Records and Descriptions of Costa Rican Cerambycidae, Part 1: the Turrialba Valley.

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Abstract

Records from the Turrialba Valley region of Costa Rica are given for species of Cerambycidae heretofore unknown from Central America, or for which no previous specific information was recorded. The following species are recorded from Central America for the first time: *Sphallambyx chabrillaci*, *Cycnoderus barbatus*, *Cylicasta nysa*, *Oncideres minuta*, *Dufauxia* sp. indet., *Onalcidion fibrosum*, *Nyssodrysola corticalis*, *Neoeutrypanus mutilatus*, *Anisopodus affinis*, and *Lithargyrus melzeri*. Previously unrecorded locality or behavioral data are given for *Xenochroma azurea*, *Chontalia cyanicolor*, *Omosarotes singularis*, and *Cephalodina crassiceps*. New taxa described are: *Ommata (Ecliptophanes) tommyi*, sp. n., *Eupogonius cryptus*, sp. n., *Jamesia ericksoni*, sp. n., *Oreodera lezamai*, sp. n., *Leptostylus lividus*, sp. n., *Colobothina*, gen. n., *C. perplexa*, sp.n.

Resumen

Se ofrecen anotaciones por la region geografico cerca del Valle de Turrialba por cerambicidos cuales no son conocen antes del America Central, o por cual antes no hay informacion specifico. Estos especies son registrado por America Central por el primero vez: *Sphallambyx chabrillaci*, *Cycnoderus barbatus*, *Cylicasta nysa*, *Oncideres minuta*, *Dufauxia* sp. indet., *Onalcidion fibrosum*, *Nyssodrysola corticalis*, *Neoeutrypanus mutilatus*, *Anisopodus affinis*, and *Lithargyrus melzeri*. Localidades y habitos nuevos son registrados por *Xenochroma azurea*, *Chontalia cyanicolor*, *Omosarotes singularis*, and *Cephalodina crassiceps*. Especies y generos nuevos describido son: *Ommata (Ecliptophanes) tommyi*, sp. n., *Eupogonius cryptus*, sp. n., *Jamesia ericksoni*, sp. n., *Oreodera lezamai*, sp. n., *Leptostylus lividus*, sp. n., *Colobothina*, gen. n., *C. perplexa*, sp. n.

Introduction

Inventories of Cerambycidae are being compiled for a number of entomological research sites in Costa Rica, together intended to comprise a faunal study of that country. Material examined contains a number of undescribed or rarely-collected taxa, along with numerous species not previously recorded from Central America. Specimens and data in this paper primarily come from the Centro Agronomico Tropical de Investigacion y Ensenanza [CATIE], in the Turrialba Valley, Cartago Province, or from premontane wet and moist forest habitats at similar elevations along the main trans-cordillera highway, from Turrialba north to the Cartago/Limón Province line (approx. 24 km).

Information cited comes primarily from field collecting by the author [FTH], E. F. Giesbert [EFG], R. L. Penrose [RLP], J. A. Chemsak [JAC], and Henry A. Hespenheide [HAH], and from the collections of CATIE, the Centro Regional Atlantico de la Universidad de Costa Rica, Universidad de Costa Rica, San José, University of California, Berkeley, and Museu Nacional de Costa Rica, San José.

Most of the original forests of the Turrialba region have been cleared, and the land put to agricultural use, but remnant stands of native vegetation and second-growth forest continue to yield remarkable numbers of woodboring insects. The hillsides and valleys surrounding Turrialba are broadly ecotonal, with floral elements from the lowland, mid-elevation and montane forests, and influences from both Caribbean and Pacific slopes. The woodboring Coleoptera fauna is correspondingly rich, and at present no fewer than 350 species of Cerambycidae are known from this region.

Much of the material labelled as coming from CATIE was collected from treefalls and dead branches along the "Los Espaveles" trail in the Reventazon River gorge, or attracted to lights. A few older specimens are labelled as being from "IICA," or the "IICA patch," an area of second growth forest on the hillsides SE of the main CATIE development. In recent years, most of this small forest tract was cleared for agricultural projects.

Specimens collected along the main highway (at various localities labelled in kilometers from Turrialba or Pavones) came primarily from forest patches which were being cleared for coffee plantations or other agricultural uses. Most of these localities now contain little or no native vegetation, and are no longer productive collecting sites.

CERAMBYCINAE
Cerambycini

Sphallambyx chabrillaci Thomson - a single specimen of this large, black-and-yellow species, previously known from Brasil, was beaten from dead wood in April, 15 km N Turrialba [EFG]. (Data and determination fide E. F. Giesbert.)

Rhinotragini

Ommata (Ecliptophanes) tommyi, sp. n.
(Figure 1)

Male. Form small, slender, elongate, subcylindrical; integument shining, piceous, mouthparts, antennal scape, apical tooth of 11th antennal segment, base of prosternum, clavate portions of pro- and mesofemora, reddish brown, pro- and mesotibia, club of metafemora, outer side of metafemoral peduncle, inner side of metatibia, tarsi, lateral and sutural margins, and apical one-half of elytra, fuscous-brown, basal portion of antennal segments 3 to 8, ninth segment, elytral disk, side of humeral angles, femoral bases, a narrow annulus before and after metafemoral club, inner surface of metafemoral peduncle, side of metatibia, pale testaceous; pubescence of three types: pale erect hairs and dense, very fine to minute, appressed silvery pubescence on the body, black erect hairs on the appendages.

Head finely, irregularly punctate on vertex, surface thinly clothed with appressed pubescence and scattered erect hairs, lower eye lobes large, contiguous on front, upper lobes small, separated on vertex by slightly less than twice the diameter of the scape, vertex narrowly, longitudinally impressed, antennal tubercles moderately elevated, rounded,

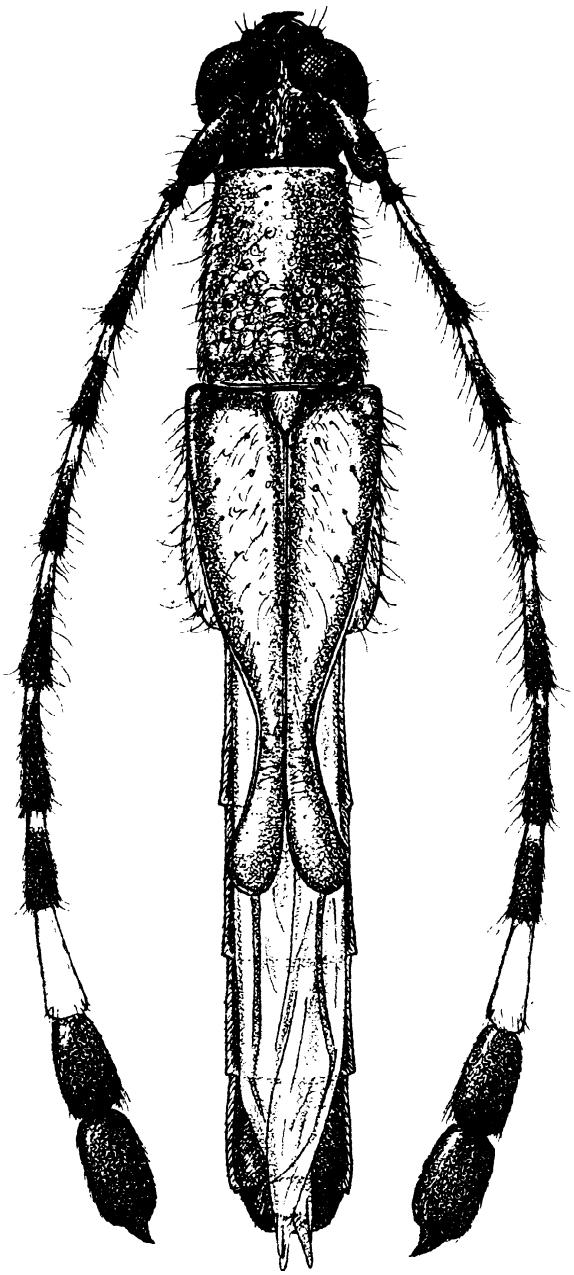

Figure 1. *Ommata tommyi*, n.sp., male, dorsal view, legs omitted.

antennae surpassing elytral apices by about 3 segments, scape moderately robust, oblong-ovate, sparsely punctate, thinly clothed with erect hairs, segments 3 to 7 slender, each feebly expanded apically, 8th segment robust, more strongly expanded apically, 9th segment elongate-conical, 10th seg-

ment inflated, subconical, 11th segment inflated, ovate, apex with an acute conical tooth, segments 2 to 7 clothed with scattered long, erect setae, shorter erect hairs, and minute recumbent pubescence, distal segments with long setae confined to apices; segment length ratios of the scape, segments 3 to 11 as follows: 20, 30:25:28:30:28:24:26:25:33 (measured at 30X).

Pronotum cylindrical, one-third longer than wide, base feebly, broadly, transversely impressed, very feebly tuberculate at sides, disc irregularly punctate, punctures shallow, crater-like, varying in size from minute to coarse, basal half of disk with a broad, longitudinally flattened, feebly, transversely plicate callous, discal surface thinly clothed with long erect hairs, basal impression, sides, and anterior one-third of disk densely clothed with minute appressed pubescence; prosternum with a few scattered punctures, surface before coxae densely clothed with appressed pubescence, procoxal process extremely narrow, coxal cavities closed behind; mesosternum impressed before coxae, meso- and metasternum clothed with appressed pubescence.

Scutellum feebly elevated, impressed medially, apex rounded, densely clothed with appressed pubescence.

Elytra three and one-quarter times longer than humeral width, extending only to apical one-third of second abdominal segment, sides tapering from humeri, strongly internally arcuate at middle, then flairing outward to apices, sutural margin feebly dehiscent apically, apices slightly elevated, spatulate, broadly rounded; anterior one-half coarsely, shallowly, irregularly punctate, larger punctures bearing long erect hairs, apical one-half nearly impunctate, thinly clothed with appressed pubescence.

Legs elongate, thinly clothed with appressed pubescence and long erect hairs, profemora clavate, meso- and metafemora pedunculate-clavate, metafemora attaining apex of abdomen, first metatarsal segment slightly longer than following two segments together.

Abdomen elongate, slender, lateral profile concave, thinly clothed with appressed pubescence, fifth sternite short, broad, apex emarginate-truncate, fifth tergite broad, convex, bearing a pair of oblong, silver-pubescent maculae at middle, apex broadly rounded.

Length (to abdominal apex): 6 - 9.5 mm.

Female. Similar to male, but differing by the slightly more robust body form; widely-spaced lower eye lobes; apical one-third to one-half of ninth antennal segment usually piceous; more coarsely punctate pronotum; and reddish-brown, convex abdomen, with the fifth sternite elongate, rounded at apex.

Length (to abdominal apex): 6 - 9 mm.

Holotype male, allotype (California Academy of Sciences) and 11 male, 7 female paratypes from COSTA RICA, Cartago Province, Turrialba, CATIE, 16 - 18 June 1986, on flowering tree [FTH]. Additional paratypes, 16 males, 7 females, same locality, 28/31 May 1987 [EFG]; 1 male, Cartago Province, 8 km N Pavones, 26 May 1985 [FTH].

This species also has been swept from blossoms of *Clethra* sp. [EFG, FTH] at Cerro Campana, Panama Province, PANAMA.

Diagnosis. Within the subgenus *Ecliptophanes* Melzer, this species appears most similar to *O. bucki* Melzer and *O. silvai* Zajciw, both from Brasil, (fide Zajciw, 1958). *Ommata bucki* is separable by its rufo-ferruginous pronotal disk, slender, only feebly conical 9th antennal segment, and entirely pale-testaceous truncated elytra, which extend beyond the apex of the third abdominal segment. Structurally, *O. tommyi* appears more closely related to *O. silvai*, but in that species the prosternum is pale, the elytra are truncated, piceous with a pale basal triangular macula, and extend beyond the apex of the third abdominal segment. Further, the posterior legs do not attain the abdominal apex, and female *O. silvai* have the pronotum rufo-testaceous.

Ommata laticornis Melzer, the only other species included in Zajciw's (1958:244) subgeneric key, may be distinguished from *O. tommyi* by its testaceous pronotum, which is twice as long as broad; obliquely truncated elytra, which extend over the fourth abdominal segment; and much less strongly inflated apical antennal segments. *Ommata* (*E.*) *scopipes* Zajciw (1965) differs from *O. tommyi* by the longer, parallel elytra (attaining the apex of the third abdominal segment), with obliquely truncated apices; scopiform pubescence on the metatibial apices; and pale metatarsi

Slight variation is evident within the type series; a few specimens have more extensively infuscated elytra, and the degree to which the elytral apices are flared ranges from moderately to strongly divaricate.

Virtually all rhinotragine cerambycids are mimetic, and in flight this and the sympatric *O.* (*O.*). *elegans* White strongly resemble mosquitoes. This species is affectionately dedicated to my son, F. T. ("Tommy") Hovore.

Callichromatini

Xenochroma azurea Demets - This species, which ranges from Mexico to Costa Rica, was not included in the "Checklist of Cerambycidae..." (Chemsak & Linsley, 1982). Adults were found in

May and June on herbaceous foliage along the "Los Espaveles" trail [FTH].

Rhopalophorini

Cycnoderus (*Ululoderus*) *barbatus* (Gounelle) - several specimens of this unusual species, previously known from Brasil, were taken from blossoming trees at CATIE in May and June [FTH, JAC, EFG]. Adults are dark metallic greenish in coloration, with fringes of long black hairs on the sixth antennal segment, metatibia and metatarsi.

LEPTURINAE
Lepturini

Chontalia cyanicolor Bates - This species, previously known only from the female holotype from Nicaragua, was taken from blossoming trees at CATIE in June [FTH, EFG]. An additional Costa Rican specimen has been seen from Heredia Province, La Selva Biological Station (HAH). All known specimens are females.

LAMIINAE
Apodasyini

Eupogonius cryptus, sp. n.
(Figure 2, b)

Male. Form broad, subcylindrical; integument dark reddish-brown; dorsal body surface and legs thinly clothed with short, appressed whitish pubescence, dorsum moderately densely clothed with long, erect black hairs, venter thinly clothed with long, erect pale hairs, antennae thickly clothed with a mixture of short and long, erect black hairs, longest internally, legs thinly clothed with long, erect pale and black hairs, dense, appressed whitish or pale yellow pubescence arrayed as follows: front of head moderately-densely clothed throughout, becoming denser at margins of lower eye lobes, forming a median line on vertex; pronotum with three longitudinal vittae, one median, the others on the sides, encompassing the lateral tubercles; scutellum densely clothed throughout; each elytron with four longitudinal vittae: a narrow sutural vitta extending to near apex; a moderately broad discal vitta, feebly sinuated, extending from base to near apex, curving apically inward toward suture, widest at apex; a narrow, paler, submarginal vitta extending from humerus to near apex; and a broad, marginal vitta extending from epipleura to apex, widest apically.

Head coarsely, densely, regularly punctate, front evenly convex, lower eye lobe slightly taller than gena; antennae surpassing elytral apices by about two segments, third and fourth segments subequal in length.

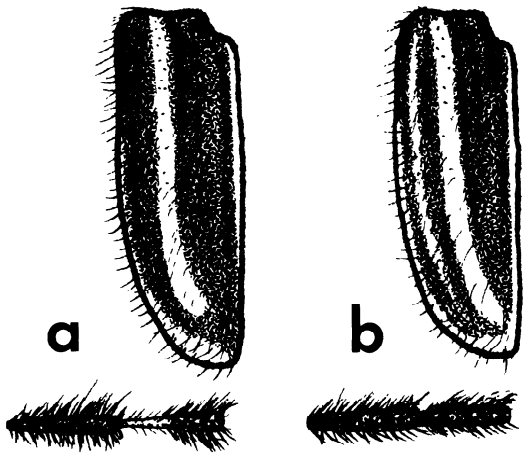

Figure 2. *Eupogonius* spp., left elytron, antennal segments 3 and 4. a) *E. flavocinctus* Bates; b) *E. cryptus*, n.sp.

Pronotum slightly wider than long, sides broadly rounded, with feebly-developed lateral tubercles, apical and basal impressions shallow, discal surface coarsely, densely, regularly punctate; pro-, meso-, and metasternal punctures irregular, coarse, moderately sparse.

Scutellum broadly rounded apically.

Basal half of elytra coarsely, moderately densely, uniformly punctate, becoming finer, shallower, and irregular on apical one-third, apices broadly, separately rounded to suture.

Legs with femora moderately strongly clavate, surface nearly impunctate.

Abdomen concave, very finely punctate, a transverse row of longer, erect hairs along inner portion of apical margin of each sternite, apex of fifth tergite broadly rounded, apex of fifth sternite feebly truncate.

Length: 4.5 - 7 mm.

Female. Coloration as in male, differing structurally as follows: form slightly stouter; antennae not surpassing elytral apices; abdomen more robust, less concave, apex of fifth tergite and fifth sternite medially impressed, apical margin of fifth sternite emarginate.

Length: 5 - 6.5 mm.

Holotype male, allotype (CAS) and 5 male, 4 female paratypes from COSTA RICA, Turrialba, CATIE, 14-17 May 1974 (EFG). Additional paratypes, all from COSTA RICA: 3 males, 28-29 May 1984,1 female, 18 June 1986 same locality as holotype (FTH); 1 male, 10 km NE Turrialba, 21 April 1981 (EFG); 2 males, 1 female, 8 km N Pavones, 26 May 1985 (FTH); Limón Province: 1 male, 2 fe-

males, 23 km SW Siquirres, 22 & 28 May 1984 (FTH); 3 males, 2 females, 16 km SW Guapiles, 28 May 1985 (FTH).

Most specimens were beaten from dead tree branches.

Diagnosis. This species is very similar in appearance to *E. flavocinctus* Bates (Figure 2, a), and the two taxa have been placed as a single species in most collections. *E. cryptus* differs immediately by its paler pubescent pattern (yellowish-orange in *E. flavocinctus*), presence of submarginal elytral vittae, denser appressed body pubescence, slightly wider pronotum, and denser, more regular dorsal punctation. Also, the basal one-third of the fourth antennal segment in *E. flavocinctus* is constricted, testaceus, sparsely pubescent, distinctly pale annulate.

E. cryptus may be distinguished from its other two described vittate Central American congeners, *E. strandi* Breuning and *E. vittipennis* Bates, by the combination of three pronotal vittae (two in *vittipennis*), with the lateral pair encompassing the lateral tubercles (passing above the tubercles in *strandi*); feebly-produced, rounded lateral pronotal tubercles (obtusely conical in *vittipennis*, acute in *strandi*); and four vittae on each elytron (only two in *vittipennis*), with the marginal vitta apically widened (absent or apically narrowed in *strandi*).

Onciderini

Jamesia ericksoni, sp. n.
(Figure 3, a)

Male. Form robust, subcylindrical, tapered apically; integument dark brown to piceous; body and appendages densely clothed with fine, appressed ashy-gray pubescence, a few long, erect pale hairs at sides of pronotum, antennae thinly fringed internally with suberect black setae, sides of abdominal sternites and tibial apices thinly to moderately densely clothed with suberect golden hairs; head, prothorax, and ventral surface sparsely to densely marked with small, round, brown maculae, elytra with scattered, round, dusky maculae on apical half, a large, vaguely defined, transverse dusky macula placed laterally at middle, not attaining suture.

Head with front plane, feebly, coarsely rugose, clypeal margin coarsely, irregularly punctate; lower eye lobe twice as tall as gena; antennal tubercles elevated, divergent; antennal scape feebly curved, third segment longest, following segments gradually decreasing in length.

Pronotum cylindrical, slightly wider at base, surface uneven, with a deep, transverse subapical sulcus extending from disc ventrally onto sides, a deep, arcuate subbasal sulcus extending anterolaterally onto sides at middle, a shallower, oval depression encircling an acute tubercle on either side of midline on anterior half, a small, acute tubercle at sides of disc at middle, two low, irregular tubercles on midline in front of basal constriction, disc sparsely, coarsely punctate, lateral margins moderately densely, coarsely punctate on basal half; prosternum transverse, intercoxal process narrow, arcuate, expanded apically; mesosternum impressed, mesocoxal process longitudinally impressed, apex truncate; metasternum moderately protuberant in front of metacoxae, midline longitudinally impressed, glabrous.

Scutellum broad, apex emarginate.

Elytra with humeral angles strongly pronounced, humeral apex with a large glabrous tubercle, centrobasal gibbosities feebly elevated, rounded, lateral margins of elytra gradually tapering to apex, apices evenly rounded to suture; disc with 8 to 20 small, rounded, tubercles scattered over basal one-fourth, a few scattered coarse punctures on apical three-fourths, each enclosed within a dark macula.

Legs with femora moderately, evenly thickened apically, profemora smooth internally, protibia feebly sinuate, metatibia strongly clavate on apical two-thirds, internal surface of club opaque, poriferous.

Abdomen feebly concave, fifth sternite slightly longer than fourth, fifth tergite and sternite broadly rounded apically.

Length: 17 - 23 mm.

Holotype male (CAS) from COSTA RICA, Cartago Province, Turrialba, CATIE, 20 April 1985 (C. L. V. Sevilla) on "Los Espaveles." One paratype male, same locality, 28-29 May 1984 (FTH), beaten from overhanging vegetation on sendero "Los Espaveles."

Diagnosis. Although this species clearly belongs in *Jamesia* Jekel (by the characters of the eyes and antennae), its coloration and dilated metatibia are similar to those of *Hypselomus* Perty, from South America. That genus is distinguished from *Jamesia* by its more arcuate scape, strongly elevated centrobasal gibbosities, and much smaller lower eye lobes (Dillon & Dillon, 1945). *Jamesia ericksoni* differs from its Central American congeners, *J. papulenta* Thomson, *J. globifera* (Fabricius), and *J. multivittata* Bates, by its pale ashy coloration with brown maculae, smaller, less numerous elytral tubercles, and strongly dilated metatibia. *J. papulenta* (Figure 3, b) bears a close resemblance to *ericksoni*, but further differs by its more elongate form, much longer male antennae, dark brown coloration, more numerous and larger elytral tubercles, and dark brown legs with pale maculations. *Jamesia ericksoni* and *J. papulenta* are sympatric at CATIE, and

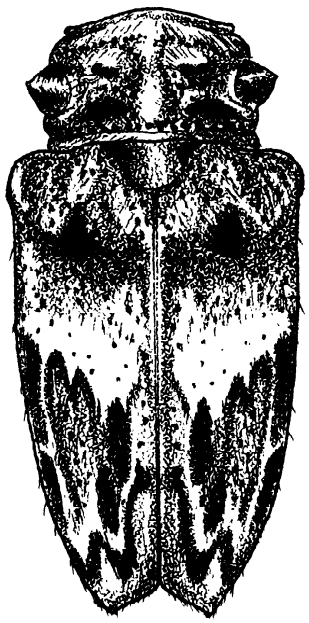

Figure 3. *Oreodera lezamai*, n.sp., pronotum and elytra.

have been collected but a few meters apart.

This species is dedicated to Arnold Erickson, former Chief of Public Relations at CATIE, for many courtesies and accommodations extended during my visits to Turrialba.

Cylicasta nysa Dillon and Dillon - specimens apparently referable to this Colombian species were taken at CATIE at lights, and from dead wood 11 - 18 km N Pavones (FTH), and 23 km S Siquirres (FTH, EFG) in January and May. This species also was collected during these same months in Panama, 8 - 15 km N El Llano (FTH, EFG).

Oncideres minuta Thomson - two specimens have been collected at lights at CATIE, in May (FTH, EFG). This determination is somewhat tentative, as the species was described from a single female, taken in "Guiana."

Acanthoderini

Oreodera lezamai sp. n.
(Figure 4)

Male. Form broad, moderately robust, subdepressed; integument reddish-brown, a large, transverse piceous macula on elytra behind basal gibbosities, extending from humeri to suture; body densely clothed with tan, brown, white and blackish appressed pubescence as follows: ventral surface entirely tan pubescent, mottled with small, round, glabrous areas; front tan, thinly clothed at margins with long erect setae, vertex brownish; antennae tan, segments 3 and 4 each with two dark brown annuli, remaining segments annulate on apical half only, all segments fringed internally with long, suberect dark setae; pronotum tan with dark brown maculae over discal tubercles and below lateral tubercles; scutellum tan; elytral base tan, centrobasal gibbosities crested with an elliptical penicillus of black setae, each elytron with a median transverse white fascia which is narrowed laterally, widened before suture, with the posterior outline V-shaped, apical area behind white fascia with an ornate pattern of tan, brown and whitish, which form two longitudinal dark maculae, a pale loop extending from fascia posteriorly to lateral margin, a thin, pale, W-shaped preapical line, followed posteriorly by a brownish and a tan line, the latter attaining the elytral apex; legs tan, femora with thin whitish maculations near apices, tibia with two brownish and ashy annuli, second and third tarsal segments brownish to blackish.

Head with front evenly convex, vertex impressed, midline narrow, glabrous; antennae about one and one-half times longer than body, surpassing elytral apices by four and one-half segments.

Pronotum about one-third broader than long, sides with obtuse, rounded lateral tubercles, each surrounded by basal impression, apical and basal impressions shallow on disc, becoming deeper at sides, each with a transverse line of deep, coarse punctures, disc with five tubercles: a large, oval, moderately produced tubercle at either side of midline behind apical constriction, a low, feebly defined median tubercle behind middle, a low, transverse tubercle internally at the base of each lateral tubercle; middle of disc and area behind tubercles with scattered coarse punctures; pro- and mesosternal processes broad, feebly arcuate, feebly emarginate apically.

Scutellum broad, sides obtusely rounded, apex feebly truncate.

Elytra with humeri slightly produced, tuberculate laterally, centrobasal gibbosities feebly elevated, possessing apical crests, surface behind feebly impressed, basal half of disc except basal declivity, coarsely, moderately sparsely punctate, punctures forming two rows, one sutural and one at middle of disc, extending beyond white fascia to apical one-fourth; sides narrowly rounded, apices obtusely truncate, outer angle not produced.

Legs with femora strongly inflated, meso- and metafemora strongly clavate, protibia not greatly elongate, only slightly longer than third antennal segment.

Abdomen evenly concave, fifth segment about one-third longer than fourth, apex of fifth sternite emarginate-truncate.

Length: 6.5 - 8 mm.

Female. Differs from male by its slightly stouter form; shorter antennae, which surpass the elytral apices by about 4 segments; more convex abdomen, with the fifth sternite more than twice as long as fourth, and narrowly, longitudinally impressed at base, transversely impressed, truncate at apex.

Length: 9 - 10 mm.

Holotype male, allotype (CAS) and 6 male, 2 female paratypes from COSTA RICA, Cartago Province, 18 km N Turrialba, 4 - 10 February 1978 (EFG). Additional paratypes: 1 female, same locality as holotype, 29 May 1987 (EFG); Limon Province: 1 male, 1 female, near Zent, 10 - 12 January 1984, on dead wood (FTH); 1 male, 28 km E Siquirres, 24 May 1984 (FTH); Heredia Province: 1 male, Puerto Viejo, nr. La Selva Biological Station, 11 January 1989, (FTH); San José Province: 1 male, Sector Carrillo, Braulio Carrillo N.P., 27 April 1988 (EFG); Guanacaste Province: 1 male, Cañas, 5 February 1973 (V. M. Kirk) (UC Davis coll.).

Diagnosis. This is one of the smallest *Oreodera*, and may be readily distinguished from other Central American species by the combination of coloration, relatively short male prolegs, obtusely truncate elytral apices, and impunctate basal elytral declivity. It appears most closely related to *O. graphiptera* Bates, which differs by the absence of a white median elytral fascia, and in having the anterior margin of the elytral dark area evenly transverse across the centrobasal gibbosities. *O. c-album* Bates, taken at CATIE (FTH), differs by the much larger size (13 - 22 mm in length), entirely dark third antennal segment, more pronounced discal pronotal tubercles, large, C-shaped elytral fasciae, and white-pubescent metafemora. Recently-described (1988) *O. howdeni* Monné & Fragoso, from Colombia, also occurs in Costa Rica, and appears to be a high-elevation, distinctly-marked subspecies of *O. costaricensis*, differing only by its darker ground coloration and more coarsely punctate epipleura. From *O. lezamai* it may be differentiated by its larger size, more apically placed elytral fascia, and coarse basal elytral punctation.

Oreodera candida Marinoni and Martins, from Brazil, is similar in size and coloration to *lezamai*, but has the elytral fascia widest at the lateral margins, the elytral punctation is very coarse and irregular, and extends into the fascia, and the basal antennal segments are not biannulate. *O. ohausi* Melzer (also from Brazil), has the elytral fascia similar in shape to that of *O. c-album*, with the prolegs and antennae proportionately much longer than those of *lezamai*.

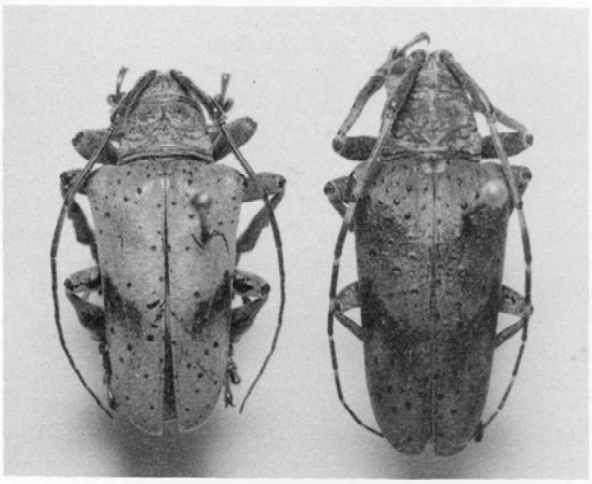

Figure 4. *Jamesia* spp. left, *J. ericksoni*, n.sp.; right *J. papulenta* Thomson.

Dufauxia sp. - Several specimens of this genus, previously known only from three South American species, were taken at lights at CATIE and from dead wood along the "Los Espaveles" trail (RLP, FTH). They may represent an undescribed species related to *Dufauxia kourouana* Lane, but the holotype of the latter is damaged, and the specific status of the CATIE material cannot be determined at this time. This same *Dufauxia* (fide E .F. Giesbert) also occurs in Panama, Panama Province, Cerro Campana, 2700' (EFG).

Acanthocinini

Onalcidion fibrosum Monné & Martins - Several specimens, tentatively assigned to this recently-described (1976) Venezuelan species, were taken at lights at CATIE, and from dead wood, 8 km N Pavones (FTH, EFG). It also has been found in Panama, Panama Province, 10 - 15 km N El Llano (FTH, EFG).

Nyssodrysola corticalis (Bates) - Specimens were beaten from dead wood at CATIE, and in areas of forest cutting 18 km N of Turrialba, and 23 km S Siquirres, in January, February, and June (FTH, EFG). Originally described from Brasil, it also has been found in Panama, 10 - 15 km N El Llano (FTH), and in Chiriqui Province, 7 km NE Fortuna Dam, 3000' (EFG).

Neoeutrypanus mutilatus (Germar) - This species, previously recorded from South America, has been taken at several localities in Panama and Costa Rica, including CATIE, on dead wood and at lights, in May and June (FTH, EFG).

Anisopodus affinis Martins - A single specimen of this species, originally described (1974) from a unique female specimen from Bolivia, was beaten from cut vegetation, 8 km N Pavones (FTH). It also occurs in Panama, 8 - 13 km N El Llano (FTH).

Leptostylus lividus sp. n.
(Figure 5)

Male. Form broad, robust, ovate in outline, dorsally subdepressed; integument opaque, pale jade green to grayish or black in color, front of head brown, vertex and sides black, prothorax greenish-gray on disc and at sides, blackish beneath, tubercles darker; elytra greenish-gray to blackish, ventral surface dark brown to black, femora, tibiae and antennal scape jade green, distal segments of antennae brown, mottled with blackish, tarsi dark brown to blackish; body and appendages densely clothed with fine, dense, appressed, pearly whitish or pale bluish pubescence which does not obscure the integument, this pubescence is tinged with yellow on the frons, across the base of the pronotum, on elytral epipleura, and narrowly on elytral suture behind middle, a few orange-tinged hairs form penicilli on the apical set of elytral tubercles; black pubescence as follows: two pair of small maculae, at either side of midline on the apical and basal margins of pronotum; a large, vaguely defined semicircular macula on elytral epipleura, extending from beneath humeri onto elytral disc behind middle; a broad, narrowly outlined diamond-shaped marking on the elytral disk behind middle, clothed internally with pale bluish pubescence; a single black macula on elytral margins near apex; and forming penicilli on basal and discal elytral tubercles; ventral surface mottled with dark brown or black; femora with a dark macula near base of club, tibiae bimaculate with blackish; scape and antennal segments three to five mottled with dark brown or blackish, apices of scape and segments three and four black annulate, bases and apices of segments five to nine black annulate, more broadly so distally, second, tenth and eleventh segments wholly dark brown to blackish.

Head with front evenly convex, vertex impressed between antennal tubercles, lower lobe of eye subequal in height to gena below, antennae extending beyond elytral apices by about 3 1/2 segments, scape elongate, feebly arcuate, flattened internally, apex feebly produced, remaining segments cylindrical, unmodified.

Pronotum slightly less than one-third wider than long, lateral tubercles feebly produced, narrowly rounded apically, disk with five tubercles as follows: one centrobasal, rounded, strongly produced; a small, angulated, less produced tubercle placed on either side of centrobasal tubercle; and a large, feebly arcuate, strongly elevated, subapical tubercle situated on either side of midline; midline with a narrow, feebly elevated triangular area apically, transverse basal sulcus deep, arcuate, with a line of large, deep punctures, sides of prothorax irregularly, coarsely punctate; prosternum narrow, transverse, procoxal process broad, arcuate, impressed medially, apex slightly expanded, coxal cavities closed; mesosternum very narrow, impressed, mesosternal process broad, arcuate, laterally produced and emarginate medially at apex; metasternum broad, convex, shining medially, minutely punctured.

Scutellum broad, feebly truncated apically, thinly clothed with appressed pubescence.

Elytra parallel-sided to apical one-third, then narrowly arcuate to apices, apices separately rounded, humeri pronounced, centrobasal arcuate crests comprised of a row of strongly elevated tubercles, median and lateral carinae indicated by irregular rows of tubercles which terminate at apical one-third, apices of tubercles setose to penicillate, basal one-fourth of disk and epipleura coarsely, densely punctate, discal punctures becoming finer apically. Legs with femora short, stout, strongly clavate, unarmed; tibiae simple, cylindrical; tarsi short, moderately broad.

Abdomen feebly concave, fifth sternite broad, tapering apically, apex broadly rounded.

Length: 6.5 - 9 mm.

Female. Differing from the male by the slightly shorter antennae, which surpass the elytral apices by about 3 segments; less strongly clavate femora; slightly more convex abdomen, and longer fifth sternite which is more produced and feebly emarginate apically.

Length: 8 - 10.5 mm.

Holotype male (CAS) from COSTA RICA, Cartago Province, 18 km NE Turrialba, 4 - 10 February 1978 (EFG); allotype (CAS) from Turrialba, 30 January 1973 (V. M. Kirk). Paratypes: 1 male, same data as holotype; 1 male, 23 km SW Siquirres, Limón Province, 9 - 12 January 1984 (FTH), on dead wood; 1 female, CATIE, 16 - 18 June 1986 (FTH), on dead wood; 2 females, CATIE, 9 - 14 June 1988 (EFG); 1 male, 1 female, CATIE, in the "IICA patch," 19 June 1988 (FTH), beaten from dead branches; 1 male, 1 female, Puntarenas

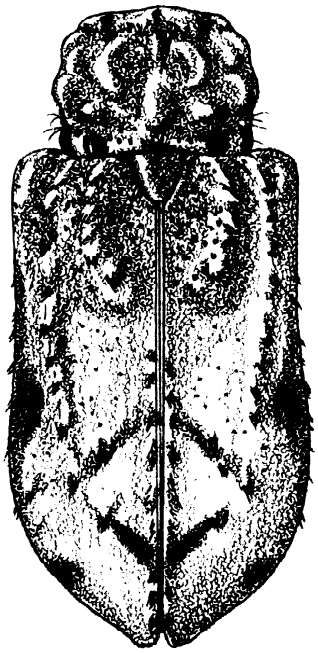

Figure 5. *Leptostylus lividus*, n.sp., pronotum and elytra.

Province, Monteverde, 1330 m, 15 - 30 June 1986, and 19 - 26 April 1988 (EFG).

Diagnosis. This species may be distinguished from all described *Leptostylus* by its unusual opaque jade-green to grayish-blue dorsal coloration, which lacks white markings, and strongly elevated pronotal and basal elytral tubercles. *Leptostylus lazulinus* Bates also has a slight bluish tint to the elytral surface, but differs by its feebly elevated pronotal tubercles, thick whitish dorsal pubescence on the head, pronotum and base of the elytra, undefined centrobasal elytral crests, much more extensive elytral black markings, metallic greenish elytral pubescence, and discal tuberculation extending to the elytral apices.

Variation within *L. lividus* is expressed primarily in the amount of greenish integumental coloration. Some specimens have the dorsal surface almost entirely jade green, while others are primarily blackish with the green coloration confined to the appendages and lateral portions of the body. The specimen from Monteverde is almost wholly grayish-blue, with a faint greenish tinge to the elytra. In a few specimens the lateral black elytral macula is obscured by pale pubescence.

Lithargyrus melzeri Martins & Monné - This species, originally described from Brasil in 1974, has been collected at a number of localities in Panama and Costa Rica (EFG, RLP, FTH), including CATIE, where several specimens were attracted to lights in May and June. Other Costa Rican localities for *L. melzeri* are: Puntarenas Province, Manuel Antonio (FTH), on dead mango; Limón Province, Zent (RLP).

Omosarotes singularis Pascoe - Numerous specimens of this rarely-collected ant-mimicking species have been collected from foliage and dead branches along the upper portion of the "Los Espaveles" trail (RLP, JAC, FTH, EFG). The generic name is incorrectly spelled "*Osmosarotes*" in the "Checklist of Cerambycidae..." (Chemsak & Linsley, 1982).

Colobothina, gen. n.

Form stout, subcylindrical, laterally compressed; pubescence both appressed and erect, elytral surface clothed with long erect setae.

Head deflexed, front subquadrate, antennal tubercles moderately elevated, clypeus short, transverse, rounded, palpi subequal in length, apical segments subconical, tapered at apex; eyes moderately large, finely facetted, deeply emarginate, upper lobes much smaller than lower lobes; antennae filiform, 11-segmented, scape elongate, slender, feebly pyriform, apex simple, third segment longer than scape.

Pronotum subglobose, sides evenly, broadly rounded, disk without tubercles; prosternum short, transverse, depressed, prosternal process narrow, about one-third as wide as the procoxa, apex expanded, procoxal cavities closed behind, procoxae large, globose; mesosternum short, transverse, depressed, mesosternal process about two and one-half times wider than procoxal process, slightly produced apically; metasternum strongly convex.

Scutellum small, slightly elevated apically.

Elytra with humeral angles moderately pronounced, elevated, obliquely rounded, sides of elytra deflexed, vertical on basal half, carinate above declivity, surface with six irregular rows of moderately long, erect black setae, apices obliquely truncate, unarmed.

Legs of male with pro- and mesotibiae notched, femora in both sexes moderately strongly clavate, tarsi short, first segment less than twice as long as following two segments together, male foretarsi only slightly expanded, flattened, feebly fringed, tarsal claws divaricate.

Abdomen unmodified in male, apical sternite simple, rounded apically, female with apical sternite and tergite elongated, forming a sheath for the

ovipositor, apical half extending beyond elytral apices.

Type Species: *Colobothina perplexa* Hovore.

Diagnosis. This genus differs from other described Colobotheiini by the combination of the short front, feebly pyriform antennal scape; smooth, globose pronotum; unarmed elytra without tubercles or crests; unmodified male foretarsi; and simple male abdominal apex. *Colobothina* is sympatric with a number of other colobotheiine genera, and these may be further distinguished as follows:

From *Sangaris* Dalman, which it most closely resembles structurally, *Colobothina* may be distinguished by the characters given in the generic diagnosis, and by the much shorter and broader apical abdominal segment of the female (the apical two-thirds or more of which extend beyond the elytral apices in *Sangaris*).

Colobothea Serville differs by its uninflated and more elongate scape, more cylindrical prothorax, dentate or spinose elytral apices, and (usually) modified male abdominal apex.

Central American species of *Carterica* Pascoe, a genus which appears to be polyphyletic as currently recognized, differ immediately by their depressed body form, acutely tuberculate or dentate pronotal sides, and emarginate-dentate elytral apices.

Colobothina perplexa sp. n.
(Figure 6)

Male. Form moderately robust, convex, slightly tapering apically; integument dark reddish-brown, appendages and abdomen paler; dorsal surface densely clothed with fine appressed white and brown pubescence, forming a pattern as follows: head white pubescent, except base of vertex, which is transversely glabrous; pronotal pubescence white and dark brown, central half of disk with a large, oval, central dark macula extending from base to apex, each side with a large, irregularly ovate dark macula on apical half; elytral pubescence white and light brown, the brown pubescence forming a large, common macula extending posteriorly from behind humeri across basal one-third of disk, this macula bilobed anteriorly, extending onto centrobasal gibbosities; submedian macula moderately large, irregularly shaped, extending from lateral margin to near suture; subapical macula irregular, feebly arcuate, extending posteriorly along lateral margin from behind submedian macula to near elytral apex, and onto disk to near suture; sutural line and white areas of elytral disc lightly flecked with brown; basal half of intermediate antennal segments thinly annulate with white, annuli narrowed distally; legs and ventral surface mostly uniformly white pubescent.

Head with front slightly convex, midline feebly impressed, lower eye lobe about one and one-half times taller than gena below; antennae surpassing elytral apices by about five and one-half segments, third segment about one-fifth longer than scape, segments 4 to 11 successively shortened distally, eleventh segment simple, intermediate segments with scattered, short black setae.

Pronotum slightly wider than long, base narrowly constricted, basal margin slightly wider than apical margin, feebly expanded behind constriction, disk impunctate, punctures confined to a single transverse row in basal sulcus and a few coarse punctures on sides, lateral punctures bearing erect setae; pro-, meso-, and metasterna minutely punctate, their surfaces obscured by pubescence.

Scutellum black, minutely punctate and pubescent, apex rotundate-truncate.

Elytra widest across humeri, slightly less than twice as long as humeral width, humeral angles moderately strongly produced, elevated, centrobasal gibbosities feebly indicated, rounded, lateral carina moderately strongly elevated, extending from behind humeri to middle, carina narrowly glabrous on basal one-third, disk coarsely, moderately densely, irregularly punctate on basal half, punctures finer on apical half and on sides below lateral carina, all punctures bearing erect setae, elytral apices obliquely truncate, apex angled posteriorly from suture to margin, sutural angle obtusely rounded, outer angle acutely rounded.

Legs with femora moderately strongly clavate, apices unarmed, tibiae straight, irregularly clothed with short, suberect dark setae which become denser apically, protarsi short, slightly expanded, flattened, thinly fringed with dark setae, metatarsi short, first segment distinctly shorter than following two segments together.

Abdomen strongly concave, fifth sternite about twice as long as fourth, feebly, transversely impressed before apical margin, apex rotundate-truncate, fifth tergite shallowly emarginate apically.

Length: 8 mm.

Female. Coloration as in male, form slightly more robust; antennae slightly shorter, surpassing elytral apices by about five segments; metafemora less strongly clavate; fifth abdominal sternite elongate, four times longer than fourth segment, tapering and becoming semi-cylindrical apically, midline feebly impressed, apex emarginate-truncate, fifth tergite extending slightly beyond fifth sternite, dorsally flattened, more narrowly tapered apically than fifth sternite, apex moderately deeply, narrowly emarginate, outer angles acute.

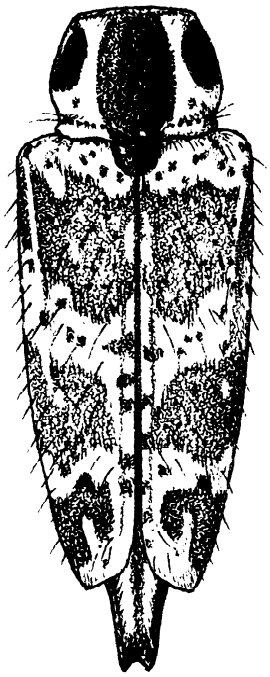

Figure 6. *Colobothina perplexa*, n.gen., n.sp., pronotum and elytra.

Length (exclusive of abdominal sheath): 8.5 - 9 mm.

Holotype male (CAS) from COSTA RICA, Cartago Province, Turrialba, CATIE, 16 - 18 June 1986 (FTH), at MV and UV lights; allotype (CAS) from Puntarenas Province, Monteverde, 23 - 27 May 1987 (EFG). Paratypes: 1 male, 1 female, same locality as holotype, 28 - 29 May 1984 (FTH), on dead wood, and 9 - 14 June 1988 (EFG); 1 female, Heredia Province, La Selva (Organization for Tropical Studies Biological Station), 13 - 15 June 1986 (FTH); 1 female, PANAMA, Panama Province, Canal Zone, Barro Colorado Island, 9° 10'N 70° 50'W, 16 July 1977 (H.A. Hespenheide).

Three specimens in the type series were collected at lights, and another was beaten from dead branches along the "Los Espaveles" trail.

Diagnosis. This species is distinctive among the described Central American Colobotheiini by its contrasting white and brown elytral pattern, and the presence of a large, central pronotal macula. In coloration it resembles somewhat various species in the closely-related tribe Acanthocinini: *Nyssodrysina* Casey, *Stenolis* Bates, and *Baryssinus* Bates, all of which differ by their laterally armed pronota and noncarinate elytra.

The species name *perplexa* is in reference to the presence at hand of specimens of an as yet generically unassigned and undescribed acanthocinine species from Mexico which is virtually identical to *C. perplexa* in size, shape, coloration, elytral pattern, and female abdominal modifications. It differs, however, by the distinct, acute lateral pronotal tubercles, rounded elytral sides, without a trace of carinae, and presence of seven discal rows of setae on each elytron. These specimens were originally intermixed in collections with the material described herein as *C. perplexa*.

Hemilophini

Cephalodina crassiceps Bates - This rarely-collected species was taken at lights at CATIE in June (FTH, M. M. Chavarria Diaz). Portions of the head and thorax which are bright lemon yellow in living beetles fade to white in preserved specimens. E. F. Giesbert (pers. comm.) observed adults feeding diurnally on foliage of *Ficus* sp., in Sumidero National Park, Chiapas, Mexico.

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