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NEW GENERA AND SPECIES OF BARK BEETLES OF THE SUBFAMILY MICRACINAE (SCOLYTIDAE, COLEOPTERA)

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In a series of three earlier papers[1] the writer revised the bark beetles of the subfamily Micracinae of the United States, described 4 new genera and subgenera and 25 new species, and presented keys to the genera and species. In the present paper 2 new genera and 16 new species are described. Of these 1 genus and 11 species are from continental United States, while 1 new genus and 5 new species are from the West Indies, Colombia, and Mexico.

The subfamily Micracinae is a rather small one containing relatively few known genera, and with the exception of *Hylocurus* Eichhoff no genus contains more than 10 known species. Specimens of Micracinae are usually not numerous in collections. This is due in part to their small size and to the inconspicuous work of representatives of such genera as *Pseudothysanoes* Blackman, *Cryptocleptes* Blackman, and the new genus from the continental United States described in this paper, which breed in the bark of dying or dead twigs of hickory, oak, acacia, and other deciduous trees and shrubs, and in other cases to the very secluded life of such lignivorous forms as *Hylocurus* Eichhoff, *Micracis* LeConte, *Micracisella* Blackman,

[1] Mississippi Agr. Exp. Stat. Techn. Bull. 9, pp. 1–62, 1920; New York State Coll. Forestry Techn. Publ. 16, pp. 142–148, 1922; New York State Coll. Forestry Techn. Publ. 25, pp. 185–208, 1928.

and *Thysanoes* LeConte, which live most of their life deep in the wood of their hosts.

In so far as known, all species breed in the bark or wood of deciduous trees or shrubs. Trees that are decadent, dying, or recently dead and broken or cut limbs and twigs commonly serve as breeding places. Large colonies of brood burrows are seldom found together, as is so often the case with other scolytids, although with *Hylocurus langstoni* (Blackman) such a massed attack is not uncommon. In most cases, however, only single burrows or small groups of burrows are found at one place. This is probably due to the paucity of individuals of most of the species, especially of the lignivorous forms such as various species of *Hylocurus*, *Micracis*, and *Thysanoes*.

The proper development of the brood of such forms depends upon whether the wood infested is in proper condition for the nourishment of the larvae. This appears to involve the presence of sufficient moisture and the presence of the hyphae of rapidly developing fungi. If the wood dries too rapidly, fungi do not develop properly and the larvae die either from lack of moisture or from the resultant slowing up of the development of decay fungi. Whether it is lack of water, lack of fungal hyphae, or lack of material produced by fungal decay that is responsible for the death of the larvae cannot be definitely stated. Perhaps the presence of all three is essential. It may well be significant that in hickory, which is a favored host for a number of species, decay of the sapwood is extremely rapid if sufficient moisture and warmth are present.

As regards economic importance the various genera and species of Micracinae vary considerably. None of the forms breeding in bark are known to be strongly injurious, as they choose as hosts decadent or broken limbs or twigs. Such species, while they may occasionally kill limbs that might otherwise survive, may in general be classed as mildly beneficial in that they aid in the processes of decay and thus hasten the return of such material to the soil.

Species of the lignivorous genera *Hylocurus*, *Micracis*, and *Thysanoes* are potentially more injurious and in several cases are known to be actually injurious. For example, *Hylocurus langstoni* (Blackman), common in the Southeastern States, often attacks living trees through injured or deadened areas of the bark, breeds in the wood beneath such areas, and by feeding on the adjacent living bark extends the injury until the entire tree is killed. Posts and poles set in the soil before being thoroughly seasoned are also often subject to heavy attack, resulting in a type of injury similar to that made by powder-post beetles, by which the entire sapwood is often riddled by larval mines filled with powdery frass.

KEY TO THE GENERA OF MICRACINAE

1. Antennal club with distinct sutures on outer face; antennal scape clavate or flattened, widened and subtriangular, funicle with 6 segments 2
   Antennal club without distinct sutures on outer face; antennal scape clavate or slightly flattened, funicle typically with 6 segments but variously modified and occasionally with fewer 7
2. Posterior end of elytra drawn out to form an acuminate sutural apex 3
   Posterior end of elytra conjointly rounded 5
3. Antennal scape club shaped, with a few short or moderate hairs, club with first suture broadly curved; eyes short oval, widely separated above and beneath; fore tibia slightly wider distally, with both edges sinuate, distal end with 2–5 submarginal teeth ..... Hylocurus Eichhoff
   Antennal scape flattened, subtriangular, with numerous long hairs, club with first suture angulate or narrowly curved; eyes large, elongate, more coarsely granulate, contiguous, narrowly or moderately separated beneath; fore tibia with outer margin nearly straight 4
4. Eyes moderately separated beneath, their inner margins entire; fore tibia with 5 teeth, all on distal submargin, terminal mucro broad ..... Micracis LeConte
   Eyes contiguous or narrowly separated beneath, their inner outlines emarginate; fore tibia with 5 teeth, at least one of which is on outer submargin, terminal mucro slender ..... Micracisella Blackman
5. Antenna with scape crudely club shaped, not twisted, with long hairs, club strongly flattened, sutures marked by setal rows of short hairs; fore tibia similar to that of *Micracis*, with sides nearly straight and subparallel, with mucro wide and shorter; elytral declivity not sulcate 6
   Antennal scape twisted clavate with fewer long hairs, club moderately flattened, sutures marked by rows of long hairs and by strong annulations; fore tibia somewhat similar to that of *Hylocurus*, wider distally with sides sinuate, mucro long, rather slender; elytral declivity sulcate ..... Stenoclyptus, new genus
6. Pronotum longer than wide, widest near middle, with sides weakly arcuate, subparallel, summit not high, posterior area horizontal; fore tibia wide, with distal end squarely or obliquely truncate, terminal mucro entire ..... Thysanoes LeConte
   Pronotum wider than long, widest near base, its outline subsemicircular or subtriangular, summit high, posterior area sloping; fore tibia narrower, distal end obliquely truncate, terminal mucro sometimes bifurcate ..... Pseudothysanoes Blackman
7. Antennae of male and female similar, funicle slightly longer than the short ovate club ..... Cryptocleptes Blackman
   Antennae of male of the normal micracine type; that of female with funicle more than twice as long as club or scape, club elongate-securiform in female ..... Chalcohyus, new genus

Genus HYLOCURUS Eichhoff

Hylocurus Eichhoff, Berlin Ent. Zeitschr., vol. 15, pp. 133–134, 1871; Ratio Tomicinorum, Mém. Soc. Roy. Sci. Liége, ser. 2, vol. 8, pp. 298–301, 1878.—Blandford, Biologia Centrali-Americana, Insecta-Coleoptera, vol. 4, pt. 6, pp. 220–225, 1898.—Blackman, New York State Coll. Forestry Techn. Publ. 16, pp. 142–148, 1922; Techn. Publ. 25, pp. 186, 192, 1928.—Schedl, Rev. Ent., vol. 10, p. 723, 1939.

Micracis LeConte (in part), LeConte, Proc. Amer. Phil. Soc., vol. 15, pp. 368–369, 1876.—Swaine, Canada Dept. Agr., Ent. Branch, Bull. 14, pt. 2, p. 83, 1918.—Blackman, Mississippi Agr. Exp. Stat. Techn. Bull. 9, pp. 19–27, 1920.

Genotype.—Hylocurus elegans Eichhoff. (Monobasic.)

The genus *Hylocurus* Eichhoff contains more species than any of the other genera of Micracinae. Of these, 12 have been described from the Neotropics and 11 species are found in continental United States. Several of the species are known only from one sex, and the secondary sexual differences vary so greatly in different species groups that in some cases we cannot be certain of the sex without dissection. This is not desirable when a species is represented by a single specimen.

Blandford believed that in the males the elytral interspaces "become subcarinate as they approach the declivity, round which they form a marginal series of teeth, carinae, or in one species, acute spines" and the sides of the elytra may appear to diverge behind. "In the female the elytra are regularly and strongly declivitous behind, . . . with no marginal tubercles." This may be true of all the species he treated, as it is of such northern species as *parkinsoniae* Blackman, and *quadrispinosus* Blackman and to a lesser degree of *langstoni* (Blackman), but it is not true of *rudis* (LeConte), *biorbis* (Blackman), *bicornus* (Blackman), *harnedi* (Blackman), *spalix* Blackman, and *schwarzi* Blackman. In these latter species the most readily seen secondary sexual differences have to do with frontal characters or with differences in the number, size, and arrangement of tubercles on the face of the declivity.

It would then appear that a key to the entire genus cannot be perfected until specimens of both sexes of all the species are available. Until such time we must rely on Blandford's key to the Neotropical forms and on the existing keys for the more northern species. The three new species described herewith can be readily fitted into the latter key (Blackman, 1928, *loc. cit.*).

HYLOCURUS BICONCAVUS, new species

Plate 29, Figure 1

Very dark reddish brown, the pronotum subopaque, elytra shining; 2.22 mm. long, 2.82 times as long as wide; related to *rudis* (LeConte), *biorbis* (Blackman), and *bicornus* (Blackman).

Frons with a large, deep ovate concavity at each side of the median line, extending dorsad from slightly above the epistoma, more than half the long diameter being above the upper border of the eye, surfaces of concavities opaque, reticulate, apparently devoid of true punctures and hairs; with a thick, high, median carina, completely separating the two concavities and extending anteriorly to form the normal contour of the head, its surface opaque and reticulate; side between concavity and eye finely aciculate. Eye small, short oval, remotely separated above and below, inner margin entire, the facets fine. Antenna of the *rudis* type, club short oval, with first two sutures distinct, sinuate.

Pronotum 1.16 times as long as wide, widest in middle third, posterior outline weakly arcuate, posterior angles rounded; sides subparallel on posterior two-thirds, very broadly rounded in front, anterior margin not truly serrate; anterior area with rather numerous broad, low asperities, summit low; posterior area granulate-punctate, interstices reticulate; pubescence apparently lacking on posterior area, inconspicuous on asperate area.

Elytra very slightly wider than pronotum and 1.50 times as long, 1.69 times as long as wide; sides subparallel on anterior three-fourths, strongly rounded posterolaterally, with a prominent sutural apex; surface moderately shining; striae weakly impressed, very closely, rather coarsely punctured; interspaces narrow, very sparsely and finely punctured, becoming granulate posteriorly, with a few very small, inconspicuous hairs. Declivity convex, rather steep, coarsely granulate; suture not elevated; third, fifth, seventh, and ninth interspaces more elevated, with coarse granules or small tubercles; with an indefinite elevation at each side in third interspace in upper half of declivity; sutural apex prominent, densely granulate, its sides meeting at an angle of about 90 degrees.

The specimen here described is probably a male. No female has been seen.

Type locality.—Kentucky.

Host.—Unknown.

Type material.—Holotype, U. S. N. M. No. 56399.

The holotype bears the data "Ky., No. 33, Solt." (Soltau collection).

HYLOCURUS FLAGLERENSIS, new species

PLATE 29, FIGURE 2

Female.—Dark reddish brown, with summit of pronotum red; 2.37 mm. long, 2.59 times as long as wide; related to *langstoni* (Blackman) and *quadrispinosus* Blackman.

Frons convex above, subopaque, reticulate, strongly granulate, with a nearly straight, transverse carina at upper level of eyes, shining, continuous near median line, but more or less broken up into granules

toward sides; area below carina transversely impressed, feebly shining, finely granulate, reticulate; hairs short, fine and very inconspicuous except on epistomal margin; devoid of coarser bristles such as in *langstoni* and *quadrispinosus*. Eye small, short oval, inner margin entire, facets fine. Antenna of the usual *Hylocurus* type, with short, twisted scape bearing a few moderate hairs, much longer 6-segmented funicle and short oval club with two strongly setigerous sutures, the first sinuate-arcuate, the second bisinuate.

Pronotum 1.13 times as long as wide, widest near base, posterior outline arcuate, posterior angles strongly rounded; sides subparallel on posterior half, moderately broadly rounded in front, with anterior margin weakly serrate; anterior area with numerous low, wide asperities; summit moderately high; with a broad, moderately deep, transverse impression behind it; posterior area opaque to subopaque, granulate-punctate, interstices distinctly reticulate; hairs inconspicuous except in transverse impression.

Elytra slightly wider than pronotum and 1.37 times as long, 1.5 times as long as wide; sides subparallel on anterior two-thirds, broadly rounded at posterior angles, with a prominent sutural apex; surface moderately shining, strongly sculptured; striae strongly impressed on disk, less impressed on sides, punctures coarse, deep, closely placed, becoming deeper and larger posteriorly, often with fine hairs; interspaces moderately narrow, strongly rugose, becoming granulate-tuberculate posteriorly, punctures small, numerous, each bearing a stout, erect bristle, becoming longer and stouter toward declivity and on sides. Declivity rather steep but rounded above and at sides; suture flat, first and second striae nearly lacking, with punctures obsolescent; third, fifth, seventh, and ninth interspaces elevated and more strongly granulate; face of declivity with small to moderately large conical teeth as follows on each elytron: A small one near summit opposite first stria, a row of three (sometimes two) in third interspace, the uppermost small, the others progressively larger, a rather small one in seventh interspace, and a row of several small and one large tooth on ninth interspace; sutural apex prominent, densely, moderately finely granulate, its sides making an angle of 90 degrees; vestiture abundant, consisting of small hairs from striae and coarse bristles from interspaces, more numerous and conspicuous than on disk.

The male is unknown.

This species resembles *langstoni* in size and general proportions but differs in many respects. It can immediately be distinguished by the abundant elytral vestiture and by the absence of conspicuous vestiture on the frons as well as by numerous structural differences. There is a greater similarity between this species and *quadrispinosus*, but the latter is much smaller, is less rugged in sculpture, and also has rather conspicuous frontal vestiture.

Type locality.—Florida.

Host.—Unknown.

Type material.—Holotype and one paratype, U.S.N.M. No. 56400.

Described from two specimens, both obtained from traps in the Florida fruit-fly survey, the holotype from Flagler County, Fla., by D. G. Webb, March 1, 1933, the paratype from Marion County, Fla., by R. B. Mathews, January 24, 1935.

HYLOCURUS CRINITUS, new species

PLATE 29, FIGURES 3, 4

Female.—Dark reddish brown, hairy, rather shining, 2.52 mm. long, 2.89 times as long as wide; very distinct from any other North American form but moderately closely allied to *schwarzi* Blackman.

Frons convex above, subopaque, finely granulate-punctate, feebly, transversely impressed below, finely granulate and subopaque at sides, finely punctate and shining in median area; hairs of moderate length, rather sparse. Eye short oval, inner margin entire, facets moderate. Antenna (pl. 29, fig. 3) with 6-segmented funicle, 1.3 times as long as club; club long oval, 1.58 times as long as wide, first two sutures strongly indicated by sinuate rows of setae.

Pronotum 1.07 times as long as wide, widest on posterior third, posterior outline nearly straight, posterior angles slightly rounded; sides subparallel behind, feebly constricted anterior to middle, moderately broadly rounded in front, anterior margin with 10 distinct serrations; anterior area with numerous irregularly arranged asperities, with numerous moderate hairs; summit moderately high; posterior area subopaque to weakly shining; granulate-punctate, interstices reticulate, impressed at each side just behind summit; vestiture of rather sparse, short hairs on most of disk, much longer and more numerous in the two lateral impressions; sides more roughly punctate-granulate.

Elytra slightly wider than pronotum and 1.76 times as long, 1.80 times as long as wide; sides nearly straight and subparallel on anterior three-fourths, strongly rounded posterolaterally, with a broad, rather short, sutural acumination; surface rather brightly shining; striae impressed, punctures large and close, but rather shallow, with fine, short hairs; interspaces narrow, rugose-granulate, finely punctured, with erect hairs longer than on striae, becoming slightly coarser, more abundant, and much longer posteriorly. Declivity rather steeply arched, coarsely, ruggedly punctured; all interspaces more or less granulate; third and ninth interspaces elevated, with coarser granules; all of interspaces bearing numerous rather long, conspicuous, moderately coarse hairs; sutural apex prominent, granulate, its sides meeting at an angle of more than 90°.

Fore tibia (pl. 29, fig. 4) of the usual *Hylocurus* structure, widened distally, both sides sinuate, terminal mucro strong, its end recurved; distal end oblique, with five submarginal teeth.

The male is unknown.

Type locality.—Orange County, Calif.

Hosts.—*Rhus laurina* Nuttall and *R. integrifolia* (Nuttall) B. and H.

Type material.—Holotype and five paratypes, U. S. N. M. No. 56401. The type series was collected October 24, 1934, by W. Ebeling, from the two species of *Rhus* cited above.

Genus MICRACIS LeConte

Micracis LeConte, Trans. Amer. Ent. Soc., vol. 2, pp. 164–165, 1868; Proc. Amer. Phil. Soc., vol. 15, pp. 367–368, 1876.—Eichhoff, Ratio Tominicorum, Mém, Soc. Roy. Sci. Liége, ser. 2, vol. 8, pp. 302–304, 1878.—Swaine, Canada Dept. Agr., Ent. Branch, Bull. 14, pt. 2, p. 83, 1918.—Blackman, Mississippi Agr. Exp. Stat. Techn. Bull. 9, pp. 8–35, 1920; New York State Coll. Forestry Techn. Publ. 25, pp. 192–197, 1928.

Genotype.—*Micracis suturalis* LeConte.

The genus *Micracis* in the restricted sense used in this paper contains 10 valid species as follows: *suturalis* LeConte (synonym *aculeatus* LeConte), *hirtellus* LeConte, *acutipennis* Eichhoff, *meridianus* Blackman, *populi* Swaine, *swainei* Blackman, *cubensis* Blackman, *lignator* Blackman, *dimorphus* Schedl, and *knulli*, new species, described below. Of these *acutipennis* and *dimorphus* occur in Brazil and *cubensis* is from Cuba, while the other seven species occur in continental United States.

MICRACIS KNULLI, new species

Plate 29, Figures 5, 6

Female.—Dark reddish brown; 2.59 mm. long, 3.19 times as long as wide; allied to *lignator* Blackman but much smaller.

Frons convex above, with surface hidden by numerous moderately long, stout, spatulate bristles, sordid yellow in color and directed dorsad; lower frons somewhat flattened between eyes, the middle third bare, subopaque, distinctly reticulate, without punctures, lateral third densely covered by yellow hairs, finer and longer than those above. Eye long oval, moderately separated beneath, moderately coarsely granulate, with inner margin slightly sinuate. Antenna (pl. 29, fig. 5) testaceous, scape flattened, moderately strongly dilated distally, and ornamented by long, fine hairs; club flattened, with narrowly arcuate sutures, about 1.64 times as long as wide.

Pronotum 1.16 times as long as wide, slightly widest near middle, posterior outline feebly arcuate, posterior angles rounded; sides nearly

straight and subparallel behind middle, feebly constricted before middle, moderately broadly rounded in front, with anterior margin rather strongly serrate; summit moderate, with a distinct, broad, transverse impression behind it; anterior area with numerous moderate asperities, and many short, coarse, clavate or spatulate bristles; posterior area shining on disk, with small, moderately spaced punctures, bearing fine, short hairs or somewhat longer, coarser bristles. surface in impression not so shining, granulate-punctate and distinctly reticulate, with many coarser bristles; sides granulate-punctate.

Elytra slightly wider than pronotum and 1.97 times as long, 2.22 times as long as wide; sides subparallel on anterior three-fourths, then gradually narrowed and extended to sutural apex; surface shining, indistinctly reticulate; punctures in definite strial rows, only the first stria distinctly, the others slightly or not at all impressed on anterior disk, all striae impressed toward declivity; interspaces narrow, very finely punctured and bearing both short, fine hairs and longer, spatulate bristles. Declivity convex, summit and sides rounded, striae narrower and more strongly impressed than on disk, punctures smaller and closer; interspaces wider, suture and second interspace scarcely elevated, not granulate, third interspace elevated and granulate, all lateral interspaces more or less granulate, the fifth, seventh, and ninth more strongly than others; all interspaces with numerous conspicuous, suberect, spatulate bristles, some of them, especially on third and fifth interspaces, much longer, with ends tapering but still flattened.

Fore tibia (pl. 29, fig. 6) of usual type with sides subparallel, outer edge entire, terminal mucro large and slightly hooked; distal end obliquely truncate, with five submarginal teeth.

Male.—Similar in general habitus to female, but smaller (2.4 mm. long) and slightly stouter (3.03 times as long as wide); frons with uniform, short, stout, erect bristles throughout; antenna with scape not so broadly dilated distally, and with fewer, shorter hairs; vestiture more abundant on pronotum and elytra, with bristles more strongly spatulate and often scalelike.

Type locality.—Huachuca Mountains, Ariz.

Host.—Unknown.

Type material.—Holotype, allotype, and eight paratypes, U.S.N.M. No. 56402.

The holotype was taken September 9, 1938, in the Huachuca Mountains, Ariz., by D. J. and J. N. Knull; allotype and eight paratypes bear the data "Huachuca Mts., Arizona, VII–1–07, Miller Canyon, H. A. Kaeber."

Genus MICRACISELLA Blackman

Micracisella Blackman, New York State Coll. Forestry Techn. Publ. 25, pp. 192, 196–197, 1928.

Pscudomicracis Blackman (not Eggers), Mississippi Agr. Exp. Stat. Techn. Bull. 9, p. 20, 1920.

Genotype.—*Micracis nanula* LeConte.

In 1920 the writer recognized that the species *Micracis nanula* LeConte and *M. opacicollis* LeConte differed from *M. suturalis* LeConte and its allies in several important particulars. He therefore separated it under the subgeneric name *Pseudomicracis.* Later it was found that Eggers earlier in the year had used this same name as the generic designation of a group of African scolytids. Therefore, in 1928 the new name *Micracisella* Blackman was substituted for *Pseudomicracis* Blackman. It is now considered that the differences between the *suturalis* and *nanula* groups are so important as to necessitate the raising of *Micracisella* to full generic rank.

Generic description.—Body cylindrical, with ends of elytra extended into an acuminate apex as in *Micracis;* color reddish brown to black, with fine hairs and spatulate bristles or scales; antenna with scape flattened and somewhat extended laterally, with long hairs in female, club-shaped in male (as in *Hylocurus*), funicle 6-segmented; club shorter than in *Micracis;* eye very large, contiguous or narrowly separated in gular region, inner line emarginate, facets coarse; fore tibia slightly wider distally, with outer margin nearly straight, inner margin sinuate; submarginal, socketed teeth usually five in number, with one or two on outer margin, terminal mucro rather slender, curved.

Other species of *Micracisella* are *Micracis opacicollis* LeConte (synonym *Micracis asperulus* LeConte), *Micracis opacithorax* Schedl from Mexico, and *subnitida*, new species, here described.

MICRACISELLA SUBNITIDA, new species

Plate 29, Figures 7, 8

Male.—Dark reddish brown, with anterior half of pronotum and elytral declivity lighter; 1.83 mm. long, 3.14 times as long as wide; allied to *opacicollis* (LeConte) and *nanula* (LeConte).

Frons convex above, subopaque, finely granulate-punctate above and at sides, with rather sparse, flattened, scalelike hairs; median area below impressed, shining, with only a few very fine punctures; epistomal hairs slender, directed orad. Eye large, long oval, narrowly separated below, inner line emarginate, facets rather coarse. Antenna (pl. 29, fig. 7) with scape club-shaped, with only a few long hairs, slightly shorter than club, distinctly shorter than funicle; club ovate, 1.27 times as long as wide, with arcuate sutures.

Pronotum 1.08 times as long as wide, widest near base, posterior margin weakly arcuate, posterior angles distinctly rounded; sides subparallel on posterior half, slightly constricted in front of middle, rather broadly rounded in front, anterior margin with only a few low serrations; anterior area lighter in color, asperities rather numerous, of moderate size, with moderate hairs; summit slightly anterior to middle, rather low; posterior area dark reddish brown, weakly shining, reticulate, sparsely punctate-granulate, with short, flattened, scalelike, cinereous hairs directed toward summit.

Elytra equal in width to pronotum, and 1.92 times as long, 2.07 times as long as wide; sides subparallel on anterior four-fifths, narrowly rounded behind, with a short sutural apex; surface moderately shining; strial punctures small, shallow, in regular subimpressed, strial rows; interspaces narrow, rugulose, finely punctate-granulate, each with a row of short, scale-like hairs, less numerous and more slender than in *opacicollis*. Declivity convex, striae impressed, interspaces, except second, convex, granulate, with spatulate hairs, slightly longer but no more numerous than on disk; sutural apex small and inconspicuous.

Fore tibia (fig. 8) of same type as in *opacicollis*.

The female is unknown.

Type locality.—Santa Rita Mountains, Ariz.

Host.—Unknown.

Type Material.—Holotype, U. S. N. M. No. 56403.

Described from a single specimen collected by H. F. Wickham.

Genus THYSANOES LeConte

Thysanoes LeConte, Proc. Amer. Phil. Soc., vol. 15, p. 369, 1876.—LeConte and Horn, Smithsonian Misc. Coll., vol. 26, No. 507, pp. 519–520, 1883.—Swaine, Canada Dept. Agr., Ent. Branch, Bull. 14, pt. 2, p. 82, 1918.—Blackman, Mississippi Agr. Exp. Stat. Techn. Bull. 9, pp. 36–45, 1920; New York State Coll. Forestry Techn. Publ. 25, pp. 197–199, 1928.

Genotype.—Thysanoes fimbricornis LeConte. (Monobasic.)

Aside from the genotype, three species have been described, *berchemiae* Blackman and *lobdelli* Blackman from the southeastern United States, and *xylophagus* Blackman from Arizona and New Mexico. In the present paper three new species are described, two from Texas and one from Mexico.

KEY TO THE SPECIES OF THYSANOES LECONTE

1. Larger, females 1.71–2.0 mm. long 2
   Smaller, females 1.39–1.55 mm. long 5
2. Mature color yellowish brown; frons with a small pit or fovea at center; punctures of elytra finer; antennal club narrow, first segment about one-third its entire length ..... fimbricornis LeConte

Mature color dark brown to black; frons without central pit; punctures of elytra moderate to coarse; antennal club broader, first segment less than one-third its entire length ---- 3

3. Frons in female longitudinally sulcate below; summit of pronotum concolorous, asperities finer; fore tibia with distal end oblique ---- berchemiae Blackman

Frons in female not sulcate below; summit of pronotum much lighter in color, asperities coarser ---- 4

4. Frons longitudinally carinate above; pronotum distinctly longer than wide; elytral punctures not so coarse; body smaller and more slender; southeastern United States ---- lobdelli Blackman

Frons not carinate above; pronotum not notably longer than wide; elytral punctures rather coarse; body larger and stouter; Arizona, New Mexico ---- xylophagus Blackman

5. Body slender, 3.0 times as long as wide; frons with short, broad, cinereous scales; pronotum distinctly longer than wide; elytra moderately rounded behind ---- texanus, new species

Body moderately stout, less than 2.7 times as long as wide; frons with short, fine hairs; pronotum scarcely longer than wide ---- 6

6. Pronotal vestiture of spatulate setae; elytra with strial punctures smaller and closer, interspaces narrower; declivital vestiture nearly uniform ---- vachelliae, new species

Pronotal vestiture shorter, broader, more scalelike; elytral punctures coarser, not so close, interspaces wider, more rugose; declivital vestiture notably longer on third interspace ---- retamae, new species

THYSANOES TEXANUS, new species

PLATE 30, FIGURE 13

Female.—Reddish brown with elytra darker; 1.55 mm. long, nearly exactly 3.00 times as long as wide.

Frons concave from eye to eye, rather sharply margined at sides, surface shining, reticulate, with fine punctures bearing short, broad, cinereous scales, easily abraded. Eye very large, broad ovate, inner margin entire, facets coarse. Antennal scape (pl. 30, fig. 13) longer than club or funicle; club 1.74 times as long as wide, with two distinct, setose sutures, first arcuate, second more strongly arcuate.

Pronotum 1.16 times as long as wide, widest near middle, posterior outline feebly arcuate, posterior angles scarcely rounded; sides very feebly arcuate from base to faint constriction anterior to middle, broadly rounded in front, with anterior margin not regularly serrate; anterior area with broad, low asperities and short, stout, cinereous bristles; summit moderate, slightly in front of middle; posterior area horizontal, its surface subopaque, distinctly reticulate, with rather sparse, very fine and shallow punctures and short, rather fine bristles on disk, somewhat longer on sides.

Elytra equal in width to pronotum and 1.67 times as long, 1.85 times as long as wide; sides subparallel on more than basal three-fourths, moderately broadly rounded behind; strial punctures deep, close, of

moderate size, in regular strial rows, only first stria impressed on disk and sides; interspaces narrow, rugulose, with sparse, fine punctures on disk; vestiture of very fine, very short hairs from strial punctures and a few short, moderately fine, erect, spatulate setae from interspaces. Declivity convex; striae impressed, punctures finer than on disk, each with small, inconspicuous hair; interspaces slightly convex, bearing short, erect, broadly spatulate, scalelike hairs, much more numerous and more conspicuous than on disk.

The male is unknown.

Type locality.—Brownsville, Tex.

Host.—Unknown.

Type material.—Holotype and one paratype, U.S.N.M. No. 56404.

THYSANOES VACHELLIAE, new species

PLATE 30, FIGURES 11, 12

Female.—Light reddish brown, with anterior pronotum and elytral declivity distinctly darker; holotype 1.41 mm. long, 2.69 times as long as wide.

Frons concave from eye to eye, moderately sharply margined at sides, surface brightly shining, reticulate, very finely punctured, with very fine, short, inconspicuous hairs. Eye very large, broad-oval, facets coarse, inner margin entire. Antenna (pl. 30, fig. 11) with club slightly shorter than funicle, scape longer than either; club 1.36 times as long as wide, with distinct, arcuate, setose sutures.

Pronotum 1.02 times as long as wide, widest near middle, posterior outline feebly arcuate, posterior angles scarcely rounded; sides arcuate from base to distinct constriction anterior to middle, very broadly rounded in front, with anterior margin not serrate; anterior area with sparse, rather low, small asperities and short, stout, spatulate bristles; summit moderate, in front of middle; posterior area horizontal, its surface subopaque, finely, distinctly reticulate, punctures sparse, fine and very shallow, with shorter, smaller, more slender bristles than on anterior area.

Elytra equal in width to pronotum and 1.69 times as long, 1.78 times as long as wide; sides subparallel on more than basal two-thirds, broadly rounded behind; strial punctures in nearly regular rows, deep, close, moderately coarse, first stria weakly impressed, others not impressed; interspaces narrow, rugulose, punctures small, bearing short, stout bristles, longer and more spatulate posteriorly. Declivity steeply arched, convex; striae impressed, punctures smaller than on disk; interspaces somewhat convex, with punctures bearing moderately short, erect, spatulate bristles, more numerous, longer, and more conspicuous than on disk.

Fore tibia (pl. 30, fig. 12) with sides entire, nearly straight and subparallel, terminal mucro long and stout, curved; distal end with three submarginal, socketed teeth.

Male.—Somewhat shorter (1.34 mm. long) and stouter (2.61 times as long as wide); frons transversely impressed below; anterior margin of pronotum distinctly serrate, anterior area more strongly asperate; vestiture of elytral declivity more broadly spatulate, scalelike, that on third interspaces longer than on others.

Type locality.—Brownsville, Tex.

Host.—*Vachellia farnesiana* (L.) W. and A.

Type material.—Holotype, allotype, and nine paratypes, U.S.N.M. No. 56405.

The type series was reared by H. S. Barber in 1904 from limbs of *Vachellia farnesiana* pruned by *Oncideres* sp.

THYSANOES RETAMAE, new species

PLATE 30, FIGURE 14

Female.—Reddish brown, with posterior half of pronotum lighter; 1.41 mm. long, 2.57 times as long as wide.

Frons strongly concave between eyes, distinctly margined, with a few rather short hairs directed dorsad, and with a few finer, longer hairs directed orad from the epistoma. Eye moderately broad, oval, inner margin entire, facets rather coarse. Antenna (pl. 30, fig. 14) with club and scape subequal in length, funicle somewhat shorter, scape rudely club shaped, with a sparse fringe of rather long hairs; funicle 6-segmented, with pedicel more than one-third of total length, distal segments progressively wider; club 1.45 times as long as wide, sutures all setose, and all arcuate.

Pronotum almost exactly as wide as long, widest slightly behind middle, posterior outline weakly arcuate, posterior angles scarcely rounded; sides arcuate from base to distinct constriction anterior to middle, very broadly rounded in front, anterior margin not serrate; anterior area with sparse, broad, low asperities, and short, stout, scalelike setae; summit moderate, very near middle; posterior area horizontal, surface subopaque, finely reticulate, with fine, shallow punctures bearing short, spatulate setae.

Elytra very slightly narrower than pronotum and 1.61 times as long, 1.67 times as long as wide; sides subparallel on anterior two-thirds, rather broadly rounded behind; surface shining, roughly punctured; strial punctures, deep, rather large, in regular rows, only the first stria impressed; interspaces narrow, rugose, with fine punctures bearing short, erect, scalelike or spatulate setae, longer and coarser posteriorly. Declivity steeply arched, convex, with strial punctures deep but slightly smaller than on disk; interspaces narrow, rugose, with numerous con-

spicuous, spatulate setae, longer and wider than on disk, those on third interspace notably longer than others near apex.

The male is unknown.

Type locality.—Mexico.

Host.—"Retama wood."

Type material.—Holotype and one paratype, U.S.N.M. No. 56406.

The holotype and paratype were intercepted at quarantine in "Retama wood," June 29, 1938.

Genus PSEUDOTHYSANOES Blackman

Pseudothysanoes BLACKMAN, Mississippi Agr. Exp. Stat., Techn. Bull. 9, pp. 46–50, 1920; New York State Coll. Forestry Techn. Publ. 25, pp. 199–207, 1928.
Cryphalus LECONTE (in part), Proc. Amer. Phil. Soc., vol. 15, p. 362, 1876.
Thysanoes LECONTE, Swaine (in part), Canada Dept. Agr., Ent. Branch, Bull. 14, pt. 2, p. 82, 1918.

Genotype.—Pseudothysanoes drakei Blackman.

Other specials are *Pseudothysanoes* (synonym *Cryphalus*) *rigidus* (LeConte) and *lecontei* Blackman from the eastern States, *hopkinsi* Blackman from California, and *phoradendri* Blackman, *sedulus* Blackman, *gambetti* Blackman and *barberi* Blackman from the southwestern United States. To these is added *P. huachucae*, new species from southern Arizona, described below.

PSEUDOTHYSANOES HUACHUCAE, new species

PLATE 30, FIGURE 15

Male.—Reddish brown; 1.21 mm. long, 2.44 times as long as wide; allied to *hopkinsi* but differing in several respects.

Frons convex above, strongly, transversely flattened below, shining, strongly, roughly punctured, with short, stout, scalelike hairs; epistomal margin with longer, slender hairs extending orad and partly concealing mandibles. Eye broadly oval, inner margin entire, facets small. Antenna (pl. 30, fig. 15) with scape longer than either club or funicle, slightly club shaped with scanty fringe of long hairs, club shorter than funicle, 1.25 times as long as wide, sutures indicated by setal rows, first slightly bisinuate, second nearly transverse.

Pronotum very slightly wider than long, subtriangular in shape, widest near base, posterior outline weakly arcuate, posterior angles rounded; sides convergently arcuate, weakly constricted anterior to middle, narrowly rounded in front, subangulate medially, with several small serrations; summit lighter in color, high, slightly behind center: anterior area with subconcentric rows of small asperities and short, stout setae not extending to middle at sides; posterior area sloping toward base, feebly shining, reticulate, finely, indistinctly punctured on disk and sides, appearing glabrous but with a few very fine, inconspicuous hairs.

Elytra slightly wider than pronotum and 1.54 times as long, 1.47 times as long as wide; sides subparallel on basal two-thirds, rather narrowly rounded behind, subangulate at apex, with a broad, shallow emargination at suture, as seen from behind, exposing tip of abdomen; surface moderately shining, irregularly, indistinctly reticulate; strial punctures deep, close, rather coarse, in regular feebly impressed rows; interspaces moderately narrow, slightly convex, rugulose, with a few fine punctures; vestiture of minute, scarcely visible hairs from strial punctures and short, moderately stout setae from interspaces, becoming longer and spatulate posteriorly on disk and sides. Declivity sloping, originating slightly behind middle, with no special modifications except that the setae of interspaces are longer, and spatulate, and the strial punctures are very small and more shallow, with strial rows not impressed.

Female.—Larger and more slender, 1.43 mm. long, 2.69 times as long as wide; frons weakly concave from eye to eye, finely, roughly punctured; pronotum broadly rounded in front, margin without serrations; elytra with setae of interspaces short, spatulate, nearly uniform throughout.

Type locality.—Huachuca Mountains, Ariz.

Host.—Unknown.

Type material.—Holotype, allotype, and eight paratypes, U.S.N.M. No. 56407.

The type series was collected by H. A. Kaeber, June 25, 1907.

STENOCLYPTUS, new genus

Genotype.—*Stenoclyptus rhois*, new species, here described.

Body form subcylindrical; frons flattened and with conspicuous vestiture; eye short oval with inner margin entire; antenna of typical micracine structure, with twisted, club-shaped scape, bearing numerous long hairs; funicle of six segments and club with annulated sutures notched at sides and marked by lines of setae; pronotum with summit postcentral, asperities rather coarse and sparse, confined to an oval area, the sides being without asperities; elytra subtruncate behind, declivity bisulcate; fore coxae separated; fore tibia slightly widened distally and with sides sinuate as in *Hylocurus* Eichhoff, but with long terminal mucro and two or three large submarginal teeth; tarsus with third segment slender.

This new genus bears a deceptive, superficial resemblance to *Cactopinus* Schwarz, but is only very remotely related.

STENOCLYPTUS RHOIS, new species

PLATE 29, FIGURES 9, 10

Female.—Dark piceous, nearly black; 1.39 mm. long, 2.50 times as long as wide.

Frons convex above, flattened between eyes, surface shining, finely, rather closely punctured, with moderately long, conspicuous, cinereous hairs, directed dorsad. Eye short ovate, with inner line entire; facets rather fine. Antenna (pl. 29, fig. 9) with scape club shaped, its shaft strongly curved and twisted, with moderately abundant, long hairs; funicle 1.21 times as long as either scape or club, with six segments, pedicel more than one-third of entire length, distal segments not greatly widened; club 1.7 times as long as wide, sutures weakly arcuate, indicated by strong setal rows and annulations, with distinct notches at sides.

Pronotum almost exactly as wide as long, widest on posterior half, posterior outline weakly arcuate, posterior angles rounded, sides weakly arcuate to beyond middle, scarcely constricted in front of middle, moderately narrowly rounded in front, anterior margin without serrations but with two submarginal asperities extending beyond margin; summit high, distinctly behind middle, lighter in color; anterior area rather coarsely but sparsely asperate on a limited ovate area, with inconspicuous hairs interspersed, sides of anterior half devoid of asperities, shining, reticulate, finely, rather sparsely punctured, with longer, slender hairs; posterior area shining, distinctly reticulate, with rather large punctures, closely placed near summit, but progessively sparser laterally, hairs short and inconspicuous on disk, longer at sides.

Elytra slightly wider than pronotum and 1.81 times as long, 1.61 times as long as wide; sides subparallel on more than anterior three-fourths, very broadly rounded, subtruncate behind; surface shining, indistinctly reticulate, roughly sculptured; strial punctures moderately coarse, rough, shallow, in fairly definite rows, only the first impressed and it rather weakly; interspaces rugose, with fine punctures bearing short, inconspicuous hairs, longer at sides. Declivity steep, suture elevated, especially posteriorly, with a moderate sulcus at each side, lateral convexities rather high; entire declivity subshining, distinctly reticulate, rugose, strial punctures smaller than on disk, interspaces with a few fine hairs of moderate length. Venter of thorax and abdomen with rather long, slender hairs.

Fore tibia (pl. 29, fig. 10) somewhat wider distally, sides sinuate, mucro rather long and slender, curved, distal end diagonally truncate, with two submarginal teeth.

The male is unknown.

Type locality.—Orange, Calif.
Host.—*Rhus integrifolia* (Nuttall) B. and H.
Type material.—Holotype and one paratype, U.S.N.M. No. 56408.
The type series was collected October 24, 1934, by W. Ebeling.

STENOCLYPTUS CEANOTHI, new species

Female.—Piceous-black, subopaque; 1.68 mm. long, 2.68 times as long as wide; similar to *rhois* in habitus but with finer surface structures more or less hidden by an incrustation.

Frons convex above, weakly concave between eyes, finely, closely punctured, with rather coarse, moderately long hairs directed dorsad on most of surface, directed orad from epistoma so as to veil the mandibles. Eye rather small, short ovate, inner line entire, facets moderately small. Antenna very similar to that of *rhois*, but with hairs of scape more abundant and longer.

Pronotum about as long as wide, widest one-third of distance from base, posterior outline nearly straight, posterior angles strongly rounded; sides strongly arcuate from base to rather narrowly rounded anterior margin, which bears two strong serrations; summit high, lighter in color, distinctly behind middle; anterior area coarsely, rather sparsely asperate on an ovate area, with hairs coarser and more conspicuous than in *rhois;* sides and posterior disk subopaque or feebly shining, reticulate, with small, shallow punctures (often concealed by incrustation), hairs coarser than in *rhois*, short and inconspicuous except on posterior margin and in impression behind summit.

Elytra slightly wider than pronotum and 1.76 times as long, 1.68 times as long as wide; sides subparallel on anterior three-fourths, very broadly, subtruncately rounded behind; surface opaque owing to an apparent incrustation which conceals most of the strial punctures; first stria feebly impressed, only near declivity, the others not impressed; interspaces with surface concealed by incrustation, but indicated by rows of short, fine hairs, longer and thicker at sides and behind. Declivity rather steep, suture elevated, more strongly posteriorly, with a sulcus at each side, lateral convexities rather high; higher than suture above, surface incrusted in type but one paratype showing surface subshining, finely rugosely punctate; hairs rather sparse, stouter than in *rhois*.

Fore tibia with sides sinuate, subparallel as in *Hylocurus*, outer edge not serrate, terminal mucro long, somewhat curved, distal end oblique and armed with three submarginal teeth.

The male is unknown.
Type locality.—Yosemite National Park, Calif.
Host.—*Ceanothus integerrimus* H. and A.

Type material.—Holotype and three paratypes, U.S.N.M. No. 56409. The type series was collected February 28, 1934, from *Ceanothus integerrimus*, by D. DeLeon.

Genus CRYPTOCLEPTES Blackman

Cryptocleptes Blackman, Mississippi Agr. Exp. Stat. Techn. Bull. 9, p. 51, 1920; New York State Coll. Forestry Techn. Publ. 25, pp. 207–208, 1928.

Genotype.—Cryptocleptes dislocatus Blackman.

Previously known species are two in number, *C. dislocatus* Blackman from the southeastern part of the United States and *minor* Blackman from Cuba. In the present paper four new species are described, one from Texas, one from Cuba, and two from Colombia.

KEY TO THE SPECIES OF CRYPTOCLEPTES BLACKMAN

1. Antennal scape in female longer than funicle and with abundant, very long hairs; Cuba ..... insularis, new species
   Antennal scape in female subequal to or shorter than funicle, hairs less abundant and moderately long 2
2. Pronotum much wider than long and very broadly rounded in front in both sexes; head visible from above; Cuba ..... minor Blackman
   Pronotum little wider than long in female, distinctly wider in male, less broadly rounded in front; head concealed from above in both sexes 3
3. Antenna with one or more funicular segments obsolescent (pl. 30, fig. 21); Colombia, South America, in *Albizzia malacocarpa* Standley ..... murilloi, new species
   Antenna with funicular segments normal (pl. 30, fig. 22) 4
4. Male stouter, 2.24 times as long as wide; antennal club subglobose; female unknown; Colombia, South America ..... colombianus, new species
   Male more slender, 2.36–2.84 times as long as wide; antennal club ovate or obovate; females 2.70–2.84 times as long as wide; Southern States 5
5. Larger, 1.3 mm. long; frons strongly concave, with fovea at center; antennal club ovate; setae of elytral declivity coarser and longer; southeastern United States, in *Hicoria* spp. ..... dislocatus Blackman
   Smaller, 1.06 mm. long; frons moderately concave, without central fovea; antennal club obovate; setae of elytral declivity shorter and finer; Texas, in *Acacia berlandieri* Benth. ..... acaciae, new species

CRYPTOCLEPTES INSULARIS, new species

Plate 30, Figures 16, 17

Female.—Light reddish brown; 1.26 mm. long, 2.44 times as long as wide.

Frons concave nearly from eye to eye, distinctly margined at sides; surface of concavity shining, finely punctured; with fine, short, inconspicuous hairs, much longer on epistoma and directed orad so as to conceal mandibles. Eye broad-oval, with inner line entire; facets

moderately large. Antenna (pl. 30, fig. 16) with scape club shaped, slightly flattened, longer than either funicle or club, ornamented with a rather dense brush of long, light-colored hairs, which veil frons when antennae are extended; funicle 6-segmented, with pedicel more than half as long as five distal segments together; club slightly shorter than funicle, about 1.39 times as long as wide, sutures incompletely outlined by setae.

Pronotum only slightly wider than long, widest near base, posterior outline nearly straight, posterior angles rounded; sides weakly arcuate behind, feebly constricted in front of middle, anterior margin moderately broad, weakly serrate; anterior area rather sparsely and weakly asperate, with moderately fine and short hairs; summit moderate; posterior area horizontal, surface shining, distinctly reticulate, with sparse, shallow, fine punctures, subglabrous.

Elytra as wide as pronotum and 1.65 times as long, 1.55 times as long as wide; sides subparallel on more than basal two-thirds, with ends meeting to form a shallow emargination at suture, exposing tip of abdomen; surface moderately shining; strial punctures strong, in definite, regular, not impressed rows, bearing minute hairs; interspaces of moderate width, rugulose and finely punctured on disk near suture, becoming finely, uniseriately granulate behind, hairs moderately short, rather stout; sides with strial punctures not so deep; interspaces smoother, hairs less numerous. Declivity convex, strial punctures as on disk, first stria impressed; interspaces uniseriately, finely granulate, with short, erect, spatulate setae.

Male.—Shorter and stouter than female, 1.09 mm. long, 2.23 times as long as wide; frons transversely impressed below, surface subopaque, reticulate, with fine punctures and fine, inconspicuous hairs; pronotum with anterior margin bearing five serrations, asperities stronger; elytra with spatulate setae longer at summit of declivity and on third to sixth interspaces.

Type locality.—Cayamas, Cuba.

Host.—Unknown.

Type material.—Holotype and allotype, U.S.N.M. No. 56410.

The type series was collected by E. A. Schwarz.

CRYPTOCLEPTES MURILLOI, new species

PLATE 30, FIGURE 21

Female.—Very dark reddish brown; 1.19 mm. long, 2.94 times as long as wide.

Frons broadly concave between eyes, with a small, shallow pit at center, surface moderately shining, reticulate, finely punctured, with fine, short, inconspicuous hairs. Eye short oval, inner line entire,

facets moderately small. Antenna (pl. 30, fig. 21) with scape and funicle subequal in length, and club shorter; scape flattened, widened distally, fringed with long, fine hairs; funicle with pedicel nearly as long as distal portion, of which the five segments are irregular in size, the third and fifth funicular segments apparently obsolescent; club broad ovate, only slightly longer than wide, sutures imperfect.

Pronotum 1.06 times as long as wide, widest behind, posterior outline weakly arcuate, posterior angles scarcely rounded; sides straight and subparallel on posterior half, distinctly but weakly constricted in front of middle, very broadly rounded in front, anterior margin not serrate; anterior area with moderate asperities and erect, spatulate setae; summit slightly anterior to middle, rather high, lighter in color; posterior area shining, reticulate, punctures very shallow, rather sparse; subglabrous.

Elytra equal in width to pronotum and 1.80 times as long, 1.91 times as long as wide; sides subparallel on anterior three-fourths, narrowly rounded behind, with ends meeting to form a broad, shallow emargination at suture as seen from behind, exposing tip of abdomen; surface moderately shining, feebly reticulate; strial punctures small, rather shallow, in regular rows, striae except the first one not impressed; interspaces of moderate width, finely rugulose, punctures very fine, rather sparse on disk and sides, with a few short inconspicuous hairs. Declivity convex, strial punctures fine, not so shallow as on disk, with minute hairs, first stria impressed; interspaces with fine punctures and short, erect, spatulate setae.

Male.—Considerably shorter (1.05 mm. long) and stouter (2.66 times as long as wide); frons convex above, transversely flattened below, surface shining; pronotum more strongly sculptured with anterior margin distinctly serrate; elytra with strial punctures larger, vestiture more conspicuous.

Type locality.—Colombia, South America.

Host.—Albizzia malacocarpa Standley.

Type materials.—Holotype, allotype, and 18 paratypes, U.S.N.M. No. 56411.

Holotype, allotype, and 10 paratypes bear the labels "San Vicente, Sant. Colombia, L. M. Murillo 157, Calopo, June, '35, 692 m. alt., 27° C."; 8 paratypes, "On branch *Albizzia malacocarpa*, Dpt. Santander, Colombia, S. A., 700-1300 m., R. P. Roba, Numbers C. H. and B. U."

CRYPTOCLEPTES COLOMBIANUS, new species

PLATE 30, FIGURE 18

Male.—Reddish brown, with summit of pronotum lighter; 0.99 mm. long, 2.24 times as long as wide; allied to *murilloi*, new species, but shorter and much stouter.

Frons nearly flat from eye to eye, with a small, shallow pit at center; surface shining, reticulate, finely punctured, vestiture abraded. Eye short oval, inner line entire, facets small. Antenna (pl. 30, fig. 18) with club and scape subequal in length, funicle shorter; scape rudely club-shaped with a few rather short hairs; club 1.31 times as long as wide, with sutures imperfectly outlined by sparse setae.

Pronotum 1.11 times as wide as long, widest near base, posterior outline nearly straight, posterior angles slightly rounded; sides weakly arcuate from base to anterior constriction, moderately rounded in front, with six rather weak serrations; anterior area with rather small, sparse asperities, and a few inconspicuous setae; summit moderate, at about middle; posterior area horizontal, surface feebly shining, reticulate, with a few fine, shallow punctures and a few inconspicuous hairs.

Elytra slightly wider than pronotum and 1.54 times as long, 1.37 times as long as wide; sides subparallel on slightly more than basal half, narrowly rounded behind; surface fairly shining; striae regular, impressed posteriorly, punctures small; interspaces reticulate, rugulose, punctures fine, setae short, inconspicuous. Declivity sloping, originating midway of elytra; striae impressed and punctures as on disk; interspaces slightly convex, each with a row of conspicuous, cinereous, erect, broadly spatulate setae or scales.

The female is unknown.

Type locality.—San Vicente, Colombia, South America.

Host.—Unknown.

Holotype.—U.S.N.M. No. 56412.

The holotype bears the label "San Vicente, Santander, Colombia; L. M. Murillo, Calapo, June, '35, 692 m. alt., 27° C."

CRYPTOCLEPTES ACACIAE, new species

PLATE 30, FIGURES 19, 20

Female.—Reddish brown, with basal half of pronotum lighter; 1.06 mm. long, 2.74 times as long as wide.

Frons moderately concave between eyes, finely, closely punctured above and at sides, with fine, moderately short, cinereous hairs extending orad, median half of concavity shining, scarcely punctate, with many scanty, short, fine, inconspicuous hairs. Eye broad oval, inner margin entire, facets rather small. Antenna (pl. 30, fig. 19) with club obovate, 1.28 times as long as wide, 0.70 as long as funicle, sutures arcuate, with incomplete setal rows.

Pronotum 1.04 times as long as wide, widest near base, posterior outline faintly arcuate, posterior angles rounded; sides arcuate on posterior half, distinctly constricted in front of middle, very broadly

rounded in front, anterior margin not serrate; anterior area with broad, low asperities and short, stout, spatulate setae; summit moderately high, at middle; posterior area nearly horizontal, surface shining, reticulate, sparsely, shallowly, finely punctured, with short, fine hairs.

Elytra equal in width to pronotum and 1.86 times as long, 1.79 times as long as wide; sides subparallel well behind middle, narrowly rounded behind; surface subshining, faintly reticulate; strial punctures in regular, not impressed rows; interspaces narrow, with very fine uniseriate punctures, each bearing a fine, erect hair. Declivity convex, strial punctures slightly smaller than on disk, each bearing a minute hair; interspaces with much finer punctures bearing short, erect, narrowly clavate setae, much more conspicuous than on disk.

Male.—Shorter than female and considerably stouter, 0.97 mm. long, 2.43 times as long as wide; frons convex above, transversely flattened below, surface subopaque, reticulate, finely punctured; pronotum with anterior margin distinctly serrate; elytral vestiture coarser and more abundant, especially on declivity.

This species is rather closely allied to *Cryptocleptes dislocatus* Blackman but is slightly stouter, with elytra more narrowly rounded behind and declivital vestiture not so coarse, and the detailed structure of frons, antenna, etc., shows considerable differences.

Type locality.—Brownsville, Tex.

Host.—Acacia berlandieri Benth.

Type material.—Holotype, allotype, and 44 paratypes, U.S.N.M. No. 56413.

The type series was reared from the limbs of *Acacia berlandieri* collected at Brownsville, Tex., August 1904, by H. S. Barber.

CHALCOHYUS, new genus

Genotype.—Chalcohyus securigerus, new species.

Resembling certain species of *Cryptocleptes* in habitus but stouter; head concealed from above, frons flattened, weakly concave in female; antennal club securiform, with distal end pointed, sutures obscure; funicle 6-segmented, segments not widened distally, loose jointed, as long as or longer than club and scape together in female, not so excessively long in male; fore coxae nearly contiguous, fore tibia (fig. 22) slightly narrower distally, distal end very obliquely truncate with three submarginal teeth, mucro thick, flattened, recurved and notched at end; pronotum and elytra somewhat similar to those of *Thysanoes* in sculpture and vestiture.

CHALCOHYUS SECURIGERUS, new species

PLATE 30, FIGURES 22, 23, 24

Female.—Light to dark reddish brown; 1.25 mm. to 1.68 mm. long, holotype 1.60 mm. long, 2.55 times as long as wide; anterior end of pronotum and posterior ends of elytra darker.

Frons moderately concave from eye to eye and from epistoma to well above upper border of eye, surface shining throughout, brilliantly shining and impunctate below in median third, finely, rather closely punctured at sides and above, hairs short and inconspicuous over most of punctured area, with a thin fringe of very long yellow hairs extending from above nearly to epistomal margin and partly veiling surface; epistomal margin at each side with a dense brush of long yellow hairs arising just above base of mandible and extending ventromesad, concealing all but the tip of the mandible. Eye small, short oval, inner line entire, facets moderately small. Antenna (pl. 30, fig. 24) nearly half as long as body, the club and distal joint of funicle extending beyond posterior border of pronotum; scape less than one-fourth as long as entire antenna, testaceous, somewhat widened distally, with only a few short hairs; funicle of six long, loose-jointed segments, of which the pedicel is testaceous and nearly half as long as the scape, distal segments piceous-brown, more slender, of nearly uniform diameter, and subequal in length except the last; club piceous, longer than scape, little more than half as long as funicle, hatchet shaped or lance shaped, arrangement of setae showing little evidence of sutural rows.

Pronotum 1.05 times as wide as long, widest at base, posterior border nearly straight, posterior angles scracely rounded; sides feebly, arcuately converging on posterior half, feebly constricted in front of middle, broadly rounded in front, anterior margin not serrate; anterior area with moderate-sized asperities and short, stout bristles; summit moderately high; posterior area nearly horizontal, shining, reticulate, finely, not closely punctured, with fine granules just behind summit; vestiture of short, fine hairs on disk, longer and coarser near summit.

Elytra slightly wider than pronotum and 1.66 times as long, 1.57 times as long as wide; sides subparallel on anterior three-fourths, moderately rounded behind; surface moderately shining, indistinctly reticulate; finely punctured in regular rows, only first strial row impressed; interspaces finely rugulose, very finely punctured, with rather short, fine, erect bristles, scarcely visible except in profile. Declivity convex, much darker in color, striae punctured as on disk, with a few minute hairs; interspaces more closely punctured, with rather short, erect spatulate, scalelike bristles in double rows on first three interspaces.

Male.—Considerably shorter and stouter than female, 1.35 mm. long, 2.15 times as long as wide; frons finely granulate-punctate, convex above, subopaque, transversely impressed below, more shining, more finely punctured, hairs short and inconspicuous; antenna (pl. 30, fig. 23) superficially different from that of female, but essentially similar, except that the funicle is more nearly of the usual type and little longer than the scape; pronotum with anterior margin serrate; elytra about as wide as in female but much stouter, 1.27 times as long as wide.

Type locality.—Puerto Rico and Haiti.

Host plant.—*Amyris balsamifera* L.

Type material.—Holotype, allotype, and 22 paratypes, U. S. N. M. No. 56414.

The holotype, allotype, and 4 paratypes were taken at Yauco, Puerto Rico, February 12, 1934, by R. G. Oakley; 18 paratypes were intercepted at New York in wood of *Amyris balsamifera* in shipment from Haiti, November 17, 1941.

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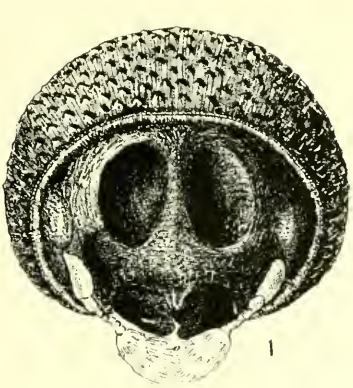
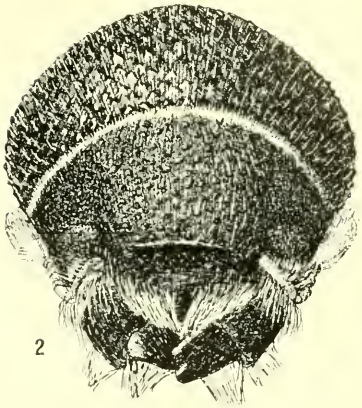
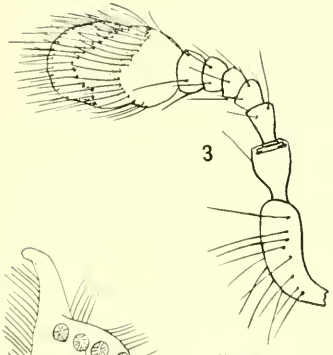
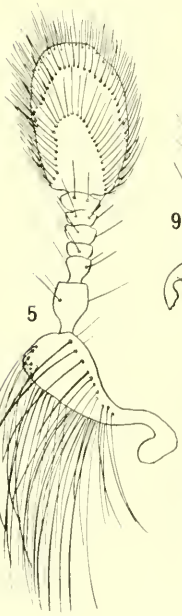
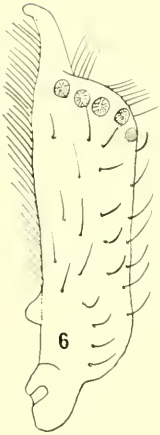
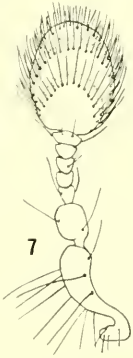


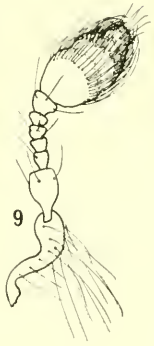




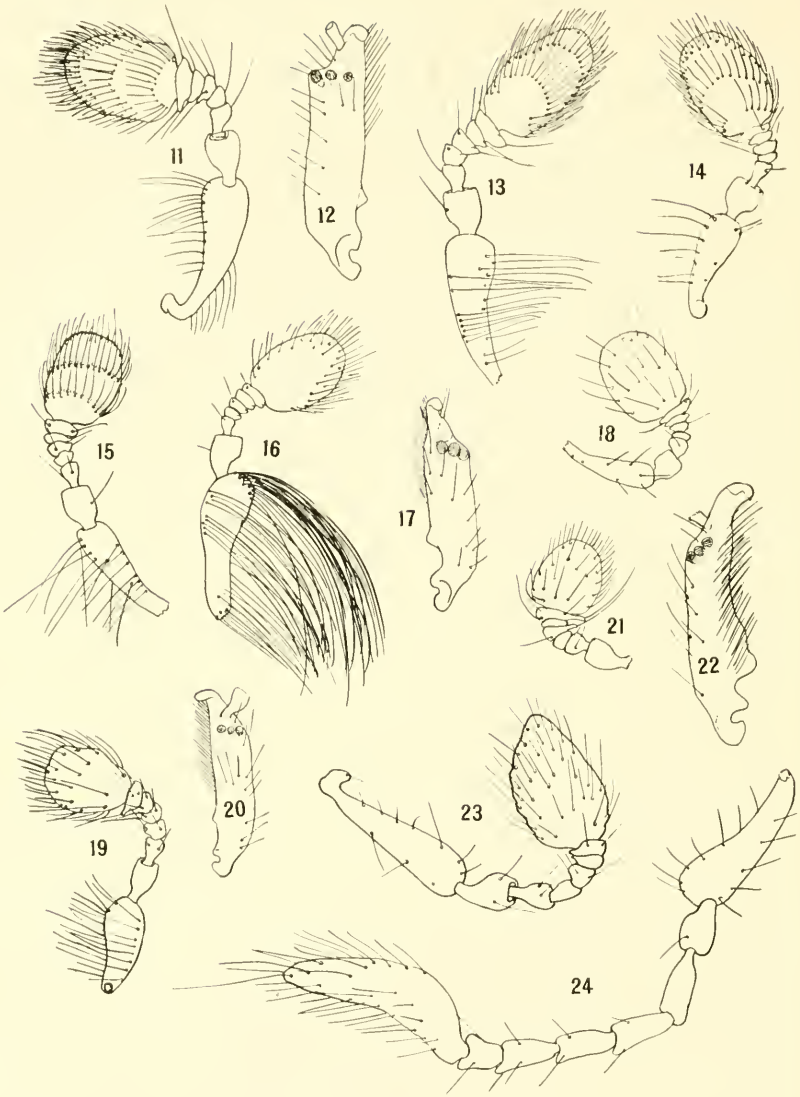








1. *Hylocurus biconcavus*, new species: Face view.
2. *Hylocurus flaglerensis*, new species: Face view.
3, 4. *Hylocurus crinitus*, new species: 3, Antenna; 4, fore tibia.
5, 6. *Micracis knulli*, new species: 5, Antenna; 6, fore tibia.
7, 8. *Micracisella subnitida*, new species: 7, Antenna; 8, fore tibia.
9, 10. *Stenoclyptus rhois*, new genus and species: 9, Antenna; 10, fore tibia.



11, 12. *Thysanoes vachelliae*, new species: 11, Antenna; 12, fore tibia.
13. *Thysanoes texanus*, new species: Antenna.
14. *Thysanoes retamae*, new species: Antenna.
15. *Pseudothysanoes huachucae*, new species: Antenna.
16, 17. *Cryptocleptes insularis*, new species: 16, Antenna; 17, fore tibia.
18. *Cryptocleptes colombianus*, new species: Antenna.
19, 20. *Cryptocleptes acaciae*, new species: 19, Antenna; 20, fore tibia.
21. *Cryptocleptes murilloi*, new species: Antenna.
22–24. *Chalcokyus securigerus*, new genus and species: 22, Fore tibia; 23, antenna of male; 24, antenna of female.

[All drawings made by Mrs. Claudelle L. Gaddis under the author's supervision.]