

NEW SPECIES OF SCOLYTIDAE (COLEOPTERA) FROM MEXICO,  
WITH ADDITIONAL NOTES

I. TRIBES XYLEBORINI AND CORTHYLINI

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**Abstract**

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Seventeen new species of Scolytidae from Mexico are described. The new species represent the genera *Sampsonius* (1) of the Xyleborini and *Corthylus* (9), *Corthylocurus* (1), *Tricolus* (2), *Monarthrum* (3), and *Amphicranus* (1) of the Corthylini.

New locality records are given for eight previously described species.

A rather large collection of Scolytidae from Mexico has been accumulated in the Canadian National Collection of Insects (CNC) in Ottawa due to extensive collecting in that country during 1969 and 1971. Since a monograph of this family of insects in North America is currently being prepared by S. L. Wood, Provo, Utah, the species contained in the CNC are being described now so their names will be available for the monograph and for other work. New records for Mexico, significant range extensions, and other notes of taxonomic interest will be included when available.

The new species in this contribution represent the genera *Sampsonius* (1), *Corthylus* (9), *Corthylocurus* (1), *Tricolus* (2), *Monarthrum* (3), and *Amphicranus* (1).

The term "length" used for describing various parts (except antennal clubs) always refers to the longitudinal measurement of the part.

All type material is in the CNC unless otherwise noted.

***Sampsonius reticulatus* n. sp.**

Figs. 1, 2

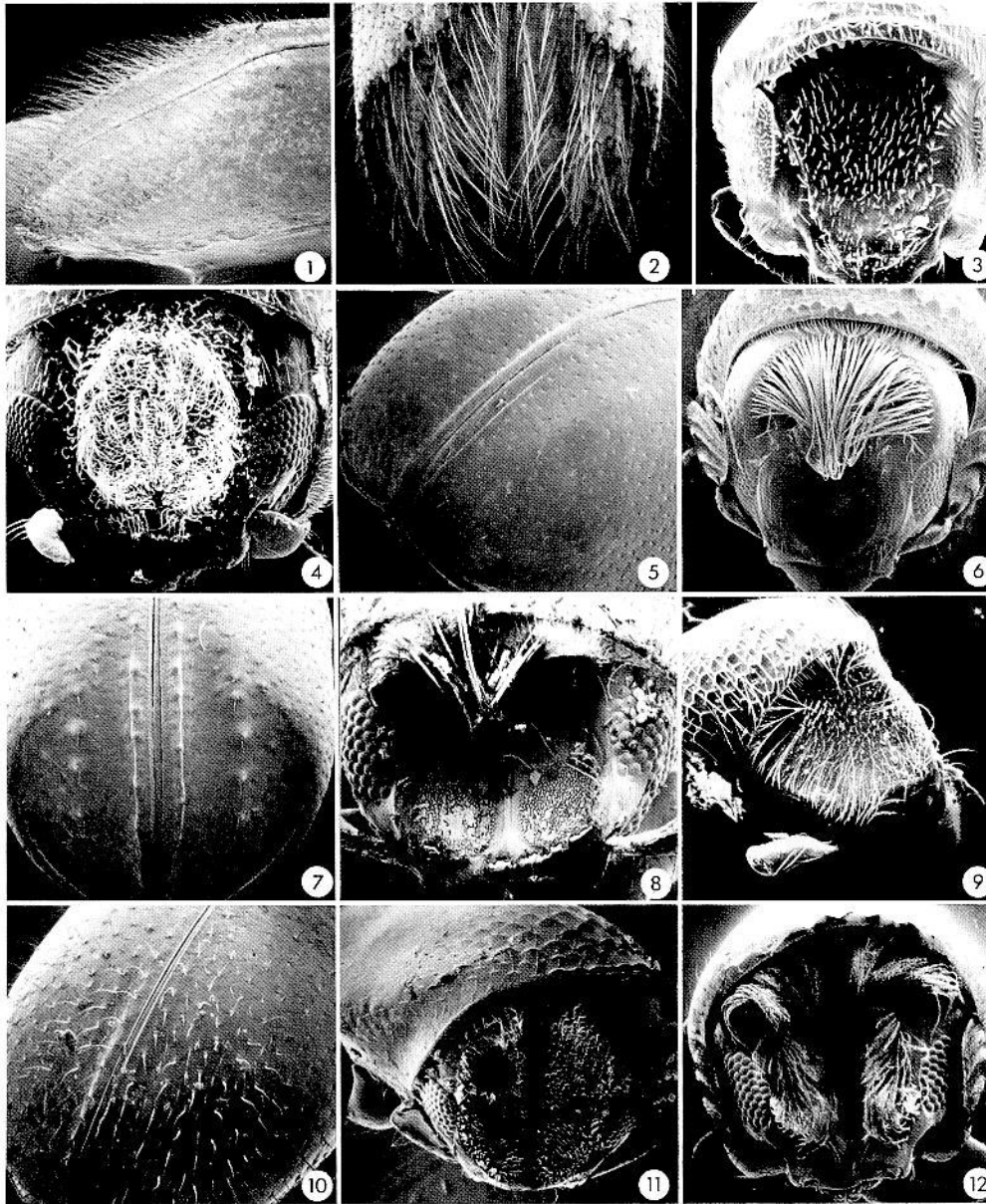
**FEMALE.** Length 5.4 to 6.0 mm, 4.3 times longer than wide; light brown.

Frons convex; surface granulate-punctate, minutely reticulate between punctures and granules; epistomal margin straight, fringed with yellowish setae. Eyes large, about 1.5 times longer than wide; facets large; anterior margin rather deeply emarginate. Antennal club about as long as wide; first suture strongly arcuate, the first segment chitinized, fringed with long, yellow, hairlike setae; second suture also arcuate, second segment chitinized; tip of club densely pubescent.

Pronotum 1.3 times longer than wide, widest in front of middle; sides weakly arcuate, strongly converging to the very narrowly rounded anterior margin; anterior margin bearing 2 large, acute asperities in median portion, the bases of these nearly touching; anterior slope bearing numerous asperities, 6 to 8 of these near anterior margin more erect and acute, remainder smaller, much lower; posterior portion brightly shining, punctures very small, widely separated, surface between punctures smooth.

Elytra 2.1 times longer than wide; sides parallel on basal two-thirds, broadly rounded behind; striae at most feebly impressed, punctured in nearly regular rows, the punctures rather large, close; interspaces as wide as striae, smooth, brightly shining with numerous scattered punctures. Declivity beginning at or near middle of elytra, completely margined on all sides by small, acute teeth; face dull, opaque, minutely reticulate, sloping toward apex; interspace 1 weakly elevated; interspace 2 deeply impressed, weakly granulate; interspace 3 more strongly elevated, densely granulate along summit; remaining interspaces slightly convex, weakly granulate; striae punctures obscure, sometimes faintly visible. Vestiture on disc consisting of short, hairlike, striae setae and much longer interstriae setae, the latter about as long as twice the interstriae width; on declivity, interstriae setae much more abundant, coarser and longer, striae setae absent.

**MALE.** Not present in material at hand.



FIGS. 1-12. 1-2, *Sampsonius reticulatus*, elytral declivity; 3, *Corthylus villus*, ♀ head; 4, *C. splendidus*, ♀ head; 5, *C. splendidus*, ♀ elytral declivity; 6, *C. glabinus*, ♀ head; 7, *C. glabinus*, ♀ elytral declivity; 8, *C. minutus*, ♀ head; 9, *C. aztecus*, ♀ head; 10, *C. aztecus*, ♀ elytral declivity; 11, *C. reburrus*, ♀ head; 12, *C. procerus*, ♀ head.

**TYPE MATERIAL.** Holotype and 9 paratypes were collected at Dos Amates, Vera Cruz, Mexico, on 5 May 1969, by D. E. Bright (CNC No. 12634). The host is unknown.

**REMARKS.** Adults of this species resemble in some respects those of *S. dampfi* Schedl, but differ in not having the strongly elevated, flattened teeth at the elytral apex. In adults of *S. reticulatus* the declivity is broadly concave, the third interspace is elevated and granulate and the declivital surface is dull and reticulate.

***Corthylus villus* n. sp.**

Fig. 3

**FEMALE.** Length 2.3 to 2.5 mm, 2.6 times longer than wide; black to light brown, apex of elytra and pronotum sometimes darker.

Frons deeply concave from well above eyes to epistoma and from eye to eye; surface shining, rather densely punctate-granulate; vestiture consisting of rather short, abundant, hair-like setae, all of equal length; epistoma smooth, shining, width (measured below antennal insertion) equal to a distance about .80 of the distance between eyes. Antennal club nearly circular, as long as wide; 2 sutures indicated by arcuate grooves, cirrus reading from base to just beyond apex.

Pronotum 1.1 times wider than long; sides arcuate, converging toward broadly rounded anterior margin; anterior margin bearing a fine, sinuate, raised line composed of low, broad asperities united at their bases; anterior slope bearing numerous low, shining asperities, surface between asperities minutely reticulate, dull; posterior portion opaque, densely minutely reticulate with small, widely separated, shallow points.

Elytra 1.5 times longer than wide; sides weakly arcuate, narrowly rounded behind, apex weakly produced; surface shining, bearing numerous punctures, these scattered on disc, evidently not placed in definite striae or interstriae rows except near declivity. Declivity convex; interspace 1 distinctly and strongly elevated from top of declivity to near apex; interspace 2 narrower than on disc, very slightly impressed; interspace 3 weakly convex, weakly elevated; remaining interspaces unmodified; striae weakly impressed, punctures distinct, in regular rows. Vestiture confined to declivity, consisting of interstriae rows of moderately long, fine, hairlike setae, absent on interspace 2 except for 1 or 2 setae at apex.

**MALE.** Similar in size and proportions to female. Frons convex, weakly impressed just above epistoma, this impression divided by a fine longitudinal carina extending from epistomal margin to upper level of impression; surface minutely reticulate, bearing rather large, widely separated punctures. Antennal club elongate oval, 1.4 times longer than wide. Anterior margin of pronotum bearing 2 large asperities; asperities on anterior slope larger, more erect. Elytral interspaces 1 and 3 bearing a few very small granules.

**TYPE MATERIAL.** Holotype female, allotype, and 19 paratypes were collected at Yerba Buena, 20 miles north of Bochil, Chiapas, Mexico, 7000 ft, on 21 May 1969, by D. E. Bright (CNC No. 12640). Four paratypes were collected from the summit of Mt. Tzontehuitz, Chiapas, Mexico, 9500 ft, on 26 May 1969, by D. E. Bright and 2 paratypes are from the same locality collected on 12 June 1969, from *Quercus* sp. by D. E. Bright.

**REMARKS.** This species is closely related to *Corthylus suturalis* Eggers and *C. nudipennis* Schedl and evidently less closely to *C. uniseptis* Schedl. Adults of *C. villosus* differ from those of *C. suturalis* and *C. nudipennis* by the longer setae on the female frons, by the finer and longer declivital setae of both sexes, and by the absence of a fine raised line (interspace 9) forming the elytral apex. The distinct declivital punctures of the adults of *C. villosus* distinguish them from those of *C. uniseptis*.

***Corthylus splendidus* n. sp.**

Figs. 4, 5

**FEMALE.** Length 2.8 to 3.1 mm, 2.6 times longer than wide.

Frons broadly concave from well above eyes to epistoma and from eye to eye; surface minutely reticulate, finely, very densely punctured, almost obscured by moderately short,

densely placed, yellowish, hairlike setae, these slightly longer and incurved on periphery of concavity (in one specimen the pubescence is limited to the area from the upper level of eye to epistoma, surface above this is glabrous with a transverse oval pit at uppermost level; this area not visible in other specimens); epistoma impunctate, smooth and shining. Antennal club elongate oval, 1.8 times longer than wide; strongly asymmetrically produced anteriorly; first 2 sutures transverse, slightly arcuate, at least partly chitinized; cirrus extending from base to apex.

Pronotum as long as wide; sides evenly arcuate toward broadly rounded anterior margin; anterior margin bearing about 6 or 7 low, blunt asperities; anterior slope bearing numerous low, blunt asperities, the surface between asperities shining, minutely reticulate; posterior area dull, closely, minutely reticulate with a few widely separated, very shallow and obscure points.

Elytra about 1.5 to 1.6 times longer than wide; sides parallel on basal two-thirds, broadly rounded behind; surface shining, confusedly punctured with no evidence of distinct striae or interstitial punctures, the punctures all equal in size, separated by a distance about 2.0 times their own diameters. Declivity convex; interspace 1 weakly elevated, weakly punctured; interspace 2 slightly impressed; interspace 3 elevated; about equal in height to interspace 1, weakly punctured; striae weakly impressed, punctures distinct, larger and deeper than those on interstriae. Vestiture confined to declivity, consisting of interstitial rows of fine, hairlike setae, these absent from interspace 2, except at apex.

MALE. Similar in size and proportions to female. Frons broadly, deeply impressed just above epistoma, convex above, surface dull, minutely reticulate, bearing scattered, deep punctures. Asperities on anterior pronotal margin and slope larger, more erect. Elytra as on female except declivital striae punctures slightly deeper and first and third interspaces bearing a row of very fine granules.

TYPE MATERIAL. Holotype female, allotype, and 34 paratypes were collected along highway 175, 3.5 miles south of Suchixtepec, Oaxaca, Mexico, 8000 ft, on 2 June 1971, from *Alnus* sp. by D. E. Bright (CNC No. 12641). Six additional paratypes were collected at Yerba Buena, 20 miles north of Bochil, Chiapas, Mexico, 7000 ft, on 21 May 1969, by D. E. Bright and 1 paratype from the summit of Mt. Tzontehuitz, Chiapas, Mexico, 9500 ft, on 12 June 1969, from *Quercus* sp. by D. E. Bright.

REMARKS. This species is evidently related to *Corthylus columbianus* Hopkins and *C. punctatissimus* Zimmerman. Adults of *C. splendidus* differ from those of the above species by their slightly smaller size, by the much more elongate antennal club, by the more abundant punctures on the male frons, by the smaller, less deeply impressed striae punctures on the declivity, and by very fine granules on the first and third declivital interspaces of the male. This species may also be related to *C. nudus* Schedl but the adults are much smaller.

### *Corthylus glabinus* n. sp.

Figs. 6, 7

FEMALE. Length 2.4 to 2.7 mm, 2.3 to 2.4 times longer than wide; head and pronotum usually dark reddish brown, elytra light brown to yellowish on base, darker brown on and near declivity.

Frons deeply concave, borders of concavity rounded above from eye to eye, sharply elevated at eye level downward for a short distance, then sharply elevated at midpoint of epistoma; surface of concavity reticulate-granulate at upper level, granules absent below, bearing a nearly circular yellow spot just above the elevated median, epistomal ridge; vestiture consisting of long, hairlike, yellowish setae arising on upper portion and upper border only, curving downward almost to epistoma, a few very short setae are located in the circular yellow area above epistoma. Antennal club oval, slightly asymmetrically produced anteriorly; first 2 sutures arcuate, chitinized at borders at least; cirrus very long, extending around club to near or slightly beyond base.

Pronotum about as long as wide, widest at middle; sides rather strongly arcuate, converging toward broadly rounded anterior margin; anterior margin bearing 3 or 4 acute asperities, these close together, bases contiguous; anterior slope bearing numerous semi-erect, shining asperities, surface between asperities dull, minutely reticulate; posterior portion very finely, minutely reticulate, without obvious punctures but bearing very low, transverse rugae, these

absent on median line and on posterolateral portions; vestiture consisting of short, hairlike setae, these somewhat longer on anterior portions.

Elytra 1.3 times longer than wide; sides parallel on basal three-fourths, truncate behind, with elevated suture extending beyond elytral apical border; striae not impressed, very faintly indicated by rows of fine, shallow punctures; interspaces evidently not punctured, minutely reticulate, dull. Declivity abrupt, convex in median portion, impressed above the elevated apical and lateral border; interspace 1 sharply elevated and bearing a row of moderate-sized granules; interspace 2 rather broad, slightly impressed to about middle of declivital face; interspace 3 sharply elevated from upper margin of declivity to about middle of face, usually bearing a row of granules; lateral margin elevated and extending from interspace 3 around declivity to the opposite interspace 3, this more sharply elevated on lower portion. Vestiture inconspicuous, consisting of sparse, short, interstitial setae located near declivity.

MALE. Similar in size and proportions to female. Frons convex, minutely reticulate, dull, bearing a few fine, shallow punctures. Antennal club circular, 1.1 times longer than wide, bearing 2 transverse sutures. Anterior margin of pronotum bearing 2 large, acute asperities. Elytra essentially as in female.

TYPE MATERIAL. Holotype female, allotype, and 4 paratypes were collected 9 miles southwest of Teopisca, Chiapas, Mexico, on 24 May 1969, by D. E. Bright (CNC No. 12642). Two paratypes were collected from the same locality on 30 May 1969; 11 paratypes are from San Cristobal de las Casas, Chiapas, Mexico, on 3-7 May 1969, by J. E. H. Martin, 1 paratype is from 8 miles northeast of San Cristobal, Chiapas, Mexico, on 10 July 1969, from *Arbutus* sp., 1 paratype is from the summit of Mt. Tzontehuitz, Chiapas, Mexico, 9500 ft, on 12 June 1969, from *Quercus* sp., 32 paratypes are from highway 131, 184 km south of Oaxaca (approx. 26 miles south of Juchatengo), Oaxaca, Mexico, on 12 May 1971, and 13 paratypes are from highway 175, 3.5 miles south of Suchixtepec, Oaxaca, Mexico, 8000 ft, on 2 June 1971, from *Arbutus* sp., all collected by D. E. Bright.

REMARKS. The description of this species is presented with some misgivings. I originally felt that this species had to be previously described but I could not match specimens with any of the descriptions given by Blandford, Eggers, Schedl, or Wood for Central American or Mexican species.

Adults evidently differ from those of all known species by the very steep elytral declivity on which the first and third interspaces are elevated and tuberculate (the third elevated only on upper portion of declivity) and by the elevated lateral margins which extend from the third interspace, around the apex and join the opposite third interspace. In some respects they show a type of declivital development found in *C. compressicornis* (Fabricius), but are distinctly different and may be at most only remotely related. Other diagnostic characters are the deeply concave female frons which bears a circular yellowish spot just above the epistoma, and is bordered at the vertex by long, yellowish setae which, when uncurled, extend almost to the epistoma and bordered laterally by an elevated ridge at eye level.

### *Corthylus minutus* n. sp.

Fig. 8

HOLOTYPE (♀). Length 1.7 mm, 2.6 times longer than wide; reddish brown.

Frons deeply concave, bordered at sides above eyes and on vertex by dense rows of long, hairlike setae, these curled downward almost to epistoma; surface above upper level of eyes minutely reticulate, rather brightly shining; entire lower half from midpoint of eyes to epistoma occupied by 2 large, oval, yellow patches, narrowly divided by a very fine, raised, longitudinal line, these patches bearing a few erect hairlike setae; epistoma faintly elevated, smooth and shining. Antennal club large, asymmetrical, about as long as wide, without cirrus; first 2 sutures arcuate, faintly grooved.

Pronotum as long as wide, widest behind middle; sides arcuate, faintly constricted before the broadly rounded anterior margin; anterior margin weakly asperate, bearing 6 low asperities; anterior slope bearing numerous small, weakly elevated, shining asperities, surface between



asperities minutely reticulate; posterior portion dull, minutely reticulate, with very low, shining, transverse rugae; vestiture consisting of scattered, very fine, hairlike setae, these slightly longer on anterior margin.

Elytra 1.7 times longer than wide; sides parallel on basal four-fifths, abruptly, rather narrowly rounded behind; striae, except first, not impressed, first only slightly so, punctured in nearly regular rows, except near base, the punctures large, slightly impressed; interspaces on disc about 1.5 times wider than striae, very sparsely punctured, surface minutely reticulate. Declivity abrupt, steep, concave; interspace 1 slightly elevated, unarmed; interspace 2 impressed, distinctly narrower than on disc; interspace 3 elevated in upper half, higher than interspace 1, bearing 3 strong, acute teeth; interspace 4 bearing 3 much smaller, acute teeth; stria punctures usually visible but obsolete in striae 1 and weakly visible in remaining striae. Vestiture mostly confined to declivity, consisting of moderately long, hairlike setae arising from bases of teeth and granules and sometimes from punctures, interstitial setae on disc very sparse.

MALE. Similar in size and proportions to female. Frons convex, very weakly impressed above epistoma; surface dull, minutely reticulate, bearing a few scattered, very shallow, almost invisible punctures. Antennal club small, 1.4 times longer than wide, divided into three nearly equal segments by two arcuate sutures. Anterior margin of pronotum bearing 2 distinct asperities at midpoint. Declivital interspace 3 bearing 4 sharp pointed teeth, these larger than in female.

TYPE MATERIAL. Holotype female, allotype, and 1 paratype were collected at Lagos de Colores (Lagunas de Montebello National Park), Chiapas, Mexico, on 17 May 1969, from *Quercus* sp. by D. E. Bright (CNC No. 12643).

REMARKS. Adults may be recognized by their small size, by the two large, yellow spots on the lower half of the female frons and by the distinct, sharply pointed teeth on the third declivital interspace. This species has the smallest adults of any species so far described from Mexico or Central America.

*Corthylus aztecus* n. sp.

Figs. 9, 10

FEMALE. Length 2.5 to 2.7 mm, 2.4 times longer than wide; usually reddish brown, apex of elytra and anterior portion of pronotum darker.

Frons deeply concave, lower portion of cavity steeply ascending to epistomal margin, bordered by rather sparse, long, incurved, yellowish, hairlike setae; surface of concavity very finely punctured, minutely reticulate, moderately shining, bearing short, fine, hairlike setae; epistoma slightly elevated, thicker at middle, smooth and shining; lateral area between concavity and epistomal margin densely, closely punctured. Antennal club narrow, elongate-oval, 2.0 times longer than wide; only 1 suture faintly indicated by an arcuate groove about middle of external face; apex and part of anterior border bearing a few, longer, hairlike setae, distinct cirrus of setae absent; internal face concave, sensory areas not evident.

Pronotum 1.1 times wider than long, widest just behind middle; sides broadly arcuate, faintly constricted before broadly rounded anterior margin; anterior margin bearing about 4 low, indistinct asperities, the median pair slightly larger; anterior slope bearing numerous, low asperities; surface between asperities minutely reticulate, dull; posterior portion dull, minutely reticulate, bearing very fine, shallow, scattered punctures.

Elytra 1.4 to 1.5 times longer than wide; sides parallel on anterior two-thirds, broadly rounded behind; striae not impressed, very weakly punctured in nearly regular rows, the punctures very shallow, small; interspaces wider than striae, obscurely punctured, the punctures similar in size and depth to those in striae. Declivity convex; striae 1 weakly impressed; interspaces 1, 2 and 3 equal in width, each bearing a row of fine granules, these sometimes slightly smaller on interspace 2; interspace 1 weakly elevated. Vestiture mostly confined to declivity, consisting of a row of long, erect, hairlike setae on each interspace and short, recumbent, hairlike, striae setae, the interstitial setae at least 2 times longer than the interstitial width, a few interstitial setae are located on disc.

MALE. Similar in size and proportions to female. Frons flattened or very weakly concave in central portion; surface dull, minutely reticulate, punctures larger, deeper than on female. Antennal club 1.4 times longer than wide; sutures not evident. Anterior margin of pronotum bearing 2 prominent teeth, teeth on anterior slope more erect and larger than on female. Elytra essentially as in female.

**TYPE MATERIAL.** Holotype female, allotype, and 14 paratypes were collected along highway 175, 3.5 miles south of Suchixtepec, Oaxaca, Mexico, 8000 ft, on 2 June 1971, by D. E. Bright (CNC No. 12644). Four additional paratypes were collected 8 miles northeast of San Cristobal de las Casas, Chiapas, Mexico, on 15 May 1969, by D. E. Bright and 1 paratype was collected at the same locality on 10 July 1969, from *Quercus* sp. by D. E. Bright.

**REMARKS.** The relationships of this species are unclear. Females show some resemblance in declivital characters to those of *C. detrimentosus* Schedl but differ radically in frontal and antennal characters. They also show a resemblance in frontal characters to *C. curiosus* Bright from Jamaica but the antennal clubs of adults of both species are very different. In Blandford's 1904 key, adults of this species run to *C. panamensis* Blandford but they are somewhat smaller, the declivity is more distinctly pubescent, and the antennal club is very differently shaped.

Adults of *C. aztecus* can be distinguished from those of other species in the genus by the narrow, elongate antennal club in which the exterior face is solid (sometimes one very faint arcuate groove can be distinguished) and by the distinct row of long, erect, hairlike setae on all declivital interspaces.

***Corthylus reburrus* n. sp.**

Fig. 11

**FEMALE.** Length 1.9 to 2.1 mm, 2.4 times longer than wide; head and pronotum reddish, elytra black to very dark reddish-brown.

Frons broadly, deeply concave from epistoma to well above eyes and from eye to eye; surface minutely, densely punctate and bearing rather dense, short, fine, hairlike setae divided into two portions by an impunctate, glabrous, longitudinal, broad space which extends from epistoma to vertex, the setae all equal or nearly equal in length; epistoma smooth, brightly shining, slightly elevated in median portions. Antennal club strongly produced anteriorly, asymmetrical, 1.4 times wider than long; 3 sutures indicated by distinct arcuate grooves, first two chitinated; cirrus long, extending more than three-fourths of the distance around the circumference.

Pronotum very slightly wider than long, widest behind middle; sides broadly, weakly and evenly arcuate to the broadly rounded anterior margin; anterior margin very weakly elevated in median portion bearing about 6 weak asperities; anterior slope bearing numerous, low, shining asperities, surface between asperities dull, minutely reticulate; posterior portion dull, minutely reticulate, weakly and sparsely punctured.

Elytra 1.2 to 1.3 times longer than wide; sides weakly arcuate on basal three-fourths, abruptly converging to narrowly rounded posterior margin; surface densely, finely punctured, the punctures shallow, equal in size, not arranged in definite striae or interstriae rows, surface between punctures smooth and shining, with minute, scattered impressed points. Declivity convex, acutely bordered at apex; interspace 1 weakly elevated, with 3 or 4 very minute granules; interspace 2 weakly impressed; interspace 3 weakly elevated, about as high as suture, with 2 small granules on upper half; striae more regularly punctured in rows. Glabrous except for a short, hairlike seta arising from base of each declivital tubercle.

**MALE.** Similar in size and proportions to female. Frons convex, transversely impressed above epistoma; surface very dull, minutely reticulate, very faintly punctured, the punctures very small, shallow, and widely separated; epistoma elevated, smooth and shining. Antennal club similar to female, about as long as wide, but smaller and not bearing long cirrus. Asperities on anterior margin of pronotum larger, more prominent, the median pair the largest; asperities on anterior slope also larger and more prominent than on female. Declivity essentially as in female except interspace 1 slightly more strongly elevated and granules larger; interspace 3 usually bearing only 1 tubercle, several very small additional granules may be present.

**TYPE MATERIAL.** Holotype female, allotype, and 5 paratypes were collected at the Palenque Ruins, Chiapas, Mexico, on 22 June 1969, by D. E. Bright (CNC No. 12645).

REMARKS. Females of this species can be most easily distinguished by the short, fine frontal pubescence which is divided into two portions by a longitudinal, glabrous median space extending from the epistoma to the vertex, and by the convex declivity which bears only two small granules on the third interspace. Males may be distinguished by the very dull, very weakly punctured frons and by the single larger granule on the third declivital interspace.

***Corthylus procerus* n. sp.**

Figs. 12-14

FEMALES. Length 1.9 to 2.1 mm, 2.2 times longer than wide; black to light reddish-brown.

Frons concave from epistoma to vertex, longitudinally depressed; surface in central half smooth, minutely punctate, rather brightly shining, glabrous, on lateral areas minutely reticulate-granulate, dull; vestiture consisting of a dense row of long, incurved, plumose setae arising on upper periphery of concavity above eye level, a brush of rather dense, shorter plumose setae in concavity on each reticulate area at eye level, and a dense row of upward curved, plumose setae on epistoma, this row divided into two parts. Antennal club about 1.4 times longer than wide; first 2 sutures slightly arcuate, indicated by grooves; cirrus on posterior face arising on upper posterior curve, extending around apex about halfway to base.

Pronotum as long as wide, widest in front of middle; sides almost parallel on basal two-thirds, rather strongly converging to the truncate anterior margin; anterior margin bearing about 8 to 12 very low, indistinct asperities, the median ones larger but still indistinct; anterior fourth bearing low, smooth asperities, surface between asperities minutely reticulate, shining; posterior half duller, more densely reticulate, bearing numerous, short, smooth, weakly elevated lines; posterolateral areas faintly punctured.

Elytra 1.1 to 1.2 times longer than wide; sides slightly diverging to lateral angle of declivity, then abruptly rounded to apex; surface brightly shining, confusedly punctured but with a slight tendency for the punctures to form rows, the punctures equal to each other in size, very weakly impressed, surface between punctures bearing minute points and lines. Declivity subvertical, completely margined on a complete circle, the margin acute except near top at suture; sutural interspace acutely elevated, sharply ridged from near top of declivity to near apex, the ridge leaning away from suture except near apex, unarmed; surface minutely reticulate, dull, with large, coarse, deeply impressed punctures; nearly glabrous.

MALE. Similar in size and proportions to female. Frons convex, weakly impressed above epistoma and weakly flattened in middle; surface reticulate, with a few deep, scattered punctures. Anterior margin of pronotum more narrowly rounded, bearing 2 larger, closely placed teeth; asperities on anterior slope larger, more erect.

TYPE MATERIAL. Female holotype, allotype, and 9 paratypes were collected 6 miles south of Valle Nacional, Oaxaca, Mexico, 2000 ft, on 18 May 1971, by D. E. Bright (CNC No. 12646).

REMARKS. This species is evidently closely related to *C. petilus* Wood. It differs, however, in a number of respects and may not be as closely related to *C. petilus* as the description of the latter would indicate.

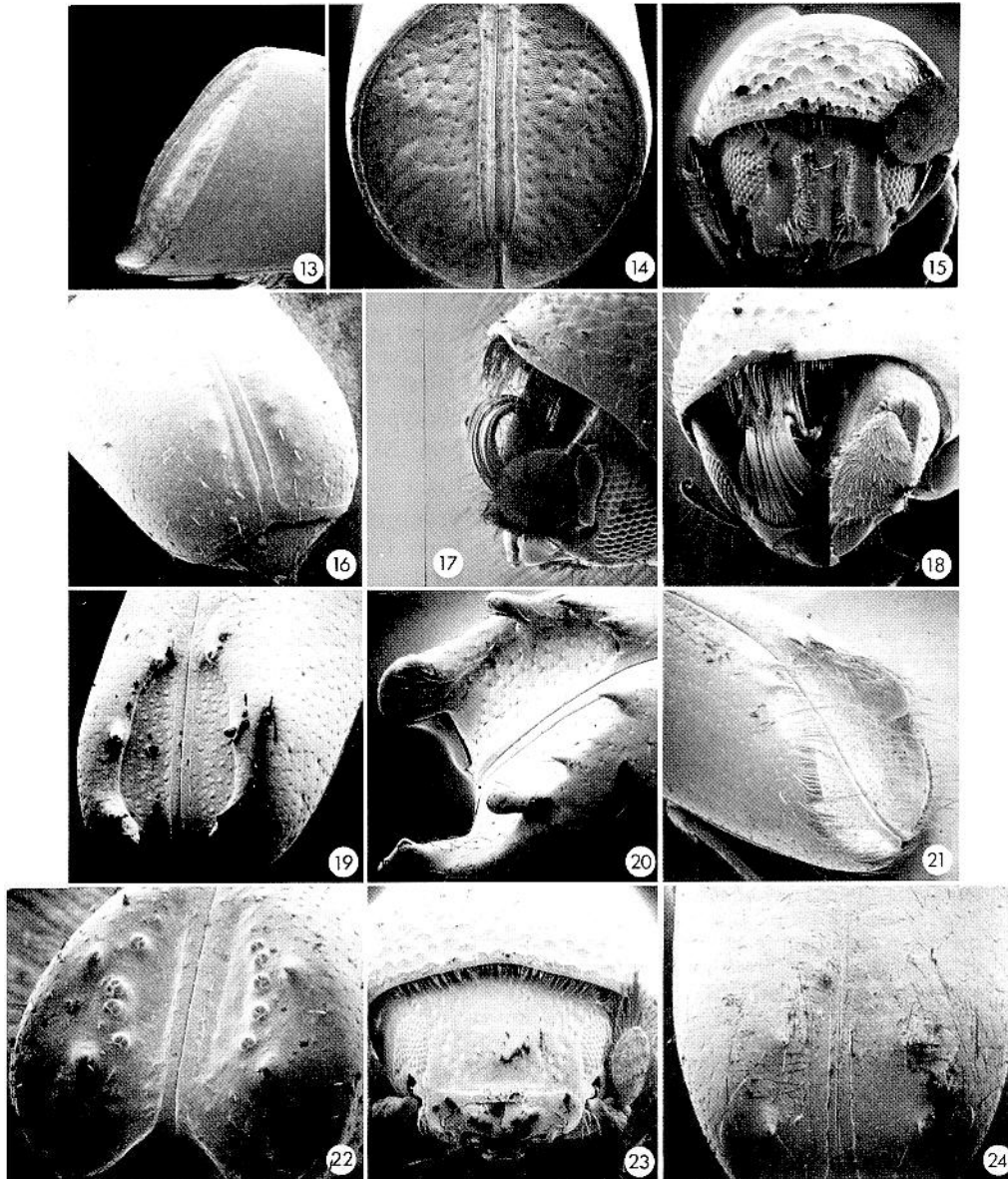
Females of *C. procerus* differ from those of *C. petilus* by not having a spongy area on the lower part of the frons and by having a tuft of setae on the posterior face of the antennal club. The elevated sutural interspace of adult *C. petilus* bears a row of about nine rounded granules while in *C. procerus* the sutural interspace is unarmed; the declivital margin of *C. procerus* is acute except at the top of the declivity near the suture while in *C. petilus* the margin is rounded on the upper half, acute below.

***Corthylus concavus* n. sp.**

HOLOTYPE (♀). Length 3.4 mm, 2.3 times longer than wide; black.

Frons rather deeply concave, lower portion of concavity steeply ascending to the narrow epistomal margin; surface densely, minutely punctured, densely pubescent with setae on entire periphery longer and incurved, those in center erect, of equal length, shorter than those on





FIGS. 13-24. 13-14, *Corthylus procerus*, ♀ elytral declivity; 15, *C. anomalus*, ♀ head; 16, *C. anomalus*, ♀ elytral declivity; 17-18, *Corthylocurus cincinnatus*, ♀ head; 19, *Tricolus difodinus*, ♀ elytral declivity; 20, *T. cordatus*, ♀ elytral declivity; 21, *Monarthrum bifidus*, ♀ elytral declivity; 22, *M. granulatatum*, ♀ elytral declivity; 23, *M. oaxacaensis*, ♀ head; 24, *M. oaxacaensis*, ♀ elytral declivity.

periphery. Antennal club produced anteriorly, asymmetrical, about 1.4 times longer than wide; 2 sutures partially chitinized, arcuate, devoid of long setae on inner face.

Pronotum 1.1 times wider than long, widest behind middle; sides rather strongly arcuate, feebly constricted just before broadly rounded anterior margin; asperities on anterior margin low, blunt, evident only in median portion; asperities on anterior slope broad, low, shining on elevated portion, surface between asperities microreticulate, dull; posterior portion more densely, finely microreticulate, punctures shallow, small and widely separated.

Elytra 1.3 times longer than wide; sides weakly arcuate on basal three-fourths, broadly rounded behind; surface confusedly punctured, the punctures rather small, shallow, area between punctures brightly shining, sparsely micropunctate. Declivity convex, weakly impressed along suture; striae more evident, punctured in nearly regular rows; sutural and third interspace bearing a row of small, acute granules; second interspace unarmed; apex bearing a fine line. Vestiture consisting of rather sparse, long, hairlike setae on first, third, fifth, seventh and ninth interspaces, the setae equal in length to about half the distance between rows of setae, longer on declivity.

MALE. Similar in size and proportions to female. Frons convex, transversely impressed above epistoma and circularly impressed above upper level of eyes. Pronotum more narrowly rounded anteriorly, with 2 prominent asperities on anterior margin. Declivity as in female except granules in first and third interspaces slightly larger.

TYPE MATERIAL. Holotype female and allotype were collected 15 miles south of Valle Nacional, Oaxaca, Mexico, 4000 ft, on 20 May 1971, by D. E. Bright (CNC No. 12647).

REMARKS. This species belongs to the group of species in which the female antennal club is devoid of long setae on the inner face and the elytral declivity is simple. It appears to be related to *C. granulatus* Schedl, described from Costa Rica. Adults of *C. concavus* can be recognized by the deeply concave female frons which bears a dense fringe of incurved setae around the entire periphery, and by the convex elytral declivity of both sexes in which the first and third interspaces each bear a row of acute, setiferous granules.

### *Corthylus anomalus* n. sp.

Figs. 15, 16

FEMALE. Length 2.0 to 2.2 mm, 2.6 times longer than wide; light brown, usually somewhat darker on elytral apex.

Frons bearing 2 longitudinal, elevated, carinae or ridges, extending from epistomal margin to upper level of eyes and bordered laterally by short, hairlike, yellow setae; the area between these 2 ridges and on each side between ridge and eye is longitudinally concave, each concavity about equal in width; surface within concavity usually brightly shining, densely microreticulate on convex area above upper level of eyes. Antennal club broadly triangular, about as long as wide, first suture weakly arcuate, second nearly transverse, inner face with cirrus of longer setae, these extending almost to upper anterior angle.

Pronotum 1.1 times longer than wide, widest at about middle; sides weakly arcuate; anterior margin broadly rounded, bearing about 4 rather low asperities, the median pair somewhat larger; anterior slope bearing numerous, low asperities, the elevated portion of each brightly shining, surface between asperities shining, microreticulate; posterior area opaque, dull, densely microreticulate, punctures very small, shallow.

Elytra 1.6 times longer than wide; sides parallel on basal two-thirds, broadly rounded behind; striae not impressed, punctured in nearly regular rows, the punctures rather confusedly placed on basal third; interspaces wider than striae, brightly shining, with a few minute points. Declivity convex; striae punctures obscure; suture and first interspace impressed slightly on upper half, flush with elytral surface below; third interspace slightly elevated on upper portion, bearing about 3 small granules. Vestiture sparse, mostly confined to declivity consisting of erect, yellowish, hairlike setae in each interspace except first and second.

MALE. Similar in most respects to female. Frons evenly convex, with a weak, median, longitudinal groove; surface dull, microreticulate and punctate except on lateral areas near eyes. Asperities on anterior frontal margin slightly larger. Elytra and declivity essentially as in female.

**TYPE MATERIAL.** Holotype female and 6 paratypes were collected along highway 175, 3.5 miles south of Suchixtepec, Oaxaca, Mexico, 8000 ft, on 2 June 1971, from *Arbutus* sp. by D. E. Bright (CNC No. 12648). Allotype and 6 paratypes were collected along highway 131, 184 km south of Oaxaca (approx. 26 miles south of Juchatengo), Oaxaca, Mexico, 6300 ft, on 12 May 1971, by D. E. Bright. One additional paratype is from 5 miles southwest of El Bosque, Chiapas, Mexico, 3 August 1969, from *Pinus strobus* var. *chiapensis* by D. E. Bright.

**REMARKS.** Adults of this species are distinguished by the peculiar frontal structure of the female in which the frons bears two parallel, longitudinal carinae which are located between three longitudinally elongate, concave areas, and by the simple, convex elytral declivity of both sexes which bears a few minute granules on the third interspace. This species is evidently not closely related to any described species of *Corthylus*.

***Corthylocurus cincinnatus* n. sp.**

Figs. 17, 18

**FEMALE.** Length 2.1 to 2.3 mm, 2.6 times longer than wide; light reddish-brown.

Frons concave from eye to eye and from well above eyes to epistoma, bearing 2 median, longitudinally elevated carinae extending from just above midpoint of eye level to vertex, these carinae closely placed to each other, yellowish along summit and bearing numerous, short hairlike setae; remainder of surface rather dull, minutely reticulate-granulate, bearing numerous fine, yellowish, hairlike setae; periphery bearing a brush of long, fimbriate, incurved, yellowish setae on vertex, these setae reaching about midpoint of concavity, remainder devoid of setae, except on epistoma; epistoma bearing a brush of long, dense, simple, yellowish setae, curled inward into more than a complete circle, the top of which reaches to near upper level of eyes. Antennal club 1.4 times longer than wide, apex narrowly rounded; first 2 sutures weakly arcuate.

Pronotum 1.1 times longer than wide; sides very weakly arcuate, converging to the broadly rounded anterior margin; anterior margin sinuate beneath a weakly elevated ridge formed by the coalescing of about 6 asperities; anterior slope bearing numerous asperities, none extending beyond summit; posterior portion dull, very finely minutely reticulate, punctures very fine, very shallow, widely scattered.

Elytra 1.4 times longer than wide; sides parallel on basal two-thirds, broadly rounded behind; striae not impressed, punctured in nearly regular rows, the punctures fine, shallow; interspaces much wider than striae, apparently punctured but punctures very obscure and shallow making entire elytral disc rather confusedly punctured. Declivity convex; suture and interspace 1 impressed, smooth; interspace 3 (?) bearing 3 small prominent granules; apex bearing a very fine raised line.

**MALE.** Similar in size and proportions to female. Frons convex, bearing a faint longitudinal groove; surface minutely reticulate, dull, with rather large, deep punctures; epistoma elevated, smooth and shining. Anterior margin of pronotum with 2 large prominent asperities. Elytra as in female except somewhat more strongly punctured, declivital granules smaller, line at elytral apex more prominent and extended.

**TYPE MATERIAL.** Holotype female, allotype, and 4 paratypes were collected 13 miles north of Ocozocoautla, Chiapas, Mexico, on 2 July 1969, by D. E. Bright (CNC No. 12649).

**REMARKS.** This species is closely related to *C. vernaculus* (Schedl) from Brazil but the females of *C. cincinnatus* may be distinguished by the shorter frontal carina, and by the prominent epistomal brush of curled setae. Males of these two species are very similar but can be distinguished by the smaller declivital granules and by the slightly more prominent groove on the frons of *C. cincinnatus*. This species also appears to be related to *C. mexicanus* (Schedl) but the male of Schedl's species has very small, hardly noticeable punctures on the frons while in the male of *C. cincinnatus* the punctures on the frons are large and deep, as in *C. vernaculus*. The female of *C. mexicanus* has not been described.

***Tricolus difodinus* n. sp.**

Fig. 19

MALE. Length (from pronotal apex to sutural apex of elytra) 2.0 mm, 3.0 times longer than wide; light reddish-brown.

Frons convex, central half just above epistoma occupied by a slightly elevated, nearly circular, reticulate area, the upper margin of this area on same level as upper margin of eyes, the surrounding surface faintly reticulate and faintly punctured; epistoma fringed with short, yellowish setae. Antennal club obovate, about as long as wide; sutures arcuate, confined to basal half, both sutures septate.

Pronotum 1.3 times longer than wide, widest at basal angles; sides weakly converging to just beyond summit, then strongly converging to the narrowly rounded anterior margin; anterior margin bearing 6 erect asperities, the median one the longest, decreasing in size laterally; anterior slope steeply declivous, bearing numerous asperities, these erect just behind anterior margin, decreasing in size and height toward summit, continuing as shining wrinkles over summit and along sides to base, the basal wrinkles more prominent than those in central portion; surface of posterior area between wrinkles minutely reticulate, rather dull.

Elytra 1.5 times longer than wide; sides weakly arcuate, more strongly so on posterior one-third, posterior margin straight between extended declivital processes; striae not impressed, punctures very large, shallow, confusedly placed on each side of suture, in more regular rows laterally; interspaces narrower than striae. Declivity concave; lateral margins elevated, arcuate, bearing 3 teeth; uppermost tooth acute, pointed caudad, placed in line with first striae, second tooth acute, placed equal distance between first and third, about at midpoint of declivity, third tooth placed at lower end of lateral margin and above the margined apical border, this tooth pointing inward toward suture and broadly rounded at apex with a small toothlike extension or notch on upper border; declivital excavation rather densely punctured, the puncture large, confusedly placed, suture weakly elevated.

FEMALE. Similar in size and proportions to male. Frons convex in median line, with 2 deep, longitudinally oval pits on each side of a broad median piece, the upper margin of these pits on a line with the upper margin of the eyes, the median piece separating the pits convexly, minutely reticulate on lower two-thirds, smooth above. Antennal club broader than in male, 1.2 times wider than long, bearing tuft of long setae on posterior face. Pronotum and elytra essentially as in male except sculpture finer.

TYPE MATERIAL. Holotype male, allotype, and 1 paratype were collected 13 miles north of Ocozocoautla, Chiapas, Mexico, on 2 July 1969, by D. E. Bright (CNC No. 12650). Two additional paratypes were collected at Lagos de Colores (Lagunas de Montebello National Park), Chiapas, Mexico, on 17 May 1969, by D. E. Bright.

REMARKS. This species is evidently closely related to *T. saundersi* Wood described from Costa Rica. Adults of *T. difodinus* differ by the densely punctured elytral declivity and by the more acute (not subquadrate) second or middle declivital tooth. The females evidently differ by the structure of the frons, i.e., in females of *T. difodinus* the presence of two deep pits, one on each side of a broad median space. Although the female of *T. saundersi* was described, details of the frons were omitted so no meaningful comparison can be made.

***Tricolus cordatus* n. sp.**

Fig. 20

FEMALE. Length (from anterior margin of pronotum to apex of elytral suture) 2.8 to 3.1 mm, 3.3 times longer than wide; apex of elytra, anterior half of pronotum and head dark reddish-brown to black, disc of elytra, posterior half of pronotum, legs and antennae light reddish-brown.

Frons strongly convex, transversely, weakly impressed above epistoma, bearing an elevated, broadly heart-shaped, reticulate, median callus; surface lateral to callus aciculate-punctate, area above callus densely microreticulate; vestiture consisting of downward pointing, hairlike setae placed on lower margin of callus. Antennal club broadly circular, about 1.1 times longer than wide, 2 arcuate sutures faintly indicated; inner face with a few long setae extending beyond apex a distance nearly equal to length of club.

Pronotum about 1.4 to 1.5 times longer than wide, widest at about middle; sides parallel on basal half, anterior margin narrowly rounded; anterior margin bearing about 10 to 12 large, erect asperities; anterior slope steeply declivous, bearing numerous erect asperities, these decreasing in size toward summit; posterior area rather dull, microreticulate, punctures small, shallow, rather widely separated.

Elytra 1.7 times longer than wide; sides parallel, apex broadly, shallowly emarginate; surface densely punctured, showing little evidence of striae rows, the punctures rather large, close, surface between punctures brightly shining, smooth. Declivity excavated; lateral margins elevated, rounded, bearing a small, acute spine near suture at base of what appears to be interspace 1, another slightly smaller acute spine at base of interspace 3, a third much longer, rounded spine at about middle of lateral margin and a fourth, large, truncate tooth at lower angle of excavation at apex, the margin from this lower tooth to suture acute; the face of the excavation brightly shining, confusedly, rather deeply punctured.

MALE. Similar in most respects to female, except antennal club devoid of long setae on inner face and declivital teeth slightly larger.

TYPE MATERIAL. Holotype female and allotype collected along highway 131, 184 km south of Oaxaca (approx. 26 miles south of Juchatengo), Oaxaca, Mexico, 6300 ft, on 12 May 1971, by D. E. Bright (CNC No. 12651). One paratype was collected along highway 175, 8 miles south of Miahuatlan, Oaxaca, Mexico, 7000 ft, on 6 June 1971, from small branches of *Pinus pringlei* by D. E. Bright.

REMARKS. Adults of this species are easily recognized by the presence of two acute spines and one longer, rounded spine on the lateral declivital elevations above a large truncate tooth at the apex and by the raised, heart-shaped, reticulate area on the frons. *Tricolus cordatus* is not closely related to any of the described Mexican or Central American species. Apparently adults of all other described species of *Tricolus* from the above areas have only one or two teeth on the lateral elevations of the declivity above the large tooth which is placed at or near the apex.

### *Monarthrum bifidus* n. sp.

Fig. 21

MALE. Length 3.5 to 4.3 mm, 3.1 times longer than wide; pronotum reddish brown, lighter on lateral areas, elytral base light brown, posterior half of elytra dark brown.

Frons convex, weakly impressed above epistomal margin; surface reticulate on lower portion, this reticulation extending upwards to above upper level of eyes, upper portion shining; punctures in shining portion rather large and deep, becoming obsolete in reticulate portion; surface glabrous. Antennal club elongate-oval, 1.8 times as long as wide, with 2 distinct arcuate sutures, third suture indicated by a row of close-set setae.

Pronotum 1.25 times longer than wide; sides almost straight, broadly rounded in front; anterior portion asperate, the asperities slightly more numerous and more erect than in *M. quercicolens*; posterior portion dull, reticulate, punctures slightly more evident than in *M. quercicolens*.

Elytra 1.9 times longer than wide; sides weakly arcuate, broadly rounded at apex, notched at suture; striae not impressed, punctures rather small, separated by a distance at least equal to their diameters; interstriae subshining, punctures equal in size to striae punctures. Declivity exactly as in *M. quercicolens* but appears to be very slightly more shallowly excavated.

FEMALE. Similar in size and proportions to male. Frons convex, median portion bearing an oval brush of dense, erect setae, this brush larger in size and different in shape than in *M. quercicolens*; declivity not excavate, second interspace elevated, bearing 2 pairs of small tubercles, surface more brightly shining and more distinctly punctured than in *M. quercicolens*.

TYPE MATERIAL. Holotype male, allotype, and 27 paratypes were collected 8 miles east of San Cristobal de las Casas, Mexico, on 6 June 1969, from *Quercus* sp. by D. E. Bright (CNC No. 12652). Four paratypes are from 4 miles east of San Cristobal de las Casas, Mexico, 26 May 1969, at light, D. E. Bright, and 1 paratype is labeled San Cristobal, Chiapas, Mexico, 29 May 1969, D. E. Bright.

REMARKS. This species is closely related to *M. quercicolens* Wood and less closely to *M. scutellare* Leconte. The males of this species are readily distinguished



from those of *M. quercicolens* by the more extensive reticulation of the frons, by the more prominent, bifid epistomal process, by the lack of a median epistomal elevation, and by the slightly rougher sculpture of the pronotal disc. Females of *M. bifidus* are distinguished by the much more extensive pubescent area on the frons, by the deeper, stronger punctures on the frons, by the slightly stronger asperities on the pronotum, and by the more brightly shining, more obviously punctate elytral declivity.

***Monarthrum granulatum* n. sp.**

Fig. 22

**MALE.** Length 2.5 to 2.9 mm, 2.5 times longer than wide; basal half of pronotum light brown, head, anterior part of pronotum and elytra dark brown to reddish brown.

Frons convex, rather broadly, weakly, transversely impressed above epistoma; surface microreticulate in impressed area, brightly shining above, with scattered, moderately large, deep punctures, area between punctures bearing numerous, fine points; epistoma elevated, brightly shining. Antennal club oval, 1.7 times longer than wide, both sutures arcuate, the first slightly more so.

Pronotum 1.1 times longer than wide; sides parallel on posterior half; anterior margin broadly rounded, bearing about 10 erect serrations; anterior slope steeply declivous, the asperities low, brightly shining, area between asperities minutely reticulate; posterior area opaque, dull, with widely scattered, shallow, small punctures.

Elytra 1.5 times longer than wide; sides parallel on basal three-fourths, posterior margin broadly emarginate; striae not impressed; discal punctures rather confusedly placed, making discernment of striae and interstriae difficult; surface moderately shining, minutely reticulate-punctate. Declivity steep, convex; suture and first interspace rather deeply impressed; an arcuate row of 4 or 5 prominent granules is located between the suture and 2 larger, acute granules located in about center of declivital face; lower margins acute, weakly elevated; declivital face rather dull, microreticulate, impunctate, glabrous.

**FEMALE.** Similar in size and proportions to male. Frons as in male except punctures slightly larger and deeper; antennal club pubescent on inner face, the setae arising from posterior part of club and extending beyond club a distance about equal to half the club length. Pronotum and elytra as in male except declivity devoid of arcuate row of granules between suture and lateral pair of granules, the 2 granules in center of declivital face smaller than in male.

**TYPE MATERIAL.** Holotype male, allotype, and 28 paratypes were collected 15 miles south of Valle Nacional, Oaxaca, Mexico, 4000 ft, on 20 May 1971, by D. E. Bright (CNC No. 12653).

**REMARKS.** This species is not closely related to any species of *Monarthrum* known to me, nor could a description of any species resembling this one be found in the literature. The most obvious character distinguishing this species is the longitudinally arcuate row of 4 or 5 granules on the declivital face of the male between the suture and the pair of larger tubercles located in about the center of the declivital face; in the female this arcuate row of granules is absent. The frons of both sexes is convex, weakly impressed, and microreticulate above the epistoma.

***Monarthrum oaxacaensis* n. sp.**

Figs. 23, 24

**MALE.** Length 2.6 to 3.0 mm, about 2.7 times longer than wide; dark reddish-brown.

Frons convex, usually rather weakly, longitudinally elevated, the elevation blending into the broad, shallow transverse impression just above epistoma; surface densely, microreticulate in transverse impression and on lateral areas near eyes, more brightly shining but still minutely reticulate above upper level of eyes, becoming shallower and smaller toward epistomal margin, longitudinal elevation impunctate; epistomal margin elevated, smooth, brightly shining. Antennal club narrowly oval, about 1.8 times longer than wide, with 2 nearly transverse sutures.

Pronotum 1.1 times longer than wide; sides parallel on basal half; anterior margin broadly rounded, bearing about 10 or more rather large, erect asperities; asperities on anterior slope low, brightly shining along apex, surface between asperities finely reticulate, moderately shining; posterior area opaque, densely microreticulate, punctures very fine, shallow, widely separated.

Elytra 1.5 times longer than wide; sides parallel on basal three-fourths, broadly rounded behind, sutural notch small, not deep; striae not impressed, punctured in nearly regular rows, the punctures small, shallowly impressed; interspaces wider than striae, sometimes with a few punctures especially near base, surface densely microreticulate, moderately shining. Declivity convex, rather deeply impressed between lateral elevations; sutural interspace weakly elevated; lateral elevations bearing 2 moderately large granules at about midpoint of declivity, the lower one larger, above them are 2 or 3 very small granules, these extending to suture; declivital face bearing a distinct callosity located at apex of what appears to be interspace 2 or possibly striae 1; margins of apex acute.

FEMALE. Similar in size and proportions to male. Frons similar to male except transverse impression narrower and deeper, and longitudinal elevation ending in a more distinct tooth above transverse impression. Antennal club with a rather long tuft of yellowish setae arising on inner face, the longest setae extending beyond apex for a distance equal to about half the club length. Asperities on anterior margin of pronotum much smaller. Declivity similar to male except granules on lateral elevations smaller, and devoid of callosity on declivital face at apex of interspace 2.

TYPE MATERIAL. Holotype male, allotype, and 8 paratypes were collected 32 miles south of Valle Nacional, Oaxaca, Mexico, 7000 ft, on 21 May 1971, by D. E. Bright (CNC No. 12654). Twenty additional paratypes were collected 15 miles south of Valle Nacional, Oaxaca, Mexico, 4000 ft, on 20 May 1971, by D. E. Bright.

REMARKS. The relationships of this species are unclear. It is evidently related to *M. vittatum* (Blandford) but only one specimen, a female, is reported in the literature, so comparisons were not possible.

Males of *Monarthrum oaxacaensis* can be recognized by the callus elevation near the suture at the apex of interspace 2, as in *M. bidens* (Blandford) (but in *M. oaxacaensis* these are much smaller), by the bituberculate lateral declivital elevations, and by the convex frons which bears a weak longitudinal elevation and a dull, transverse impression on the epistoma. The females are recognized by the lack of the callus elevation and by the more strongly elevated longitudinal elevation and deeper transverse impression on the frons.

### *Amphicranus spinatus* n. sp.

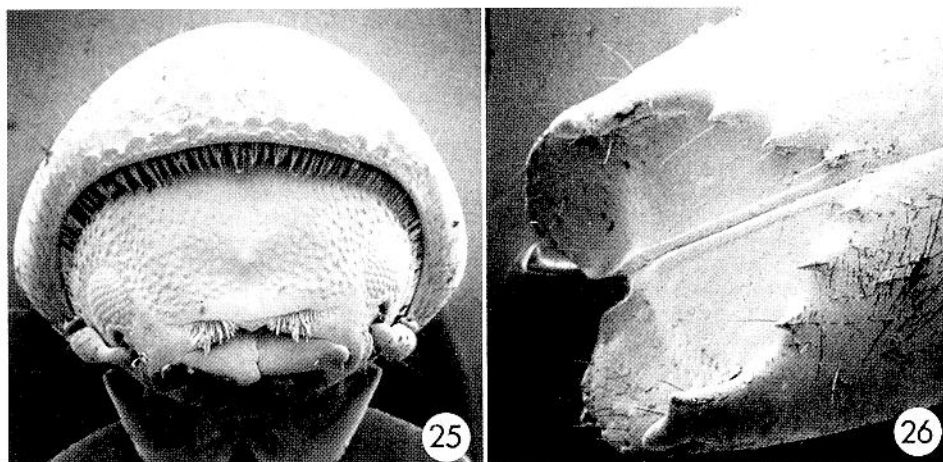
Figs. 25, 26

MALE. Length 4.2 to 5.0 mm, 3.1 times longer than wide; light to dark reddish-brown.

Frons convex above, transversely impressed above a transversely elongate frontal elevation, the point of which projects orad over epistoma, a distinctly elevated, median tubercle is located above impression; surface moderately to brightly shining, strongly granulate-punctate on lateral portions, usually more brightly shining and punctured above tubercle, sometimes minutely reticulate on a longitudinal area just above tubercle, impressed area above frontal process rather dull, usually not punctate or granulate; epistoma wide, smooth, brightly shining; frontal process fringed with a row of yellowish setae. Antennal club 1.9 times longer than wide, claviform, the 2 sutures transverse or very weakly arcuate.

Pronotum 1.2 times longer than wide, widest on basal half; sides parallel on basal half, then gradually converging to the broadly rounded, weakly serrate anterior margin; anterior slope not steeply declivous, armed by numerous, low asperities, these becoming smaller toward middle; summit not evident; posterior half smooth, rather dull, with numerous, rather widely separated impressed points, surface between points minutely reticulate.

Elytra about 2.0 times longer than wide; sides weakly arcuate; apex notched at suture, each elytron rounded at apex; surface moderately shining, confusedly punctured, making discernment of striae and interspaces difficult, area between punctures densely scratched with minute points and lines. Declivity commencing behind middle, oblique; upper margin armed



FIGS. 25-26. *Amphicranus spinatus*. 25, ♀ head, 26, ♀ elytral declivity.

with 3 acute spines, one each in interspaces 2, 3, and 4; below these spines and slightly below the midpoint is a large, truncate process, this process about 2.0 times longer than wide, below this the lateral margins continue around to sutural notch; floor of cavity brightly shining, minutely, sparsely punctured, minutely reticulate and dull on processes projecting beyond sutural apex. Vestiture sparse, confined to declivity, consisting of fine hairlike setae scattered around declivital margins, with a seta at base of each spine on upper margin of declivity, several setae on large truncate process and several on elytral apex.

**FEMALE.** Evidently slightly smaller than male. Frons rather brightly shining, densely punctured, especially on lower half, usually a low, median longitudinal carina is visible. Antennal club much larger, 1.4 times longer than wide, densely pubescent on inner face. Declivity convex; suture impressed; lateral areas bearing 5 to 8 scattered granules on upper two-thirds, surface rather dull, minutely reticulate; apex of each elytron acutely margined.

**TYPE MATERIAL.** Holotype male, allotype, and 5 paratypes were collected 32 miles south of Valle Nacional, Oaxaca, Mexico, 7000 ft, on 21 May 1971, by D. E. Bright (CNC No. 12655). Ten additional paratypes are from: 3, 37 miles south Valle Nacional, Oaxaca, Mexico, 8500 ft, 24 May 1971, at light, D. E. Bright; 2, along highway 131, 178 km south of Oaxaca (approx. 26 miles south of Juchatengo), Oaxaca, Mexico, 7500 ft, 11 May 1971, at light, D. E. Bright; 1, along highway 131, 115 miles south of Oaxaca (approx. 26 miles south of Juchatengo), Oaxaca, Mexico, 6000 ft, 27-30 May 1971, at light, D. E. Bright; 2, 4 miles east of San Cristobal de las Casas, Chiapas, Mexico, 26 May 1969, at light, D. E. Bright; 2, 8 miles northeast of San Cristobal de las Casas, Chiapas, Mexico, 31 May 1969, H. F. Howden, and 2, same data except 17 May and 3 May 1969, H. F. Howden.

Paratypes are in the CNC and the Howden collection, Ottawa.

**REMARKS.** This species is evidently not rare in southern Mexico but no description matching these specimens could be found in the literature. It is probably related to *A. quercus* Wood but not closely. Males of *A. spinatus* can be most readily distinguished by the presence of three small spines on the upper margin of the declivity between the large, truncate process and the suture, and by the frontal process that overlaps the epistoma. Females can be distinguished by the convex elytral declivity with the suture impressed and with scattered granules on its lateral areas.

The host plant of this species is unknown but I believe it is *Quercus* sp.

### New Records

Only new records for Mexico or significant range extensions are included here.

***Amphicranus brevipennis* Blandford**, 1905, *Biologia cent.-am.* 4(6): 293.

Described from a single specimen from Guatemala and evidently not recorded from elsewhere. Specimens were recently collected at Dos Amates, Vera Cruz, on 5 May 1969; 5 miles southwest of El Bosque, Chiapas, on 3 August 1969; and 13 miles north of Ocozocoautla, Chiapas, on 2 August 1969, by D. E. Bright.

***Corthylocurus barbatus* (Blandford)**, 1904, *Biologia cent.-am.* 4(6): 265.

Described from one specimen from Panama. Specimens referred to this species were collected 6 miles south of Valle Nacional, Oaxaca, on 8 May 1971, by D. E. Bright.

***Corthylus compressicornis* (Fabricius)**, 1801, *Syst. Eleuth.*, p. 388.

Known from Central and South America but not recorded from Mexico. A series was collected at Lake Catemaco, Vera Cruz, on 1-3 May 1969, by D. E. Bright, and 13 miles north of Ocozocoautla, Chiapas, on 2 August 1969, by D. E. Bright.

***Monarthrum bidens* (Blandford)**, 1904, *Biologia cent.-am.* 4(6): 277.

Described from one specimen from Panama. A series was collected 5 miles southwest of El Bosque, Chiapas, on 3 August 1969, by D. E. Bright.

***Monarthrum ferrari* (Blandford)**, 1905, *Biologia cent.-am.* 4(6): 284.

Described from one specimen from Panama and evidently not reported from elsewhere. A series was collected at Lake Catemaco, Vera Cruz, on 16-20 June 1969, by D. E. Bright.

***Monarthrum fimbriaticorne* (Blandford)**, 1905, *Biologia cent.-am.* 4(6): 285.

Described from one specimen from Guatemala. A series of 5 specimens was taken along highway 131, 178 km south of Oaxaca, Oaxaca, 7500 ft, on 11 May 1971, from *Pinus* sp. by D. E. Bright.

***Monarthrum quercicolens* Wood**, 1967, *Gt Basin Nat.* 27(1): 49.

This species is known from Durango and Michoacan, Mexico. Specimens were recently collected along highway 131, 115 miles south of Oaxaca, Oaxaca, 6000 ft, on 27-30 May 1971, at light, by D. E. Bright.

***Xyleborus macer* Blandford**, 1898, *Biologia cent.-am.* 4(6): 218.

Known from Costa Rica, Guatemala, Nicaragua, and Panama. Specimens were recently collected at Lake Catemaco, Vera Cruz, on 3 June 1969, by D. E. Bright and at Palenque Ruins, Chiapas, on 7-9 May 1969, by D. E. Bright.

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