

A SYNOPSIS OF *MICRALCINUS* LECONTE (COLEOPTERA, CURCULIONIDAE)

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This is the first in a series of papers which will eventually consider the whole of the old subfamily Cryptorhynchinae occurring in North America. One or more closely related genera will be considered in each paper. The last paper will contain the keys to the tribes and genera. This method has been resorted to in order to facilitate publication.

Micralcinus LeConte

Micralcinus LeConte 1876, p. 235. Blatchley and Leng 1916, p. 494. Buchanan 1927, p. 108.

Rostrum received in the prosternum in repose; the pectoral canal not extending behind the anterior coxae and not closed behind. Funicle 7-segmented, first segment robust and subequal to second. Club densely pubescent. Prothoracic lobes strongly developed. Elytral intervals flat or very feebly convex. Anterior coxae narrowly separated; mesosternum protuberant. Femora slender, sinuate beneath. Claws free, divergent and with a minute tooth at basal third of each.

Genotype. Miracalcinus cribratus LeConte.

The body form and general morphology is typically Ithyporid and the genus is properly placed after *Conotrachelus* as was done by LeConte and Buchanan. The funicle is definitely 7-segmented contrary to statements otherwise by Blatchley.

All previous authors have considered the claws to be free, divergent and simple. However, examination under magnifications of from 60x to 90x show the claws to have a minute tooth at about the basal third of each claw. All members of the genus actually have minutely toothed claws.

External sexual differences (as indicated by Buchanan, *l.c.*) are easily noted. They are: ♂ with concavity at the base of the abdomen and the fore tibiae distinctly arcuate; ♀ with the last abdominal segment deflexed upward and transversely depressed across apical fifth. The author has noted that in most collections the ♀ outnumber the males about 3-1.

A large number of the specimens examined were taken at light near bodies of water.

KEY TO THE SPECIES OF *Micralcinus*.

1. Femora completely unarmed, without even a minute denticle on the hind pair..... 2
- 1'. Femora armed with a small tooth or denticle which is often more prominent on the hind pair..... 3
2. Third and fourth funicular segments subequal; rostrum moderately arcuate on dorsal edge in profile; punctures of elytral series moderate, not nearly as wide as the intervals..... *cribratus* LeConte
- 2'. Third segment of funicle longer than fourth; rostrum very feebly arcuate on dorsal edge in profile; punctures of elytral series coarse, nearly or as wide as the elytral intervals..... *maculatus* (Blatchley)
3. Elytra without erect seta-like scales on the elytra; femora with a very small denticle; more elongate species..... *kalmbacki* Buchanan
- 3'. Elytra with erect, bristly, seta-like scales on all elytral intervals; femora with a tooth which is readily visible; shorter more robust species..... *stehri* n. sp.

Micralcinus cribratus LeConte

Micralcinus cribratus LeConte 1876, p. 236. Blatchley and Leng 1916, p. 494. Buchanan 1927, p. 108.

Elongate-oval; dark reddish brown with the elytra mottled with black; moderately clothed with elongate, prostrate, white seta-like scales which on the elytra are condensed in spots giving a mottled appearance, prominent patches at the bases of 3rd intervals and on humeri.

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Rostrum stout, about as long as prothorax, moderately arcuate on dorsal edge in profile, deeply striate and punctured. First funicular segment robust, subequal to 2nd; 3rd segment shorter than 2nd; 3rd and 4th subequal. Head rather densely punctured. Front with a small round deep fovea between the eyes.

Prothorax as wide as long, sides subparallel in basal two-thirds, then narrowed to a feeble apical constriction; pronotum cribrately punctured, the punctures coarse and deep. Scutellum small and triangular.

Elytra oval, about one-third wider than the prothorax; bisinuate at base; humeri rounded; sides slightly rounded, more strongly convergent apically; striae feebly impressed, composed of rather large, deep punctures, which become smaller apically; intervals flattened.

Ventral side strongly, moderately densely punctured, sparsely clothed with setae. Femora slender, sinuate beneath and unarmed. Anterior tibiae of ♂ distinctly arcuate, of ♀ straight. Male with a concavity at base of abdomen, the ♀ with the last abdominal segment deflexed upward and transversely depressed across apical fifth.

Length 3.2–4.7 mm., width 1.2–2.3 mm.

Type locality. Capron, Florida. Type in the LeConte Collection at the Museum of Comparative Zoology, Cambridge, Massachusetts.

Distribution. Known only from Florida.

Material examined. Examples have been seen from Moore Haven, VI–4–18; Belle Glade, VII–26; Enterprise; Tarpon Springs; Sebring, VI; all in the State of Florida.

Since the above was written additional material from the Florida State Plant Board has been studied and additional localities are added herewith: Miami, V–1–39, I–9–43, V–5–39; Florida City, V–1–39. A total of 34 examples were examined. Seventeen of this number were taken at light. Examples from Florida City were on *Amaranthus* sp. Those from Miami were on *Acnidia cuspidata*.

Superficially resembling a rather robust *Tyloclerema variegata* (Horn). This is by far the more common of the four species recognized.

***Micralcinus maculatus* (Blatchley) n. comb.**

Tyloclerema maculata Blatchley, Blatchley and Leng 1916, p. 491.

Elongate-oval, robust; dark reddish brown, the elytra mottled with black and the antennae and tarsi pale reddish brown; head, rostrum and prothorax moderately clothed and the elytra thickly clothed with prostrate, elongate seta-like scales which on the latter are condensed in spots, prominent patches present on the bases of 3rd elytral intervals and on humeri.

Rostrum nearly as long as head and prothorax, very feebly arcuate on dorsal edge in profile, carinate at middle, finely striate laterally, coarsely and densely punctured. Funicle 7-segmented, the first segment robust, subequal to 2nd which is more slender, 3rd segment shorter than 2nd, longer than 4th. Head finely and closely punctured. Front with a small, round, deep fovea between the eyes.

Prothorax a little wider than long, sides nearly straight, very slightly convergent to apical third then feebly narrowed to apex; pronotum densely, coarsely and rather evenly punctured. Scutellum small and broadly triangular.

Elytra oval, one-fourth wider at base than prothorax, emarginate at base, sides feebly converging from base to behind middle, then rapidly converging to apex; humeri obliquely rounded; striae unimpressed, striae punctures rather coarse, cutting into intervals; the latter very feebly convex.

Ventral side sparsely and more finely punctured than the dorsum, each puncture with a fine, gray, prostrate seta. Abdominal segments as in *cribratus*. Anterior tibiae of ♀ straight and shorter than the femora.

Length 4.0–4.5 mm., width 1.8–2.1 mm.

Type locality. Little River, Florida. Type in the Blatchley Collection, Purdue University, Lafayette, Indiana.

Distribution. Known only from Central and Southern Florida.

Material examined. Only three examples known: Little River, III–17, (holotype); Moore Haven, III–3, W. S. Blatchley; Hog Island, Dunedin, III–26–18, W. S. Blatchley. The latter example was swept from *Batis maritima* L.

The author was surprised to find that *Tyloderma maculata* Blatchley was actually a *Micralcinus*, and is not a little puzzled as to why Blatchley made the error. There is no evidence of a pectoral canal behind the anterior coxae, nor is the pectoral canal closed behind. The funicle is definitely 7-segmented while in *Tyloderma* it is 6-segmented. The general form and morphology is definitely Ithyoprid.

***Micralcinus kalmbachi* Buchanan**

Micralcinus kalmbachi Buchanan 1927, p. 169.

Oblong; reddish brown, the elytra mottled with black; sparsely unevenly clothed with narrow, prostrate, white seta-like scales, which on the elytra are condensed in a patch at base of 3rd interval, and tending to form spots and bands; the odd intervals with a single row of unevenly placed suberect setae.

Rostrum sub-cylindrical, evenly arcuate, feebly carinate along median line, feebly strigose laterally, rugosely punctured; very feebly set off from the head. Head coarsely and closely punctured. Front coarsely foveate between the eyes. Eyes moderately convex.

Prothorax slightly wider than long, sides slightly converging from middle to base, very feebly constricted at apex; pronotum cribrately punctured. Scutellum small, elongate, narrow and rounded behind.

Elytra elongate, one-fourth wider at base than prothorax, feebly bisinuate at base, sides subparallel to behind middle then convergent to the apex; humeri rounded and prominent; striae unimpressed except near declivity, punctures rather large and close, not cutting into the intervals; intervals nearly flat, becoming feebly convex, the first more prominent, at declivity.

Ventral side darker than dorsum, sparsely clothed with suberect setae; punctures coarse and rather sparse, becoming finer and denser on the fifth abdominal segment. Anterior tibiae of ♀ nearly straight, shorter than the femora. Femoral tooth only a denticle, more prominent on the posterior legs, scarcely visible on anterior pair.

Length 4.2–4.3 mm., width 1.9–2.0 mm.

Type locality. Gueydan, Louisiana. Type in the United States National Museum.

Distribution. Louisiana and Alabama.

Material examined. *Louisiana:* Gueydan, VIII-5-25, E. R. Kalmbach, (holotype and paratype), in the United States National Museum; New Orleans, VIII-8-38, in the author's collection. *Alabama:* Mobile. Eight examples have been studied, all of which were female and collected at light.

***Micralcinus stehri* n. sp.**

Female.—Robust; dark reddish, the elytra paler and mottled with black; moderately densely clothed with prostrate brown, black and white seta-like scales, the head and pronotum with a few scattered erect seta-like scales and the elytra with a single row of erect scales on each interval, a prominent patch of white scales present on bases of 3rd intervals and humeri.

Rostrum nearly as long as head and prothorax combined, subcylindrical, feebly curved; coarsely punctured; carinate along median line, feebly striate laterally; feebly set off from head. Antennae inserted near apical third of rostrum. Funicle 7-segmented; first segment robust, subequal to 2nd which is slender; 3rd segment longer than 4th; remainder moniliform, gradually increasing in size. Club elongate, oval and densely pubescent; strongly annulated. Head closely, coarsely, rather shallowly punctured, the intervals between the punctures strongly alutaceous. Front with a round, deep fovea. Eyes feebly convex and coarsely granulated.

Prothorax slightly wider than long, the sides parallel in basal two-thirds then converging to apex; the sides feebly sinuate at middle; pronotum closely, coarsely, deeply and evenly punctured, each puncture with a seta-like scale; prothoracic lobes very prominent. Scutellum small and triangular.

Elytra about one-third longer than wide, sides parallel to apical third, then convergent to apex; humeri oblique; striae impressed, striae punctures about half the width of intervals, rounded, deep, about one-half their diameter apart; intervals very feebly convex, confusedly punctured, each interval with a row of erect seta-like scales which are separated by almost one and one-half their length.

Ventral side coarsely closely punctured, those of the 5th abdominal segment finer and denser, each with a recumbent white seta, the intervals between the punctures strongly alutaceous. Mesosternum moderately protuberant and produced forward. Legs moderately robust, densely clothed with white scales. Femora prominently armed with a tooth. Anterior tibiae of ♀ straight. Claws free, divergent and minutely toothed at basal third.

Length 3.6 mm., width 1.75 mm.

Male.—Differs very little from the female, other than by the usual sexual differences. The anterior tibiae not distinctly arcuate as in the genotype. Length 3.3 mm., width 1.7 mm.

Type locality. New Orleans, Louisiana. Type in the author's collection.

Distribution. Louisiana, Mississippi and Alabama.

Type material. Holotype, ♀, New Orleans, Louisiana, VII-20-44, J. H. Hughes in the author's collection. Allotype, ♂, Mobile, Alabama, VI-23-50, E. D. Wilson, in the collection of B. D. Valentine. Eight paratypes as follows: in the author's collection, 3 ♀, same data as holotype; in the collection of B. D. Valentine, 2 ♀, same data as allotype, 3 ♀, Hattisburg, Mississippi, VII-12-52, C. B. Segars. Length of paratypes 3.3-3.8 mm., width 1.5-1.8 mm. All examples were taken at light.

This species differs from all other species in the genus by the erect seta-like scales, and the other characters mentioned in the key.

This species is named in honor of Dr. W. C. Stehr of Ohio University, Athens, who has kindly given the author many Curculionidae for his collection and who donated the types of this species to the author.

LITERATURE CITED

- Blatchley, W. S. and C. W. Leng.** 1916. Rhynchophora or weevils of North Eastern America. The Nature Publishing Co. Indianapolis. 681 p.
- Buchanan, L. L.** 1927. Notes on some light attracted beetles from Louisiana (Coleop.). Ent. News 38: 165-170.
- LeConte, J. L.** (assis. by G. W. Horn). 1876. The Rhynchophora of America North of Mexico. Proc. Am. Phil. Soc. 15: 1-455.
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