

New Species of Bark Beetles (Coleoptera: Scolytidae), Mostly Mexican. Part III¹

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In this paper 12 new species and a new genus (*Prochramesus*) of scolytid beetles are described from Mexico, and one species is described from Honduras. Notes concerning geographical distributions of a few other Mexican species are included. The specimens taken in Mexico were all collected by the author while with the 1953 expedition of the Francis Huntington Snow Entomological Museum (University of Kansas, Lawrence). The new species represent the following genera: *Pseudohylesinus* (1), *Phrixisoma* (1), *Leperisinus* (1), *Phloeosinus* (1), *Chaetophloeus* (1), *Renocis* (1), *Phloeotribus* (1), *Prochramesus* (1), and *Chramesus* (4).

Pseudohylesinus magnus, new species

This species is evidently more closely allied to *pullatus* Blackman than to other species of the genus, but differs in numerous respects including the following: body size much larger; frons flattened and more finely punctured below; pronotum more finely, closely punctured; stria punctures smaller; and the interstriae proportionately wider. A character of this species peculiar in the genus is the reticulate-granulate surface within each stria puncture.

Female.—Length 6.0 mm. (paratypes 5.5–6.1 mm.), 2.44 times as long as wide; body and scale colour black.

Frontal rectangle about equal in width and length; evenly convex above, transversely impressed above epistomal margin, flattened on a large triangular area above epistomal area, this triangular area divided on basal two-thirds by a narrow median carina and narrowly impressed on the median line from the carina to the apex of the triangle; triangular area finely, dorsal and lateral areas a little more coarsely punctured. Eye elongate-ovate, narrower below, entire; rather coarsely granulate. Antennal funicle seven-segmented; club conic, the first segment about equal in length to the second segment.

Pronotum 1.15 times as wide as long; widest near base, posterior angles rather narrowly rounded, sides slightly arcuate and converging anteriorly, moderately constricted and transversely impressed behind the broadly rounded anterior margin; surface rather finely, very closely punctured, not granulate or asperate; middle of third median line slightly, narrowly elevated; vestiture consisting of inconspicuous short dark setae, with a few longer yellow hairs posteriorly.

Elytra wider than pronotum, 1.69 times as long as wide; the bases separately arcuate, crenulate, the overlapping marginal crenulations decreasing in size laterally; sides subparallel on basal two-thirds, rather narrowly rounded behind; striae impressed, rather narrow, the punctures moderately deep, very close, the surface within each puncture appearing rather coarsely reticulate-granulate; interstriae twice as wide as striae, nearly flat, transversely crenulate anteriorly, rather coarsely granulate-punctate on posterior three-fourths of disc (largely concealed by small, oval scales); vestiture consisting of abundant very dark brown to black scales, with small scattered patches (10–15 percent of surface) of light cinerous ones, and fine, short, hairlike, median, interstitial setae. De-

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clivity rather steep; striae and interspaces one and two slightly narrower than on disc; ninth interspace only slightly elevated, not serrate.

Male.—Unknown.

Type Locality.—Twenty-five miles west of Ciudad Hidalgo, Michoacan, Mexico.

Host.—*Abies* sp.

Type Material.—The female holotype and four paratypes were collected at the type locality on July 14, 1953. The holotype is in the Snow Entomological Collections, and the paratypes are in the Canadian National Collection and the collections of the U. S. National Museum.

***Phrixisoma minor*, new species**

Figs. 1, 2

Similar to *obesa* Blackman (types compared), but smaller in size, the interspaces narrower, the interstrial hairs much stouter with the median row proportionately longer, and three rows of granules on each interspace instead of four.

Male.—Length 1.7 mm. (paratypes 1.6-1.9 mm.), 2.0 times as long as wide; body colour black.

Frons convex, opaque, densely, finely granulate, with a fine, distinct, median carina on the lower half (absent in some paratypes), indistinctly impressed above the epistomal margin; vestiture fine, short, inconspicuous, slightly longer at epistomal margin. Eye completely divided, the halves rather broadly separated, the lower half slightly larger. Antennal scape long and slender; the funicle six-segmented; the club marked by three transversely arcuate sutures, the first partly septate.

Pronotum 1.33 times as wide as long, widest basally; posterior margin more or less bisinuate and rather sharply margined, the median area slightly produced; sides arcuately convergent toward the broadly rounded anterior margin; surface subopaque, rather finely, densely subgranulately punctured; vestiture fine, short.

Elytra 2.0 times as long as pronotum, about 1.3 times as long as wide, the bases finely crenulate; striae narrowly and deeply impressed, the punctures small, separated by a space about equal to their own diameters; interstriae about three times as wide as striae, flat on disc, more convex and narrower on declivity, rather finely and closely granulate, the granules arranged in three semi-definite ranks on posterior half of disc; pubescence consisting of short cinerous hairs, the median row on each interspace slightly longer on the posterior half.

Female.—Similar in size and habitus to the male, but with a sinuate line separating the pubescent and glabrous areas behind the eye (Figs. 1, 2), and with a corresponding anterolateral extension of the pronotum.

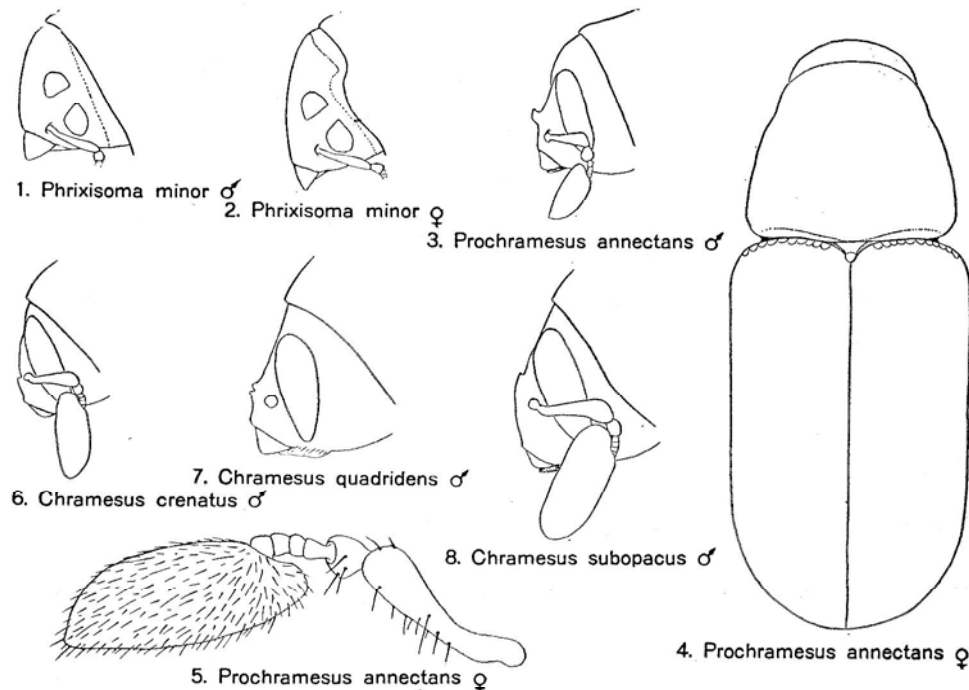
Type Locality.—LaCeiba, Honduras.

Host.—Unknown.

Type Material.—The male holotype was collected at the type locality on May 29, 1949; the female allotype and 12 paratypes were taken at the same locality on various dates between May 20, and August 26, 1949. All were taken at light by E. C. Becker. The holotype, allotype, and some paratypes are in the Canadian National Collection; other paratypes are in the collections of the U. S. National Museum.

***Leperisinus fasciatus* (Leconte)**

This species, described from Pennsylvania, is rather widely distributed in the eastern United States. A female specimen collected at Three Rivers, Texas, on June 27, 1938, by R. I. Sailer, and another female collected at San Juan



Figs. 1-2. Lateral aspect of head of *Phrixisoma minor*: 1, male; and 2, female.

Figs. 3-5. *Prochramesus annectans*: 3, lateral aspect of head of male; 4, dorsal aspect of female; and 5, antenna of female.

Figs. 6-8. Lateral aspect of head of male *Chramesus* spp.: 6, *crenatus*; 7, *quadridens*; and 8, *subopacus*.

del Rio, Durango, Mexico, on July 23, 1953, from a desert shrub, cannot be distinguished from female specimens taken near the type locality.

***Leperisinus mexicanus*, new species**

The two specimens assigned to this species have the colour, colour pattern, and many other features almost identical to those of *fasciatus*; however, they are distinctly larger, the striae are less strongly impressed (particularly on the declivity), the second declivital interspace is not as narrow, the frons of the male is much more shallowly concave, and the frontal carina of the female is less prominent.

Male.—Length 2.6 mm., 1.78 times as long as wide; colour piceous to black, with a variegated pattern of very dark brown (almost black) and white scales almost identical to that of *fasciatus*.

Frons very broadly and shallowly impressed, slightly concave, a finely raised median line indicating the presence of a carina on lower half; surface coarsely reticulate and sparsely, finely granulate-punctate particularly at sides and above; vestiture consisting of moderately abundant, rather long, coarse, white setae. Eye elongate-ovate, about 2.2 times as long as wide, entire, finely granulate. Antennal funicle seven-segmented; club distinctly flattened, about 1.9 times as long as wide, three transverse sutures indicated by rows of setae.

Pronotum 1.4 times as wide as long; widest at base, sides weakly, convergently arcuate, moderately constricted and transversely impressed just behind the nearly straight anterior margin; lateral areas with several rather large asperi-

ties; surface rather finely granulate-punctate, becoming coarse near summit; vestiture scalelike, dark brown in the asperate lateral and in the median posterior areas, white in the posterolateral areas, along the sides, and medially just behind the anterior margin.

Elytra 1.3 times as long as wide; wider than pronotum, sides subparallel on basal two-thirds, rather narrowly rounded behind; bases slightly raised, with rather large, overlapping crenulations from interspace one to eight; striae narrow, rather weakly impressed, the punctures rather small, deep, close; interstriae almost three times as wide as striae, nearly flat, the punctures rather fine, rugose; vestiture consisting of nearly erect, trilamellate scales, the median row longer, their colour very dark brown except for the small white patches located (1) just behind scutellum on interspaces one and two, (2) one-third the distance to declivity on interspaces six and seven, (3) at base of declivity on interspaces two to five, and (4) near apex of declivity; median row of setae on each interspace more slender and pointed anteriorly and on the sides. Declivity gradual; interstriae slightly narrower than on disc; sutural interspace moderately elevated; second interspace weakly impressed; striae slightly wider and less strongly impressed than on disc.

Female.—Similar to male except: length 3.0 mm; frons transversely impressed above epistoma, flat, with a weakly elevated median carina indicated just above the transverse epistomal impression.

Type Locality.—Tecamachaco, Puebla, Mexico.

Host.—An unidentified desert shrub.

Type Material.—The male holotype and female allotype were collected from the same gallery, at the type locality on July 2, 1953. They are in the Snow Entomological Collections.

Phloeosinus taxodiicolens, new species

Closely allied to *taxodii* Blackman, but distinguished by the more finely punctured pronotum, the finer interstitial sculpture, the less strongly elevated first and third declivital interspaces, the more nearly scalelike declivital pubescence, and the more feebly impressed frons of the male.

Male.—Length 2.5 mm. (paratypes 2.4–2.6 mm.), 2.0 times as long as wide; body colour dark brown to almost black, with the elytra reddish brown.

Frons transversely flattened on lower half, convex above; rather coarsely granulate-punctate at sides and above, more finely punctured near centre; median carina broad, low; vestiture consisting of rather sparse yellow hair of median length. Eye about 3.2 times as long as wide, more than half divided by an emargination. Antennal club about 1.7 times as long as wide, sutures oblique.

Pronotum 1.18 times as wide as long; widest near base, sides arcuate, strongly constricted on anterior third, with a weak transverse impression behind the broadly rounded anterior margin; surface shining, closely and deeply, rather finely punctured; vestiture rather abundant, short, inconspicuous.

Elytra about 1.3 times as long as wide; wider than pronotum; sides subparallel on basal two-thirds, broadly rounded behind; striae narrow, strongly impressed, the punctures small, distinct, separated by one and one-half to two times their own diameters; interstriae on disc about three times as wide as striae, finely granulate-punctate, granules larger and uniseriate near declivity; setae rather numerous, stout. Declivity with interspaces slightly narrower than on disc; the second as wide as the third, flat, finely punctured, with one or two granules near apex; first and third convex and armed by rather coarse, black,

blunt serrations, crowded on third, sparse posteriorly on first; five to nine each with a few rather coarse serrations; vestiture rather short, coarse, almost scale-like.

Female.—Similar to the male in size and habitus; frons more convex, carina more strongly elevated above, with a weak impression above the carina; first and third declivital interstriae less strongly elevated, the serrations much smaller, and the second usually with a few serrations about equal in size to those on one and three.

Type Locality.—Tomazunchale, San Luis Potosi, Mexico.

Host.—*Taxodium mucronatum*.

Type Material.—The male holotype, female allotype, and 76 paratypes were collected at the type locality on June 21, 1953, from branches of the host tree; 29 other paratypes were taken twelve miles north of Rodeo, Durango, Mexico, on July 25, 1953. The holotype, allotype, and some paratypes are in the Snow Entomological Collections; other paratypes are in the Canadian National Collection and the collections of the U. S. National Museum.

Chaetophloeus lasius, new species

This species is similar to *hystrix* (Leconte), but differs as follows: elytra more finely and shallowly punctured, the striae not evident; third declivital interspace not armed; and the pubescence longer and more nearly plumose. The two species agree in antennal, frontal, and tibial characters, and in the general type of vestiture.

Female.—Length 2.4 mm. (paratypes 1.8-2.5 mm.), 1.88 times as long as wide; colour black, the pubescence yellowish- or brownish-white.

Frons with a rather strong, subconcave, transverse impression above epistoma; surface finely, rather sparsely punctured, largely concealed by rather abundant, long, plumose setae; a pair of widely spaced, pointed tubercles at upper level of eyes; mouthparts, epistoma, and bases of mandibles clothed with long yellow setae. Eye elongate-oval, entire; rather finely granulate. Antennal funicle five-segmented; club 1.3 times as long as wide, with three non-septate, slightly arcuate, transverse sutures, segment four almost equal to the combined length of segments one, two, and three.

Pronotum 1.33 times as wide as long; sides strongly, convergently arcuate, the anterior margin broadly rounded; surface uniformly, rather closely punctured, the punctures rather deep, moderately large; laterally armed by two paired groups of asperities, each group consisting of from one to four tubercles; vestiture long, moderately abundant, and conspicuously plumose.

Elytra 1.13 times as long as wide; the bases strongly elevated medially, each bearing about six marginal serrations that decrease in size laterally and three submarginal ones; striae not clearly evident, the surface covered with confused, close, moderately fine punctures, each puncture bearing a long, erect, more or less scalelike but evidently plumose seta. Declivity rather steep, sulcate, unarmed; striae scarcely evident; the setae in rows evidently corresponding to interspaces.

Male.—Frons more strongly impressed, and the antennal club more elongate than in the female.

Type Locality.—Seven miles southeast of Nochixtlan, Oaxaca, Mexico.

Host.—Unknown.

Type Material.—The female holotype, male allotype, and 62 paratypes were collected at the type locality on July 5, 1953, from an unidentified, resinous, sumac-like shrub. The holotype, allotype, and some paratypes are in the

Snow Entomological Collections; other paratypes are in the Canadian National Collection and the collections of the U. S. National Museum.

***Renocis sulcatus*, new species**

Allied to *maclayi* (Bruck), but with the frons less strongly impressed, the frontal tubercles smaller, the lateral margins of the declivity more strongly elevated, and a distinctive colour pattern that includes a transverse band of dark brown scales across the base of the pronotum (largely white in *maclayi*).

Female.—Length 1.9 mm. (paratypes 1.7–2.1 mm.), 1.83 times as long as wide; body dark brown, the colour pattern of the vestiture variegated, consisting of dark brown and nearly white scales and hairlike setae.

Frons flat, a weak transverse impression above epistoma; epistomal margin with a short, sharp, median, pointed process and with a fringe of light yellow-cinereous setae; laterally armed by a pair of sharp, prominent tubercles at upper level of eyes; surface shining, finely punctured, largely concealed by the rather coarse, semi-erect, light brown and cinereous setae. Eye about 3.5 times as long as wide, the inner margin sinuate. Antennal club 2.5 times as long as wide, with three straight, aseptate sutures indicated by rows of setae.

Pronotum 1.5 times as wide as long, widest near base; basal margin broadly procurved; sides arcuate, strongly constricted and transversely impressed just behind the nearly straight anterior margin; surface rather finely, closely punctured, with interspaces minutely reticulate-granulate; two small groups of rather coarse asperities on each side; vestiture consisting of small, broad, recumbent scales, their colour dark brown on the median and basal areas, white in irregular lateral and anterior areas.

Elytra about 1.3 times as long as wide; wider than pronotum; sides subparallel on basal two-thirds, very broadly rounded behind; each basal margin elevated from first to fifth interspace and armed by seven coarse serrations that decrease in size laterally; striae weakly impressed, the punctures of moderate size and separated by a distance equal to their own diameters; interstriae about twice as wide as striae, the surface finely reticulate-granulate, finely punctured, and nearly concealed by numerous small, semi-erect, brownish and white scales, and median rows of longer erect scales; each elytron with a rather dense group of erect brown setae behind basal elevation; colour pattern irregular, small patches of white scales cover about forty to fifty percent of the surface. Declivity moderately steep, rather strongly sulcate between the third interspaces; the first striae more strongly impressed on upper half, the sutural interspaces very slightly elevated; third interspace rather high, with a rather prominent elevation bearing a group of erect scales at the junction with the seventh interspace, and with the longer median setae more numerous than on the disc and forming a partial double row.

Male.—Similar in size and habitus to female, but with the frons more strongly impressed, with the vestiture longer and more abundant; antennal club more slender; and setae on anterior margin of pronotum longer.

Type Locality.—Ixmiquilpan, Hidalgo, Mexico.

Host.—Unknown.

Type Material.—The female holotype, male allotype, and eighteen paratypes were collected at the type locality on June 23, 1953, from an unidentified roadside shrub. The holotype, allotype, and some paratypes are in the Snow Entomological Collections; additional paratypes are in the Canadian National Collection and in the collections of the U. S. National Museum.

***Renocis eggersi*, new name**

The name *Renocis mexicanus* Eggers (1949, Ent. Blätt. 41-44: 149) is pre-occupied (Blackman, 1940, Proc. U. S. Nat. Mus. 88: 397). It is proposed that Eggers' species be renamed in his honour.

***Phloeotribus pruni*, new species**

This species is very closely allied to *liminaris* Harris, but is distinguished by the more coarsely sculptured pronotum and elytra, by the presence of distinct interstrial granules, by the more numerous, more slender crenulations of the elytral bases, by the more shallowly impressed strial punctures, and by the coarser vestiture.

Female.—Length 2.1 mm. (paratypes 1.7-2.1 mm.), 2.1 times as long as wide; body colour brown.

Frons convex, with a slight transverse impression above epistoma, a feeble elevation between antennal bases, and a small shallow median fovea near centre; surface reticulate-granulate, with sparse shallow punctures; vestiture consisting of sparse yellow hair of medium length. Eye elongate-ovate, entire; finely granulate. Antenna as in *liminaris*.

Pronotum 1.17 times as wide as long; widest at base, sides weakly arcuate, feebly constricted just behind the broadly rounded anterior margin; surface reticulate, punctures of moderate size and density, shallow; vestiture fine, rather long and abundant.

Elytra 1.4 times as long as wide; sides subparallel on basal two-thirds, broadly rounded behind; basal margins separately arcuate and armed by about 15 rather narrow overlapping crenulations, the lateral ones sharply pointed; the submarginal crenulations smaller and more irregular than those on margin; striae not impressed, the punctures of moderate size, distinct but shallow; interstriae wider than striae, ornamented by two irregular ranks of small granules, except uniseriate on interspace one. Declivity rather steep, convex; striae narrower and a little more strongly impressed; interstrial granules uniseriate and more sharply pointed than on disc, only slightly larger on nine; none of the interspaces elevated. Vestiture consisting of erect, rather fine yellowish hair; the setae in a double row on each interspace of disc, except uniseriate on interspace one; stouter, but not longer than on declivity.

Male.—Similar to female except: epistomal area with a rather broad, very low, median elevation, the surface of the elevation conspicuously reticulate; the transverse impression above the epistoma obscure; and frons flattened, the median fovea obscure or absent.

Type Locality.—Fifteen miles northwest of Chihuahua, Chihuahua, Mexico.

Host.—*Prunus* sp.

Type Material.—The female holotype, male allotype, and 45 paratypes were collected at the type locality on July 29, 1953, from a native species of *Prunus* that grew along the bank of a stream. The holotype, allotype, and some paratypes are in the Snow Entomological Collections; other paratypes are in the Canadian National Collection and the collections of the U. S. National Museum.

***Prochramesus*, new genus**

Closely allied to *Chramesus* Leconte, but differing as follows: body form slender (Fig. 4); pubescence essentially hairlike; antennal scape shorter, the club smaller and less strongly compressed; and the posterior margin of the pronotum not extended medially. This genus resembles *Chramesus* in having the antennal

funicle five segmented and attached to the side of the club; in having the club unsegmented and similar in shape (Fig. 5); and in having the frons of the male concave, with the lateral margins armed.

Description.—Frons flattened in the female, concave in the male; eye elongate-oval, entire; antennal scape rather long, but not extending beyond the posterior margin of the eye; funicle five-segmented and attached to the side of the moderately flattened, unsegmented club; pronotum only slightly wider than long, the posterior margin essentially straight, not extended medially, the sides not asperate; elytra elongate, the bases crenulate; vestiture consisting of hairlike and bristlelike setae, the short interstitial setae appearing almost plumose, but not scalelike.

Type Species.—*Prochramesus annectans*, new species.

***Prochramesus annectans*, new species**

Figs. 3, 4, 5

Female.—Length 2.3 mm. (paratypes 2.0-2.3 mm.), 2.33 times as long as wide, body colour black (including the antennal club).

Frons flattened on a more or less triangular area extending from epistoma to upper level of eyes, armed just above the level of the antennal insertion by a pair of prominent tubercles, the tubercles separated from one another by a space equal to half the distance between the eyes; vestiture consisting of a few short stout yellow setae. Eye elongate-oval, only slightly narrower ventrally, entire; rather finely granulate. Antennal scape extending to posterior margin of eye; funicle shorter than scape, ornamented by a few small scattered hairs; club rather large, tapered distally, similar to *Chramesus* spp. but less strongly flattened and with longer, less abundant vestiture.

Pronotum 1.12 times as wide as long; the posterior margin straight, the lateral margins slightly arcuate and converging anteriorly, rather broadly rounded in front, indistinctly impressed behind the anterior margin; surface of disc covered with small isolated granules with a few punctures interspersed, each granule and puncture giving rise to a short, yellow, bristlelike seta.

Elytra wider than pronotum, 1.69 times as long as wide; the bases separately arcuate, their margins elevated and armed by about eleven transverse crenulations; sides subparallel on more than the basal two-thirds, broadly rounded behind; surface shining; striae indistinctly impressed, the punctures moderately large, rather deeply impressed, separated by less than their own diameters; interstriae equal in width to striae, each with a median row of granulate punctures, the granules rather large and each bearing a moderately long bristle, additional short, rather broad setae in semi-definite rows arising from minute punctures between the striae punctures and the granules. Declivity steep, convex; the striae punctures and interstitial granules somewhat smaller than on disc, and the vestiture more conspicuous.

Male.—Similar to the female except: frons rather deeply, almost hemispherically concave below upper level of eyes; the excavation occupying only about half of the space between the eyes, its lateral margins not acute; the frontal tubercles larger, each laterally compressed and directed more dorsomedially than in the female and appearing subquadrangular from the lateral aspect (Fig. 3).

Type Locality.—Seven miles southeast of Nochixtlan, Oaxaca, Mexico.

Host.—*Nolena* spp.

Type Material.—The female holotype, male allotype, and 29 paratypes were collected at the type locality on July 5, 1953; 19 other paratypes were taken ten miles southeast of Oaxaca, Oaxaca, Mexico, on July 6, 1953. These beetles

were collected from the fruiting stalks of two species of *Nolena*. They were monogamous and constructed transverse galleries in the outer woody portion of the fruiting stalks. The galleries of the parent adults were usually transverse and similar to those of *Chramesus* species; those of the larvae were more or less straight and parallel to the axis of the stalk. The holotype, allotype, and some paratypes are in the Snow Entomological Collections; other paratypes are in the Canadian National Collection and the collections of the U. S. National Museum.

***Chramesus subopacus* Schaeffer**

Fig. 8

This species was collected in Mexico at Encinal, Tamaulipas, on June 15, 1953 from *Condalia obtusifolia*; and at 18 miles west of Tehuantepec, Oaxaca, on July 8, 1953, from an unidentified shrub that grew in a hedge fence.

***Chramesus xylophagus*, new species**

Allied to *subopacus* Schaeffer, but the punctures of the striae and pronotum larger and deeper; the male frons not as deeply impressed and with lateral margins only slightly elevated, the small tooth located below the level of the antennal insertion (located as in *crenatus*, Fig. 6); and the female frons without a median fovea.

Male.—Length 1.9 mm. (paratypes 1.7-1.9 mm.), 1.6 times as long as wide; body colour dark brown to black.

Frons broadly, concavely impressed from epistoma to upper level of eyes, the lateral margins acutely, not strongly elevated and armed at lower level of antennal sockets by a pair of small blunt teeth (located as in *crenatus*, Fig. 6); the concavity sparsely clothed with rather small hairlike setae. Eyes and antennae similar to those of *subopacus*.

Pronotum 1.25 times as wide as long; widest posteriorly, the sides arcuately convergent anteriorly, slightly constricted just behind the broadly rounded anterior margin; posterior margin slightly produced medially as in related species; lateral areas very finely and sparsely asperate, median and posterior areas coarsely, rather shallowly punctured; episternal area finely reticulate-granulate, finely and very shallowly punctured; vestiture consisting of hair and stout bristles, not scalelike as in *subopacus*.

Elytra about equal in length and width, the sides subparallel on the basal half, very broadly rounded behind; anterior margin of each elytron armed by about twelve rather large overlapping crenulations, and a few submarginal ones, the marginal crenulations becoming narrower laterally; striae slightly impressed, the punctures moderately large and deep; interstriae about twice as wide as striae, each with a uniseriate row of granulate punctures; surface largely concealed by abundant, short, subplumose, scalelike, interstitial setae, and uniseriate rows of erect, stout, pointed, interstitial bristles, each bristle shorter than the distance between rows of bristles.

Female.—Similar to the male except: frons flattened, without an impression, elevated margins, or teeth; and pronotal asperities and the armature of elytral bases larger.

Type Locality.—Three miles southeast of Rosario, Sinaloa, Mexico.

Host.—An unidentified shrub.

Type Material.—The male holotype, female allotype, and ten paratypes were collected at the type locality on July 21, 1953, from a shrub that grew along a ditch at the edge of a cultivated field. The galleries were longitudinal, and

rather deep in the wood. The holotype, allotype, and some paratypes are in the Snow Entomological Collections; other paratypes are in the Canadian National Collection and the collections of the U. S. National Museum.

***Chramesus quadridens*, new species**

Fig. 7

Allied to *xylophagus*, but the punctures of the lateral striae (seven to nine) larger and deeper, the proepisternum more nearly rugose and rather coarsely and deeply punctured, the male frons with a median fovea and with the lateral margins more strongly elevated and armed by two pairs of tubercles, and the female frons rugulose on the upper half.

Male.—Length 2.0 mm. (paratypes 1.8-2.1 mm.), about 1.6 times as long as wide; body colour dark brown to black.

Frons broadly, concavely impressed from epistoma to upper level of eyes, the lateral margins acutely elevated on lower two-thirds and armed at level of antennal sockets by two pair of blunt teeth of about equal size (Fig. 7); the concavity with a rather small, deep, median fovea just below the level of the upper end of the acute lateral margins; rather coarsely reticulate-granulate, except smooth just above epistoma; vestiture scanty, short. Eye and antenna similar to allied species.

Pronotum 1.36 times as wide as long; widest posteriorly, the sides arcuately converging anteriorly and slightly constricted just behind the broadly rounded anterior margin; anterior, lateral, and median areas rather finely asperate; posterior area coarsely, rather shallowly punctured, episternal area rugulose, and coarsely, rather deeply punctured; vestiture of disc consisting of stout bristles as in *xylophagus*.

Elytra 1.05 times as long as wide, the sides subparallel on basal half, very broadly rounded behind; anterior margin of each elytron armed by about eleven rather large crenulations that tend to overlap, and a few submarginal ones, the marginal crenulations becoming progressively narrower laterally; striae slightly impressed, the punctures moderately large and deep on the disc, becoming larger and deeper on the sides; interstriae about twice as wide as striae, each with a uniseriate row of granulate punctures; surface largely concealed by abundant, short, subplumose, scalelike, interstitial setae, and uniseriate rows of longer, erect, stout, blunt, interstitial bristles, each bristle shorter than the distance between rows of bristles.

Female.—Similar to the male except: frons flattened, without elevated margins, teeth, or median fovea; pronotal asperities and armature of elytral bases slightly larger.

Type Locality.—Seven miles southeast of Atlixco, Puebla, Mexico.

Host.—An unidentified leguminous vine.

Type Locality.—The male holotype, female allotype, and 15 paratypes were collected at the type locality on July 13, 1953. The type series, including larvae, was removed from the axis of stems about one-fourth of an inch in diameter. The holotype, allotype, and paratypes are in the Snow Entomological Collections.

***Chramesus striatus*, new species**

Closely allied to *asperatus* Schaeffer, but the punctures on the posteromedian area of the pronotum are not as large or as deep, the elytral bristles are much finer and shorter, the proepisternal areas are more coarsely and deeply punctured, the proepimeral areas are dorsoventrally rather coarsely striate, and the male frons is less deeply impressed.

Male.—Length 1.6 mm. (paratypes 1.4–1.8 mm.), 1.6 times as long as wide; body colour dark brown to black.

Frons rather broadly, deeply concave from epistoma to above the upper level of the eyes; lateral margins acutely, rather strongly elevated on the lower three-fourths and armed at lower level of antennal sockets by a pair of rather large, pointed teeth (located as in *crenatus*, Fig. 6); vestiture sparse, short. Eye and antenna as in allied species.

Pronotum 1.42 times as wide as long; widest near middle, slightly narrowed posteriorly; sides strongly arcuate, broadly rounded in front; finely asperate or granulate on anterior and lateral areas, a small posteromedian area rather finely, shallowly punctured; episternal area rather coarsely, deeply punctured; epimeral area with about five coarse, dorsoventral striations; discal vestiture consisting of short, stout bristles.

Elytra 1.05 times as long as wide, the sides subparallel on basal half, very broadly rounded behind; anterior margin of each elytron armed by about eight coarse crenulations, the lateral ones narrower; striae slightly impressed, the punctures moderately large and deep; interstriae about twice as wide as striae, each uniseriately granulate-punctate; surface largely concealed by abundant, short, rather slender interstitial scales, and uniseriate rows of slender interstitial bristles, the length of each bristle about equal to the distance between rows of bristles.

Female.—Similar to male except: frons flattened, transversely impressed above epistoma, and with a small median impression above; and pronotal asperities and elytral crenulations slightly larger.

Type Locality.—Seven miles south of Atlixco, Puebla, Mexico.

Host.—Evidently *Acacia* sp.

Type Material.—The male holotype, female allotype, and twelve paratypes were collected at the type locality on July 2, 1953, from the pith region of twigs and small branches of the host tree. The holotype, allotype, and some paratypes are in the Snow Entomological Collections; other paratypes are in the Canadian National Collection and the collections of the U. S. National Museum.

Chramesus crenatus, new species

Fig. 6

This species is evidently more closely allied to *striatus* than to other species that have similar frontal characters, but it differs conspicuously in vestiture, in the number and arrangement of the crenulations on the elytral bases, and in the sculpture of the proepisternal and proepimeral areas.

Male.—Length 1.5 mm. (paratypes 1.4–1.6 mm.), 1.6 times as long as wide; body colour very dark brown.

Frons rather broadly, deeply concave from epistoma to above the upper level of the eyes; lateral margins acutely elevated on lower three-fourths and armed at lower level of antennal sockets by a pair of blunt teeth (Fig. 6); vestiture very sparse and short. Antennal club large, but slightly shorter than in *asperatus*.

Pronotum 1.35 times as wide as long; widest posteriorly, convergently arcuate anteriorly and broadly rounded in front; finely asperate in anterior and lateral areas, coarsely and shallowly punctured in posteromedian area; episternal and epimeral areas rather coarsely reticulate, a few fine punctures scarcely evident; discal vestiture mostly of short slender bristles, a few scalelike setae evident especially in lateral areas.

Elytra about 1.05 times as long as wide, the sides subparallel on basal half, rather narrowly rounded behind; anterior margin of each elytron armed by a row of about twelve rather low crenulations, the lateral eight or nine of them basally united, not overlapping; striae impressed, the punctures rather small, impressed; interstriae about twice as wide as striae, uniseriately granulate-punctate; surface largely concealed by abundant, short, broad, interstitial scales and uniseriate rows of slender bristles, each bristle as long as the distance between rows of bristles.

Female.—Similar to male except: frons flattened, transversely impressed above epistoma, and with a small impression (a fovea in some specimens) above; a weakly developed arching elevation extending between antennal sockets; and pronotal asperities and elytral crenulations slightly larger.

Type Locality.—Twenty miles northwest of Vera Cruz, Vera Cruz, Mexico.

Host.—A large unidentified tree.

Type Material.—The male holotype, female allotype, and 169 paratypes were collected at the type locality on June 30, 1953, from longitudinal galleries in the cambium region of branches one-half to two inches in diameter. These beetles were associated with *Scolytus dimidiatus* Chapuis. The holotype, allotype, and some paratypes are in the Snow Entomological Collections; other paratypes are in the Canadian National Collection and the collections of the U. S. National Museum.

***Chramesus chapuisii* Leconte**

This species was collected at Los Abritos (20 miles northeast of Ciudad del Mais), San Luis Potosi, Mexico, from a broken stump about three inches in diameter of what appeared to be *Robinia* sp. It is a widely distributed bark boring species in the eastern and southern United States, but has not been reported previously from Mexico.