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ANCYLOCERINA)

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**THREE NEW SPECIES OF *CERALOCYNA* VIANA, 1971 FROM MEXICO
AND ECUADOR (CERAMBYCIDAE: CERAMBYCINAE,
TRACHYDERINI, ANCYLOCERINA)**

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ABSTRACT. Three new species are described herein, one from coastal lowland deciduous forests of western Mexico (Jalisco), one from coastal lowland deciduous scrub in western Ecuador (Manabi), and one from upper Amazonian Ecuador (Napo).

KEY WORDS: Cerambycidae, *Ceralocyna*, Mexico, Ecuador.

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RESUMEN. Tres especies nuevas son descritas aquí, una del bosque deceduo de las tierras bajas costeras del occidente de México (Jalisco), otra del matorral deceduo de las tierras bajas costeras de Ecuador occidental (Manabi), y la última de la parte alta del Amazonas en Ecuador (Napo).

PALABRAS CLAVES: Cerambycidae, *Ceralocyna*, Mexico, Ecuador.

Monné and Napp (2000) recently revised the genus *Ceralocyna* Viana to contain 14 described species, all but two of which, *C. cribricollis* (Bates, 1885) and *C. parkeri* (Chemsak, 1964), both from Mexico, are distributed in South America (Monné and Napp, 1999; 2000). Three new species of *Ceralocyna* are described herein, one from coastal lowland deciduous forests of western Mexico (Jalisco), one from coastal lowland deciduous scrub in western Ecuador (Manabi), and one from upper Amazonian Ecuador (Napo).

***Ceralocyna aliciae* sp. nov.**

(Figure 1)

Male. Form elongate, narrow, cylindrical; integument piceous, legs and basal abdominal sternites slightly lighter, apical 4 sternites dark reddish-brown, elytra dark red, basal area piceous, a broad, well-defined, central, piceous vitta extending from base to apex, becoming less well-defined over apical one-third. Pubescence white, fine, short, erect and appressed. Head densely, coarsely, deeply punctate, erect hairs sparse, short; genae incurved, triangular, shorter than

lower eye lobes, apices acute, spiniform, surface smooth, irregularly punctate; mandibles with dorso-basal lobe poorly developed, surface rugoso-punctate, apices acuminate; antennae with 11 antennomeres, slender, surpassing elytral apex by 2 – 3 antennomeres, scape shining, lightly, sparsely punctate, punctures bearing short, erect hairs, distal antennomeres shining, nearly impunctate, glabrous dorsally, a few erect hairs ventrally on 3 – 5, paired poriferous areas very narrow, confined to external margins, present from apical 1/3 of antennomere 3 to near apex of 11. Prothorax cylindrical, about 1/2 again longer than wide, anterior and posterior margins subequal in width, sides subparallel; pronotal surface uneven, elevated before middle, feebly impressed medially, coarsely, moderately densely punctate on disk, erect hairs arising from larger punctures, broad areas of sexual punctation extending from sides onto prosternum, consisting of a mixture of small and minute punctures. Prosternum with sexual punctation at sides, narrowly shining with a few larger punctures medially and across apex, a few hairs at apex; mesosternum narrow, impressed, coarsely sculptured; metasternum shining, coarsely punctate laterally, more finely punctate medially, with a narrow glabrous median line, punctures bearing erect hairs; pro- and mesocoxae, epimera and episterna microsculptured, densely clothed with fine appressed white pubescence. Scutellum small, subchordate, medially impressed, basally declivous, glabrous. Elytra elongate, narrowly impressed around and behind scutellum to basal 1/6; punctation coarse, linearly arrayed basally in 8 vague rows, punctures becoming slightly smaller, with rows less clearly defined at apical 1/3, short, erect hairs arising from each puncture; disk abruptly rounded before apex, a narrow flared area below declivity, about equal in length to scutellum, outer angles obtusely rounded, sutural angles acute, feebly dentate, apical margin feebly sinuate. Legs with scattered erect hairs on femora, primarily on

outer and inner surfaces; posterior femora with apical spine slender, subequal in length to width of femora. Abdomen broad, sparsely, moderately coarsely punctate, more coarsely so at lateral margins, punctures becoming finer apically, erect hairs arising from punctures, terminal sternite broadly, feebly emarginate at apex. Dimensions: pronotum: 1.9 – 2.9 mm long, 1.2 – 1.8 mm wide; elytra 4.5 – 6.75 mm long, 1.5 – 2.2 mm wide at humeri; total length: 7.5 – 12 mm.

Female. Similar to male in form and coloration, slightly more robust; genae acutely dentate; antennae with 10 antennomeres, antennomeres thickened, flattened, projecting laterally at apices, attaining middle of elytra; pronotum broader, sides and prosternum lacking sexual punctation, moderately coarsely, moderately densely punctate; terminal abdominal sternite broadly rounded apically. Dimensions: pronotum: 2.5 mm long, 1.9 mm wide; elytra: 6.2 mm long, 2.1 mm wide at humeri; total length: 8-10 mm.

Holotype, (IBUNAM collection) allotype, MEXICO: Jalisco: 5 km S Playa Careyes, 16 July 1987, feeding on leaves of *Coccoloba*, F. T. Hovore; 8 Paratypes: 4 m, same data as holotype; 1m, Estación de Biología Chamela, 15–23 July 1987, F. T. Hovore; 1 m, Chamela, 14 July 1985, R. Ayala; 1 f, Estación de Biología Chamela, 27 June 1995, R. L. Westcott; 1 f, 3 km O km 32.8, Carret. 200, 4 July 1995, F. A. Noguera, A. Rodriguez. Paratypes in EMEC, EBCC and F.T. Hovore collection.

Diagnosis. This species is distinctive by the combination of the dorsal coloration, vittate elytra, elongate pronotum, with the disk smooth and shining, and the incurved, acuminate genae. *Ceralocyna cribricollis*, from eastern Mexico, has entirely red elytra, the pronotum more coarsely, densely punctate, and short, rounded genae; *C. parkeri*, from Oaxaca, Mexico, has the pronotum red with a darker central macula and entirely red elytra, with the pronotal disk coarsely, confluent punctate, with a narrow median



FIGURE 1. *Ceralocyna aliciae*, new species, Holotype male.

impunctate area, and divergent genae.

Ceralocyna aliciae keys to couplet 12 in Monné and Napp (2000), with *C. margareteae* Martins and Galileo, 1994, and *C. variegata* Monné and Napp, 1999, both from South America. It differs immediately from *C. margareteae* (known only from the female type) by the acuminate genae, shining medially-impressed pronotal disk, lacking visible microsculpture; *C. variegata* has the elytral apices bidentate and more strongly flared and produced, bispinose genae, and basal 1/2 of the elytra reddish-orange. Two Brazilian species, *C. nigricollis* (Gounelle, 1911), and *C. seticornis* (Bates, 1870), have piceous pronota in one sex or the other, but in addition to being from South America, they may be distinguished from *C. aliciae* by the following characters: both sexes of *C. nigricollis* have the lateral portions of the pronotum pale, the elytral apices bidentate-truncate, and females have the genae obliquely truncate. Male *C. seticornis* have the pronotal disc plane, coarsely, deeply, densely punctate, lacking sexual punctation laterally and on the prosternum, (fide Monné & Napp, based upon examination of a photograph of the type); female *C. seticornis* have the genae short and subtriangular, pronotum pale-maculate laterally, elytral apices evenly truncate. The elytral coloration of *C. aliciae* most closely resembles that of *C. foveicollis* (Buquet, 1854), also from South America, but that species has pale appendages and a smooth, finely, sparsely punctate, dark-reddish pronotum.

Variation. In dorsal coloration ranges from having the elytra almost wholly piceous with only a narrow lateral margin reddish to having the lateral margins very broadly reddish and the central piceous vitta confined along the suture. Minor males have less strongly developed genal apices, and appear to have only 10 antennomeres, the terminal antennomere being appendiculate.

Etymology. It is with sadness and affection that we dedicate this beautiful species to the memory

of Alicia Rodriguez Palafox, our close friend and companion for many years during fieldwork in and around the Chamela Biological Station, who contributed much to the study of the Cerambycidae of western Mexico.

***Ceralocyna onorei* sp. nov.**

(Figure 2)

Male. Form elongate, narrow, cylindrical; integument piceous, sides of pronotum at base, middle of metasternum, abdomen, and basal 4/5 of elytra dark red. Pubescence white, fine, short, erect and appressed. Head densely, coarsely, deeply, confluent punctate, erect hairs short, sparse, denser on front; front broadly impressed, genae parallel-sided, triangular, shorter than lower eye lobes, apex acute, feebly dentate, surface irregularly rugoso-punctate; mandibles small, lacking dorso-basal lobe, surface rugoso-punctate, apices acuminate; antennae with 11 antennomeres, slender, barely surpassing elytral apex, scape shining, coarsely, densely punctate, a few punctures bearing short erect hairs, distal antennomeres feebly shining, sparsely, coarsely, shallowly punctate, glabrous dorsally, a single erect hair ventrally at middle of third antennomere, a few erect hairs ventrally on 4 - 9, paired poriferous areas very narrow, confined to external margins, present from apical 1/4 of antennomere 3 to near apex of 11. Prothorax cylindrical, about 1/4 again longer than wide, anterior and posterior margins strongly constricted, subequal in width, sides uneven, subparallel; pronotal surface uneven, elevated basally at sides before basal constriction and at either side of midline behind anterior constriction, coarsely, moderately sparsely punctate on disk, punctures separated by greater than their width, erect hairs arising from punctures, broad, irregularly-shaped areas of sexual punctation on sides, extending onto prosternum, consisting of small to minute, confluent punctures, moderately densely clothed with anteriorly appressed hairs. Prosternum with sexual

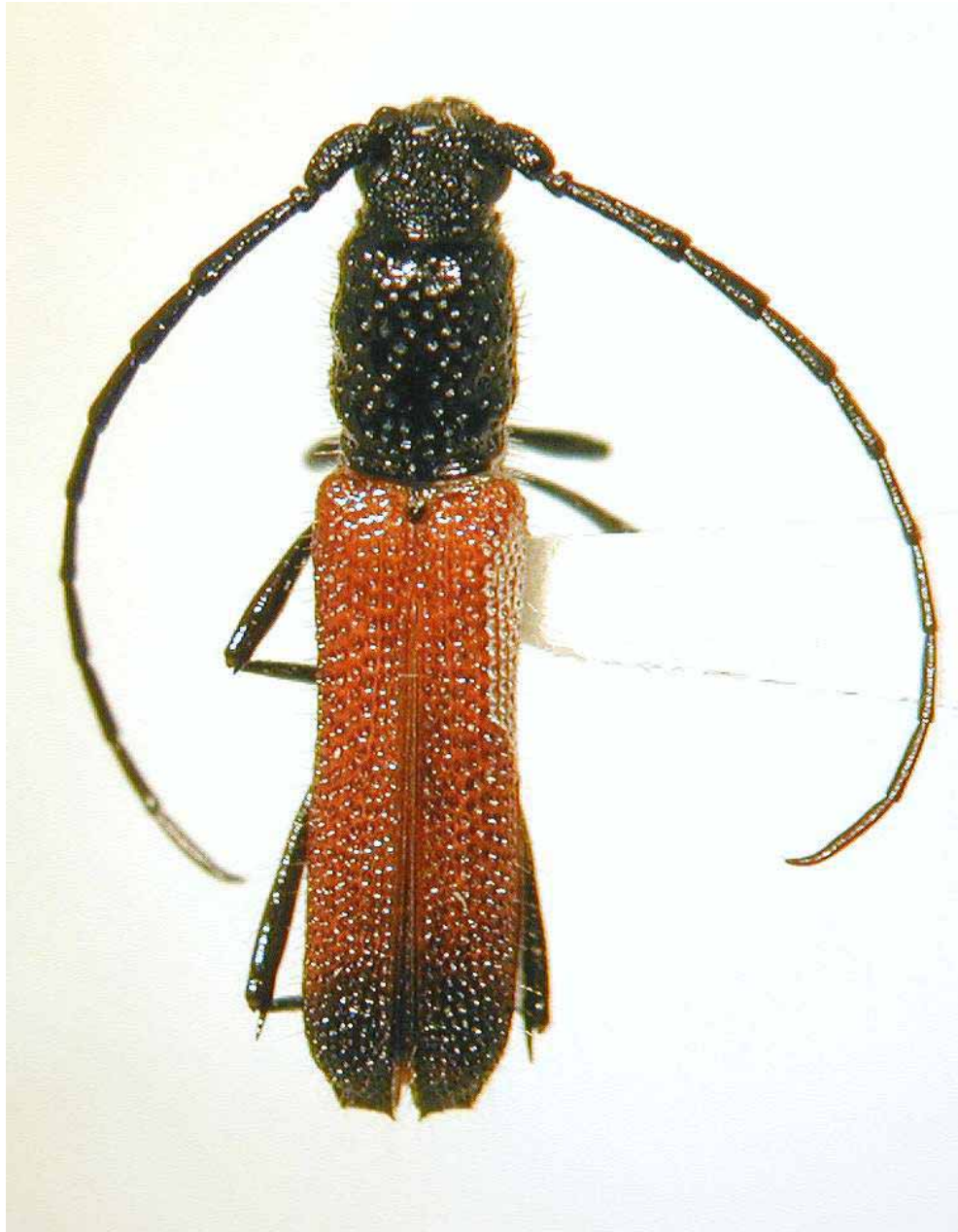


FIGURE 2. *Ceralocyna onorei*, new species, Holotype male.

punctuation at sides angled toward midline anteriorly, forming a subtriangular shining, sparsely, coarsely punctate median area, erect hairs arising from punctures; mesosternum narrow, impressed, lightly sculptured; metasternum shining, coarsely punctate laterally, more finely punctate medially, with a narrow glabrous median line, punctures bearing erect hairs; pro- and mesocoxae, epimeron and episterna microsculptured, clothed with fine appressed white pubescence. Scutellum small, elongate-ovate, truncate apically, medially impressed, glabrous. Elytra elongate, narrowly impressed around and behind scutellum to basal 1/6; punctuation coarse, linearly arrayed basally in 9 vague rows, punctures slightly smaller, with rows less clearly defined on apical 1/4, short erect hairs arising from each puncture in every other row from sutural row laterally; disk abruptly rounded to apex, a narrow flared area below declivity, about equal in length to scutellum, outer angle acute, sutural angle dentate, apical margin arcuate. Legs with scattered erect hairs on femora, primarily on upper and lower edges; posterior femora with apical spine slender, equal in length to width of femora. Abdomen broad, basal sternite sparsely, moderately coarsely punctate, more finely so at lateral margins, remaining sternites finely punctate medially, micro-punctate patches basally at sides, a few erect hairs arising from punctures, terminal sternite broadly, feebly emarginate at apex. Dimensions: pronotum: 2.0 mm long, 1.5 mm wide; elytra: 5.0 mm long, 1.6 mm wide at humeri; total length: 8 - 9 mm.

Female. similar to male in form and coloration, slightly more robust; genae shorter, apex emarginate, bidentate; antennae with 10 antennomeres, antennomeres thickened, flattened or impressed, projecting laterally at apices, slightly surpassing middle of elytra; pronotum broader, sides and prosternum lacking sexual punctuation, punctuation slightly finer at sides; elytral apices truncate, outer angle obtuse, sutural angle feebly dentate; terminal abdominal sternite broadly, feebly

rounded apically. Dimensions: pronotum: 2.1 mm long, 1.7 mm wide; elytra: 5.5 mm long, 1.8 mm wide at humeri; total length: 8.5 mm.

Holotype male, **allotype** (Canadian Museum of Nature) and 2 male paratypes: ECUADOR, Manabi: 1.5 km E Pto. Cayo, 20 m, 28 FEB 1981, H. Howden. Paratypes in EMEC, PUCE.

Diagnosis. This species also keys to couplet 12 in Monné & Napp (2000). It differs from *C. variegata* by the stouter body form, much shorter, uneven, sparsely punctate pronotum, unmodified mandibles, genae without a long spine, and feebly flared, obtuse or acute, but not dentate, outer angles of the elytra. From *C. margaretae*, which it more closely resembles, female *C. onorei* differ by the lighter red coloration of the elytra (very dark purple-red in *C. margaretae*), stouter, uneven, less-coarsely, densely punctate pronotal disk, and thicker basal antennal segments. This is the first described *Ceralocyna* with a black pronotum and uneven pronotal surface, only *C. nigrocollis* possessing feeble gibbosities basolaterally.

The type series was collected in deciduous scrub forest on the coastal plain of southwestern Ecuador.

Etymology. This species is dedicated to Giovanni Onore, Pontificia Universidad Católica del Ecuador (PUCE), who has generously provided logistical support, collecting permits, and endless inspiration during visits to that country.

***Ceralocyna marcelae* sp. nov.**

(Figure 3)

Female. Form elongate, narrow, cylindrical; integument piceous to black, basal 4 segments of abdomen orange-red, apical segment dark brown to piceous, and basal 1/3 of elytral disk with a broad, roughly rectangular red-orange macula. Pubescence white to dark brown, fine, erect, a few suberect, golden setae on legs. Head densely, coarsely, deeply, confluent punctate, erect hairs sparse, slightly denser on front; front broadly,

deeply impressed, genae feebly divergent, much shorter than lower eye lobes, apex broadly truncate, surface lightly rugose; mandibles small, lacking dorso-basal lobe, with a deep pit a base on each side of front, surface concave, roughened, apices acuminate; antennae with 11 antennomeres, slender, barely attaining elytral apex, scape shining, coarsely, sparsely punctate, glabrous except for a single erect hair on ventral face, distal antennomeres micropunctate, feebly shining, glabrous dorsally, a single erect hair ventrally at middle of third and fourth antennomeres, paired poriferous areas narrow, confined to external margins, present from apical 1/2 of antennomere 3 to apex of 11. Prothorax cylindrical, about 1/4 again longer than wide, anterior margin strongly constricted, basal margin only feebly constricted, sides uneven, subparallel; pronotal surface evenly convex, sides feebly elevated before basal constriction, with rounded elevations behind anterior constriction, disk coarsely, moderately densely punctate, punctures separated by about their width, dark erect hairs arising from punctures, broad, sides less coarsely punctate, lacking areas of sexual punctation. Prosternum lacking sexual punctation, sparsely punctate, erect hairs arising from punctures; mesosternum moderately broad, impressed, shining, sparsely punctate; metasternum shining, sparsely, moderately coarsely punctate laterally, more finely punctate medially, punctures bearing suberect hairs; pro- and mesocoxae, epimera and episterna microsculptured, thinly clothed with minute appressed pubescence. Scutellum small, ligulate, glabrous. Elytra elongate, narrowly impressed around and behind scutellum to basal 1/6; punctation coarse, irregularly arrayed basally on disk in 5 vague rows, epipleural punctation confused, non-linear, punctures smaller and discal rows less clearly defined at apical 1/3, dark erect hairs arising from each puncture in every other row from sutural row laterally; disk abruptly rounded well before apex, a broad flared area behind

declivity, about equal in length to antennomere 3, outer angle feebly acute, minutely dentate, sutural angles minutely dentate, apical margins truncate, entire apex curled inward, elevating sutural and lateral margins. Legs with a few erect hairs on underside of femora, a short crest of suberect setae on upper edge; posterior femora with apical spine slender, about equal in length to width of femora. Abdomen broad, sternites sparsely, finely punctate, erect hairs arising from punctures, terminal sternite broadly, feebly rotundate-truncate at apex. Dimensions: pronotum: 2.0 mm long, 1.5 mm wide; elytra: 6.5 mm long, 2.0 mm wide at humeri; total length: 9.0 mm.

Holotype female (Essig Museum of Entomology) from ECUADOR: Napo: 21–25 km E Atahualpa, 27–3 SEP 1997, on fallen limb, F.T. Hovore, coll.

The type specimen was taken from a small twig on a fallen tree limb lying along the roadside on the south bank of the Rio Napo, between Puerto Napo and the Rio Arajuno, about 3 km E of Cabañas Aliñahui and 7 km E of the Jatun Sacha Reserve.

Diagnosis. Like the preceding taxa, this species keys into couplet 12 in Monné & Napp (2000) where it most closely approximates *C. variegata* in coloration and form. It differs from the original descriptions of both sexes (Monné & Napp, 1999) of that species by the dark brown dorsal pubescence, very short, truncate genae, lacking a long projection or teeth; shorter, more narrowly concave mandibles, lacking any trace of a basal lobe and possessing basal pits; shorter, less-rounded prothorax; and outer angle of the elytra feebly projecting but not obviously dentate. The holotype male of *C. variegata* (color digital image examined) and a single female specimen appearing to represent that species (Bolivia, Santa Cruz, 4–6 km SSE Buena Vista, F & F Hotel, 17–30 April 2003, R. Clarke), were compared with *C. marcelae*, and both of those specimens additionally differ by the



FIGURE 3. *Ceralocyna marcelae*, new species, Holotype female.

broader elytral macula, extending diagonally to the lateral margins. The female specimen further differs from *C. marcelae* by having 10-segmented antennae; the pronotum wider and more evenly rounded laterally, with the disc slightly less densely punctate; the elytral macula rich crimson-red, and the basal elytral punctation finer and less regularly linear; the apical elytral punctation cribrate; the basal three segments of the abdomen dark red, with the apical two segments piceous; and the dorsal pubescence pale.

The only two other *Ceralocyna* species described as possessing dark erect pubescence are *C. coccinea* Monné and Napp, 1999, and *C. nigropilosa* Monné & Napp, 1999, both of which have entirely red pronota and elytra.

The holotype female has long, slender, 11-segmented antennae, and in this respect resembles a male specimen, but it lacks sexual punctation on the prothorax and has a typically female abdominal apex.

Etymology. This species is dedicated to Marcela L. Monné, who provided assistance with determinations of some difficult Ancylocerina, and who, with Dilma Solange Napp, recently revised the genus *Ceralocyna*.

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LITERATURE CITED

- MONNÉ, M. L. AND D. S. NAPP. 1999. *Ceralocyna* (Coleoptera, Cerambycidae): descrição de quatro espécies novas e sinonímia. *Iheringia, Ser. Zool., Porto Alegre*, (86): 29–37, 5 figs.
- MONNÉ, M. L. AND D. S. NAPP. 2000. Revisão do gênero *Ceralocyna* (Coleoptera, Cerambycidae, Cerambycinae, Trachyderini, Ancylocerina). *Iheringia, Ser. Zool., Porto Alegre*, (88): 103–137, 91 figs.

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