules smaller, interstriae 9 slightly more strongly, acutely elevated in declivital area, apical margin from level of striae 3 to suture more strongly serrate, vestiture slightly more slender and very slightly longer.

Female.— Similar to male except frons convex, tubercles absent; pronotal and elytral vestiture more slender.

Type locality.— Acatlan, Jalisco, Mexico.

Type material.— The male holotype, female allotype, and four paratypes were taken at the type locality 3-VII-1965, 1300 m, No. 158, from *Ficus*, by me. Eight paratypes are from Estación de Biología, Chamela, Jalisco, 1-VII-1982, 110 m, S-731, by A. Equihua.

The holotype, allotype, and paratypes are in my collection.

Pycnarthrum amersum, n. sp.

This species is distinguished from *brosimi* Wood by the larger size and stouter form, by the coarser vestiture, and by the evenly convex declivity.

Male.— Length 2.0 mm (paratypes 2.0–2.3 mm), 2.0 times as long as wide; color brown, vestiture pale.

Frons similar to *brosimi* except more strongly flattened over larger area; eyes separated by 1.8 times width of an eye (1.0 in *brosimi*).

Pronotum similar to *brosimi* except vestiture much coarser.

Elytra resembling *brosimi* except declivity convex, not impressed, interstriae without tubercles, erect interstitial bristles much stouter and strongly confused on 2, less confused on 3, minute ground setae stouter; discal striae 1 impressed, punctures on 1 and 2 slightly larger, deeper.

Female.— Similar to male except frons convex.

Type locality.— Tenacatita, Jalisco, Mexico.

Type material.— The male holotype, female allotype, and six paratypes were taken at the type locality on 4-II-1983, 40 m, S-883, *Brosimum alicastrum*, T. H. Atkinson and N. Bautista.

The holotype, allotype, and paratypes are in my collection.

Scolytodes plumericolens, n. sp.

This species is distinguished from *plumeriae* Wood by the smaller size, by the more slender body form, and by numerous other characters, some of which are treated below.

Female.— Length 1.5 mm (paratypes 1.5–1.7 mm), 2.3 times as long as wide; color almost black.

Frons resembling *plumeriae* except somewhat more strongly convex, surface punctured throughout (without an impunctate area), vestiture much less abundant, finer, ending well below upper level of eyes on a narrower area.

Pronotum 1.0 times as long as wide; surface uniformly reticulate, punctures conspicuously smaller than in *plumeriae*.

Elytra 1.4 times as long as wide; about as in *plumeriae* except minute interstitial punctures almost uniseriate; very minute, erect interstitial hair present.

Type locality.— Estación de Biología, Chamela, Jalisco, Mexico.

Type material.— The female holotype and two female paratypes were taken at the type locality on 2-VII-1982, 90 m, S-736, *Plumeria rubra*, A. Equihua.

The holotype and paratypes are in my collection.

Scolytodes retifer, n. sp.

This species is distinguished from *ficivorus* Wood by the larger size, by the reticulate elytra, and by the very different female frons as described below.

Female.— Length 2.0 mm (paratypes 1.8–2.2 mm), 2.2 times as long as wide; color brown to dark brown.

Frons flattened on an ovate area from eye to eye from epistoma to vertex (stronger and more extensive than in *ficivorus*); oval area on central third of lower half impunctate, glabrous, reticulate, remaining areas closely, finely punctured and setose; vestiture consisting of abundant, long, subplumose, yellow hair, longest setae equal in length to more than half distance between eyes.

Pronotum and elytra strongly reticulate, very similar to *reticulatus* Wood except all punctures much smaller and anterior margin of pronotum neither costate nor serrate. Subglabrous, a very few hairlike setae on odd-numbered interstriae.

Male.— Similar to female except frons convex, of uniform sculpture, setae sparse, inconspicuous.

Type locality.— Texeal, Mpio. Tepoztlán, taken on 1-XI-1982, 1710 m, B-082, *Ceiba*, Morelos, Mexico. A. Burjos.

Type material.— The female holotype, The holotype, allotype, and paratypes are male allotype, and eight paratypes were in my collection.