

NEW OHIO RHYNCHOPHORA. I.  
(COLEOPTERA, CURCULIONIDAE)

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During the preparation of a bulletin on the Rhynchophora, except Scolytidae, of Ohio, numerous new forms have been discovered. This is the first of several papers devoted exclusively to Ohio Rhynchophora new to science. It might be stated here that many of the following species were collected in areas that are small relic communities with an ecology very different from that of the surrounding area.

***Phyllotrox fulvipennis* n. sp.**

Figures 6 and 9

*Female*.—Elongate; reddish brown with head, an area around scutellum, and mesosternum darker, the elytra brownish yellow; thinly clothed with very fine yellow pubescence, mesosternum densely clothed with white pubescence.

Rostrum two-thirds as long as pronotum, cylindrical, closely and finely punctured, smoother at apex; sparsely clothed with fine recumbent yellow setae. Antennae inserted just beyond middle; scape feebly arcuate, not attaining eyes; first segment of funicle stout, twice as long as second, the second one-half longer than third, remainder subequal in length, gradually wider toward club. Club round, densely clothed with fine white pubescence. Head convex; closely, finely punctured; not foveate between eyes. Eyes black and strongly convex.

Prothorax flattened; as wide as long; sides feebly, evenly rounded, feebly constricted at apex; closely, coarsely, very shallowly punctured; intervals between punctures alutaceous, each puncture with a recumbent yellow seta. Scutellum triangular, broad, feebly convex; minutely punctured.

Elytra elongate; wider than pronotum; sides feebly arcuate, broadest at middle; humeri rounded; clothed with fine, recumbent, yellow setae; striae feebly impressed, punctures close-set, small deep, rectangular; intervals flat, with confusedly placed, minute, very shallow punctures.

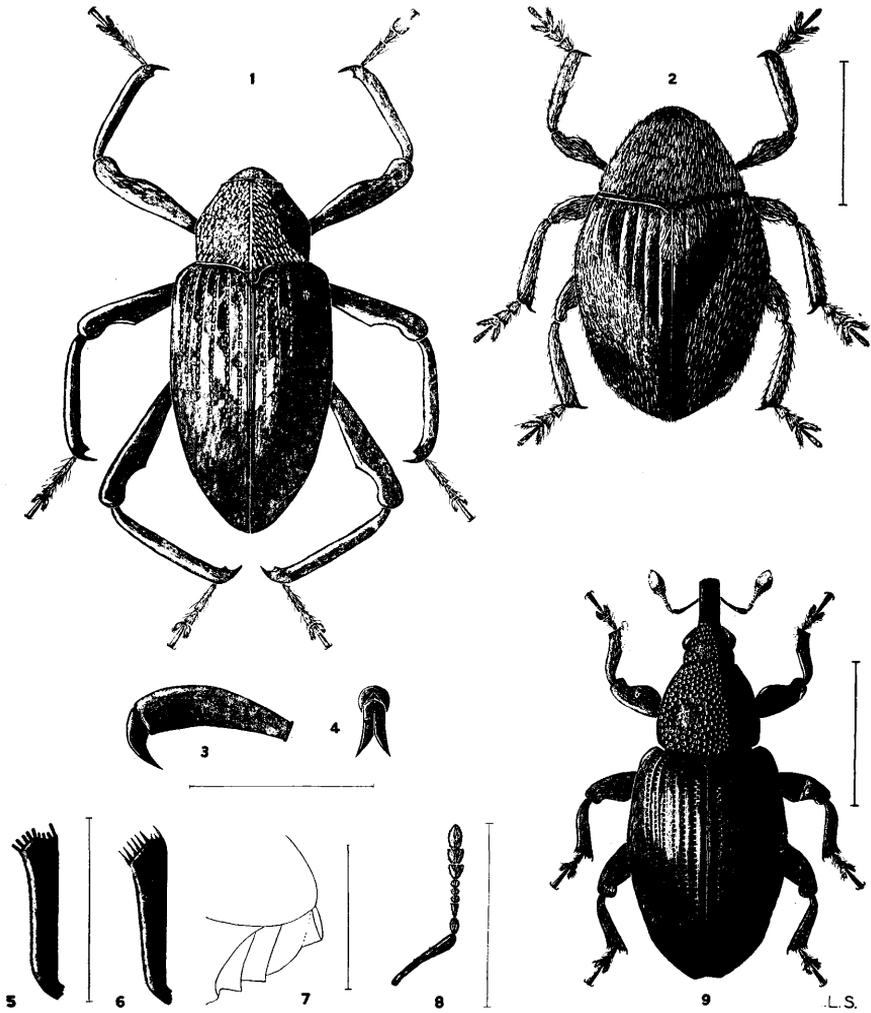
Ventral side convex. Prosternum short before coxae; metasternum finely, sparsely punctate, white pubescence recumbent. Abdominal segments 1, 2, and 5 subequal in length; fifth as long as three and four combined; 1-4 with sparse, fine, shallow punctures, fifth more coarsely and closely punctured. Legs stout, sparsely clothed with very fine yellow setae. Femora very robust, unarmed. Anterior tibiae narrower than others with a dense patch of pubescence mesally at apex. Middle and posterior tibiae stout, widening toward apex, obliquely truncate at apex, the apex with long, narrow, sharp spines. Third tarsal segment broadly bilobed. Claws simple, divergent. Pygidium flat.

Length 2.1 mm., width 1.0 mm.

*Male*.—Pygidium slightly convex with a broad, deep, median longitudinal groove; anterior tibiae not obliquely truncate. Length 2.0 mm., width 1.0 mm.

*Type material*.—Holotype, ♀, Crane Hollow, Hocking County, Ohio, V-27-50, NJ & ELS,\* Allotype, ♂, Hocking County, Ohio, IV-29-50, NJ & ELS, in (ELS). There are 166 paratypes deposited as follows: in (ELS), 70 ♂, 75 ♀, Hocking County, Ohio, IV-29-50, NJ & ELS, 1 ♂, 3 ♀, Hocking County, Ohio, V-27-50, NJ & ELS; in the United States National Museum, 3 ♂, 3 ♀, Hocking County, Ohio, IV-29-50, NJ & ELS; in the Entomological Collection, Ohio University, Athens, 6 ♂, 5 ♀, Rock Run, Jackson County, Ohio, V-11-35, W. C. Stehr. Material is also at hand from Ashland and Greene Counties, Ohio, but is not a part of the type series.

\*The abbreviations NJ & ELS and (ELS) refer to N. J. & E. L. Sleeper and the author's collection respectively.



1. *Sternochetus woodruffi* n. sp., holotype, ♂.
2. *Nanophyes confusor* n. sp., holotype, ♂.
3. Lateral view of last tarsal segment and claws of *Nanophyes confusor* n. sp., holotype, ♂
4. Connate claws of *Nanophyes confusor* n. sp., holotype, ♂.
5. Posterior tibiae of *Phyllotrox nubifer* LeConte, ♀.
6. Posterior tibiae of *Phyllotrox fulvipennis* n. sp., holotype, ♀.
7. Lateral outline of abdominal segments 3, 4 and 5 of *Acanthoscelidius isolatus* n. sp., holotype, ♀.
8. Antennae of *Nanophyes confusor* n. sp., holotype, ♂.
9. *Phyllotrox fulvipennis* n. sp., holotype, ♀.

Figures 1-2, 7-9. Line = 1 mm.

Figures 5-6. Line = 1/2 mm.

Figures 3-4. Line = 1/4 mm.

This species is very similar in general appearance to *P. nubifer* LeConte. It differs in having the punctures of the pronotum finer, punctures of rostrum finer laterally, more shallow, punctures between eyes finer, irregular, not as coarse and deep as in *nubifer*, punctures of elytral intervals much finer. The distal end of the posterior tibiae of *flavipennis* has long narrow sharp spines, while that of *nubifer* has spines that are short, robust and more blunt.

***Magdalis hockingensis* n. sp.**

*Male*.—Elongate, wedge-shaped; black, feebly shining; without vestiture except for very short white seta-like scales on legs.

Rostrum longer than pronotum, strongly curved, coarsely and densely punctured basally, punctures finer in apical half. Antennae inserted in basal third; first segment of funicle stouter, as long as second. Head strongly alutaceous, sparsely and coarsely punctured.

Prothorax slightly longer than wide, sides straight, feebly constricted at apex, hind angles feebly produced, scarcely divergent; pronotum without trace of smooth median line, densely moderately punctured, the intervals between punctures alutaceous. Scutellum quadrate, sloping forward.

Elytra at base scarcely wider than prothorax, sides straight, strongly convergent from base to apical fourth then strongly rounded to apex; striae noticeably impressed, strial punctures deep, rectangular, nearly contiguous; intervals nearly flat, strongly alutaceous, each with a row of punctures at least as wide as the intervals.

Ventral side with abdominal segments finely punctured, sparsely at sides, more densely at middle. Femora unarmed, front femora obliquely impressed at base. Claws simple.

Length 2.7 mm., width 1.1 mm.

*Female*.—Unknown.

*Type material*.—Holotype, ♂, Crane Hollow, Hocking County, Ohio, V-27-50, NJ & ELS, 1 ♂, paratype, same locality as holotype, V-1-54, ELS, both in (ELS).

This species is nearest to *M. hispidoides* LeConte, from which it differs in having the prothorax with the sides more cylindrical, pronotum flatter, more finely punctured; elytra with sides more strongly divergent, striae more deeply impressed; ventral side more sparsely finely punctured. This weevil was beaten from an oak but it undoubtedly breeds in pine as do most of the other members of this group. There were sizeable stands of pine nearby. The paratype was beaten from Scotch pine.

***Nanophyes confusor* n. sp.**

Figures 2, 3, 4, and 8

*Male*.—Oval, convex, robust; reddish brown, with the head, rostrum, apical margin of prothorax, an oblique bar and a lateral subapical spot, the thoracic sternae, and all but the fifth abdominal segment black; densely clothed dorsally with narrow, flat, recumbent, pale yellow scale-like setae, the black fascia of elytra with very fine recumbent black setae.

Rostrum slightly longer than the pronotum; cylindrical, the dorsal line feebly arcuate when viewed laterally, ventral line straight; broadly bisulcate laterally; a strong median and two prominent lateral carinae in basal half; very sparsely clothed with pale yellow setae. Antennae inserted just beyond middle. Scape attaining the eyes, funicle 5-segmented; first segment elongate, robust, second segment elongate and more slender than the first, remaining segments short, rounded, subequal. Club elongate, very loose, last segment as long as preceding two. Head conical, alutaceous, very sparsely and finely punctured; vertex with a very short prominent carina. Eyes narrowly separated above, feebly convex, strongly granulate.

Prothorax conical, sides strongly convergent to apex which is about one-half width of base; pronotum strongly alutaceous, finely sparsely punctured. Scutellum not visible.

Elytra oval-robust, base slightly wider than base of prothorax; sides strongly arcuate to apical fourth then convergent to apex; humeri obsolete; striae deeply impressed, strial punctures strong, separated by twice their diameter; intervals very broad, strongly convex, densely and confusedly punctured; vestiture denser on basal fourth of second interval.

Ventral side sparsely clothed with finer vestiture; strongly alutaceous. First, second, and fifth segments, subequal, much longer than third and fourth combined; fifth broadly truncate.

Pygidium very prominent from ventral aspect, appearing as a sixth abdominal segment. Legs robust, sparsely clothed with fine pale setae. Femora unarmed. Claws connate to middle, very feebly divergent.

Length 2.25 mm., width 1.25 mm.

*Female*.—Rostrum one-fourth longer than pronotum, apical fourth dark reddish brown. Fifth abdominal segment feebly truncate at apex; nearly as long as first and second segment behind posterior coxae. Length 2.3 mm., width 1.3 mm.

*Type material*.—Holotype, ♂, allotype ♀, from Cranberry Bog, Buckeye Lake, Licking County, Ohio, VI-18-50, NJ & ELS, in (ELS). Eighty-eight paratypes as follows: in (ELS), 34 ♂, 35 ♀, same data as holotype, 1 ♂, 1 ♀, Buckeye Lake (Collected at Cranberry Bog), Ohio, VII-9-46, J. A. Wilcox; in the Canadian National Collection, 8 (sex undetermined) same data as holotype; 4 ♂, 5 ♀, Buckeye Lake, Licking County, Ohio, VI-20-53, R. E. Woodruff, in collection of the collector.

This has been compared with the holotype of the only other species of the genus known from North America, *Nanophyes canadensis* Brown by the author of that species and is quite unlike it. *N. confusor* seems to be nearest *marmoratus* (Goeze) (*lythri* Fab.) from Southern Europe. *N. confusor* is more robust, more densely pubescent, and has the antennal club and base of the elytra pale reddish brown. The pronotum and abdominal segments are alutaceous.

Previously this has been sent to some workers under the name *Corimalia pallidulus* ?? (Gozis) but it is a *Nanophyes* and not a *Corimalia* as the latter has a compact antennal club and free tarsal claws.

#### *Acanthoscelidius isolatus* n. sp.

##### Figure 7

*Female*.—Broad, oval, robust; black, the funicle and club with a reddish tinge; sparsely clothed with brown and white, flat, clavate, prostrate scales; a patch of white scales condensed around the scutellum on elytra.

Rostrum five-sixths as long as pronotum, subcylindrical; viewed dorsally it is widened from base to middle, then narrowed again to apex; a prominent median keel-like carina from point of insertion of antennae to apical margin of prothorax; deeply, coarsely, rugosely punctured throughout. Antennal funicle 7-segmented; first segment short and robust, second segment very slender, nearly twice as long as third and fourth combined, third and fourth subequal, remaining segments short and rounded. Club compact, oval, and densely pubescent. Head very coarsely, closely, deeply punctured. Eyes very feebly convex, finely granulate.

Prothorax one-third wider than long, sides strongly rounded to a strong apical constriction; pronotum coarsely and deeply punctured with punctures of irregular size, the bottom of each puncture strongly alutaceous; two small pointed tubercles present laterally, a median dorsal channel distinct in basal third. Scutellum very long and narrow, about five times longer than wide.

Elytra one-half wider at base than prothorax, as long as wide; sides strongly rounded from humeri; striae deep, with round, deep, distant punctures; intervals wider than striae, convex, intervals 3, 5 and 7 strongly elevated, wider than other intervals, all intervals with very prominent asperites which bear brown recurved scales.

Ventral side coarsely and densely punctured throughout. Apical third of first and all the second abdominal segment concave at middle; fifth segment when viewed in profile strongly arched upward to a flat apical area (fig. 7). All segments clothed with broad, flat, white scales. Legs robust, clothed with scales as on dorsum; middle and posterior tibiae with dense, long, brown pubescence along outer apical margin. Femora unarmed, grooved beneath receiving tibiae. Anterior tibiae slender, outer apical angle prolonged in a toothed process; middle and hind tibiae toothed on outer edge at one-third from apex. Claws with a long slender tooth.

Length 3.1 mm., width 2.0 mm.

*Male*.—Unknown.

*Type material*.—Holotype, ♀, Hocking County, Ohio, VII-12-50, NJ & ELS, in (ELS). The type was found in a rather isolated hollow along Clear Creek.

This weevil is unlike any other of the genus. It resembles *Auleutes tenuipes* (LeConte) but may be separated from it by the prolongation of the anterior tibiae. The peculiar modification of the fifth abdominal segment and the very deeply, coarsely punctured pronotum separates *isolatus* from the other members of *Acanthoscelidius*. It seems to represent an intermediate form between the genera *Acanthoscelidius* and *Auleutes*. Further study may make it necessary to combine these genera.

***Auleutes triplehorni* n. sp.**

*Male*.—Broadly oval; shining, black with the funicle dark reddish black; clothed with broad, flat, white scales and moderately long, black, brown, and white setae; the broad white scales are arranged in patterns on pronotum and a cruciform spot on elytra, the setae on elytra are arranged in rows on intervals.

Rostrum one-third longer than pronotum, coarsely, deeply and densely punctured in basal three-fourths, apical fourth smooth and nearly impunctate; no evidence of a median carina. Antennae inserted just behind middle. Funicle 6-segmented, first segment elongate and robust, second and third elongate slender and subequal, the remainder short, one-half length of third. Club elongate, not distinctly annulated, densely clothed with long fine pubescence. Head coarsely, deeply, densely punctured, many punctures coalescent, forming strigae; a prominent carina from vertex to apical margin of pronotum; front with a patch of white scales. Eyes feebly convex, upper margin elevated above the level of front.

Prothorax one-fourth wider than long; sides strongly rounded to a strong apical constriction, apical margin reddish brown; pronotum coarsely, deeply, densely punctured with punctures of irregular size; lateral tubercles prominent; base of pronotum with a very prominent median lobe which cuts off the scutellum. Scutellum very small and round.

Elytra more than one-half wider at base and prothorax, as wide as long; sides strongly rounded to apex; striae deeply impressed, stria punctures shallow, elongate and distant; intervals wider than striae, strongly elevated, each with a row of moderate asperites, each of which bears a recurved setae.

Ventral side coarsely and moderately punctured, punctures of abdominal segments coarser, deeper, each bearing a broad, flat, white scale. First abdominal segment broadly and shallowly impressed. Fifth segment a little longer than the fourth, with a small deep pit densely filled with brownish yellow, erect, broad, flat scales. Legs sparsely clothed with narrow brown and white setae which are denser at apex of tibiae. Femora unarmed, grooved beneath. Anterior tibiae not prolonged outward at apex. Claws long and divergent, with a short tooth.

Length 2.0 mm., width 1.3 mm.

*Female*.—Differs from the male in that the first abdominal is not impressed and the fifth is as long as the third and fourth combined. Length 2.0 mm., width 1.3 mm.

*Type material*.—Holotype, ♂, and allotype, Clear Creek, Goodhope Twp., Hocking Co., Ohio, IV-25-54, NJ & ELS, in (ELS). Eight paratypes as follows: 1 ♂, same data as holotype; from the same locality and with same collectors, 1 ♂ V-1-54, 1 ♀ V-12-54, 1 ♀ V-27-50, 1 ♀ V-29-51, 1 ♀ Ross Co., (Tar Hollow), V-22-51, C. A. Triplehorn, 2 ♂ Hamilton Co., V-18 and VI-10, all in (ELS). All examples were swept from plants on wet ground.

*A. triplehorni* will key in Blatchley & Leng (1916) to *A. marionis* Fall because of the 6-segmented funicle, but they are very different otherwise. *A. triplehorni* may be separated easily by the black color and the prominent fovea on the last abdominal segment of the male.

***Tyloderma asclepiasae* n. sp.**

*Female*.—Elongate, robust, strongly convex; bluish black, with the antennae, tibiae, and tarsi reddish brown; without a trace of vestiture.

Rostrum slightly more than half as long as pronotum and slightly curved; coarsely, densely and rugosely punctured throughout. Head strongly alutaceous, finely, deeply, and sparsely punctured; a deep elongate fovea from vertex to middle of the front.

Prothorax slightly wider than long, sides parallel in basal two-thirds, then strongly constricted to apex; pronotum finely alutaceous becoming stronger basally, coarsely and sparsely

punctured; sides of prothorax strongly alutaceous, coarsely and deeply punctured. Scutellum very small, round and alutaceous.

Elytra behind oblique humeri, more than one-third wider than prothorax, sides rounded, widest about one-third from base; strongly alutaceous; striae absent, strial punctures very feeble, only those of first striae prominent in basal third; intervals each with a row of minute punctures in basal half, punctures of striae and intervals obsolete laterally and apically.

Ventral side with metasternum strongly alutaceous, coarsely and deeply punctured, each puncture with a minute flat, broad, white scale. All abdominal segments strongly alutaceous, first and second abdominal segments fused, the suture obsolete, both impunctate, second segment with two shallow pits; third and fourth subequal, alutaceous, impunctate; fifth abdominal segment deeply and coarsely punctured but without other modification, evenly rounded apically. Legs strongly alutaceous, coarsely and sparsely punctured, sparsely clothed with scales as on metasternum. Claws small, divergent, simple.

Length 3.2 mm., width 1.5 mm.

*Male*.—Unknown.

*Type material*.—Holotype ♀, Ohio State University Woods, Franklin County, Ohio, VI-7-50, NJ & ELS, in (ELS). Swept from *Asclepias incarnata* L., the stem of which bore oviposition scars typical of most species of *Tyloderma*.

This species is nearest *T. nigra* Casey, but *asclepiasae* has the punctures of the pronotum and the sides of prothorax sparser, the first four abdominal segments of *nigra* are finely strongly and distantly punctured, while in *asclepiasae* they are impunctate. The latter differs from *T. aera* (Say) by the coarser punctures of the pronotum and lateral areas of the prothorax; *aera* has the first four abdominal segments minutely punctured, and the first segment coarsely punctured between metacoxae.

Many authors have considered *T. nigra* Casey as a variety of *T. aera* (Say). However, a study of the characters given by Blatchley (1916, p. 490, 493), of a large series of both forms, along with their biologies, prove them to be two distinct species.

#### ***Sternochetus woodruffi* n. sp.**

Figure 1

*Male*.—Elongate-oval, robust; dark reddish black with the antennae and tarsi reddish brown; densely clothed with brown, white, and black, broad, flat, prostrate scales which are much larger on pronotum; a prominent crest of black scales at basal fourth of third elytral interval.

Rostrum one-fourth longer than pronotum, strongly arcuate, deeply, coarsely and rugosely punctured in basal two-thirds, smooth, shining, and finely punctured in apical third; a prominent median carina in basal half, faint indication of lateral carinae. Antennae inserted at apical third. Funicle 7-segmented; first segment short and robust, second slender and almost one-half longer than first, third and fourth subequal, three-fourths as long as second, remaining segments subequal, rounded. Club elongate, not distinctly annulated. Head coarsely and deeply punctured, a faint carina in evidence at vertex, above each eye a short blunt tubercle, front concave, rugosely punctured, with a small, deep, rounded fovea.

Prothorax wider than long, sides subparallel in basal half, then strongly convergent to apex which is not visibly constricted; a median carina present, strongly elevated at middle; pronotum coarsely, deeply and densely punctured, each puncture with a broad, flat, clavate scale, the black scales nearly erect, more robust and narrower than others. Scutellum small, round, strongly convex, shining and denuded.

Elytra elongate, much wider at base than prothorax, sides parallel in basal half, then convergent to apex; humeri prominent, rounded; striae impressed, punctures large, quadrate and moderately deep, each puncture with a long narrow flat scale; intervals broad, odd intervals feebly convex, even intervals flat, punctures of intervals fine and very closely placed.

Ventral side with abdominal segments coarsely, deeply, and densely punctured, each puncture with a very short broad scale; second, third, and fourth abdominal segments subequal; first segment feebly concave at middle, fifth subequal to first, feebly concave at middle. Legs long and slender. All femora with a very minute denticle. Tibiae coarsely punctured, anterior edge longitudinally strigose.

Length 7.5 mm., width 3.2 mm.

*Female*.—Very similar to male; rostrum rugosely punctured in basal half, median carina prominent, lateral carinae not in evidence; head without carina or tubercles, front not concave; first and fifth abdominal segments not concave; fifth coarsely and evenly punctured, posterior margin deflexed sharply downward. Legs shorter, more robust. Length 7.8 mm., width 3.5 mm.

*Type material*.—Holotype, ♂, and allotype, ♀, Cranberry Bog, Buckeye Lake, Licking County, Ohio, VI-20-53, R. E. Woodruff. Holotype in (ELS), allotype in collection of R. E. Woodruff.

This is nearest *S. helvus* (LeConte) which it resembles superficially, but may be easily separated by the structure of the funicle and the presence of the black crest of scales. The females of *helvus* on hand have a smooth triangular impunctate area on the anterior margin of the fifth abdominal segment. All examples of *helvus* that the author has seen were from Florida.

#### LITERATURE CITED

- Blatchley, W. S., and C. W. Leng. 1916. Rhynchophora or weevils of North Eastern America. The Nature Publishing Co., Indianapolis. 682 p. Illus.
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