

## NOTES ON THE CURCULIONOIDEA

### 14. A contribution to the knowledge of the Curculionoidea.

ELBERT L. SLEEPER

*Department of Zoology and Entomology, The Ohio State University, Columbus 10*

During the last several years a number of species of the Curculionoidea have come to the author's attention which are of particular interest in that they represent new records for, or new distribution records in the United States. Some were collected by the author and his wife; others were in material sent for determination. Other data are included here regarding the taxonomic status or the proper name of some species.

#### **Anthribidae**

A single example of *Piesocorynus moestus* (LeConte) was beaten from a dead branch of an oak in Scioto Co., VI-25-55, ELS, (ELS). Previously this species was recorded and known only from the states east of the Appalachian Mountains and the Gulf States. Its occurrence in Ohio increases vastly the distribution of this species.

#### **Brachyderinae**

Two examples of *Lachnopus argus* (Reiche) (1840, p. 275), a native of Cuba, were found crawling on a sandy strip of beach on Sugar Loaf Key, V-1-53, NJ & ELS. There is also a single abraded example in the National Museum labeled only "Fla."

The fact that the two examples collected on Sugar Loaf Key were taken alive would seem to indicate that this species is probably established in this country at least in a local area. *L. argus* may be distinguished from our other species, *L. floridanus* Horn by the following key:

1. Smaller, less than 10.0 mm. in length; derm of dorsum uniform reddish brown to reddish black; prothorax coarsely, irregularly punctured; elytra clothed with narrow elongate appressed scales and with numerous more or less circular spots of pearly, elliptical scales..... *floridanus* Horn
- 1'. Larger, 12.0 mm. or more in length; body black with prothorax finely, densely punctured; elytra with vestiture restricted to circular spots of overlapping pearly, elliptical scales..... *argus* (Reiche)

On *L. argus* the pearly scales of rostrum and ventral side frequently with a bluish tinge.

*L. floridanus* Horn was very abundant on Cape Sable, Fla., V-28-53, NJ & ELS, on *Solanum torvum*. More than 200 examples were found in one small area on the aforesaid host.

#### **Brachyrhininae**

The neoholotype of *Peritelus (Cercopeus) chrysorrhoeus* Say, designated in Sleeper (1955, p. 288), has been removed from (ELS) to the entomological collection at The Ohio State University in compliance with recent changes in the Rules of Zoological Nomenclature, Copenhagen Decisions on Zoological Nomenclature, Article 31, p. 29, par. 35(4).

Three examples of *Cercopeus chisaius* Sleeper, described from Illinois and recorded from Iowa, Missouri, and Arkansas, were collected on Cream Ridge, near Crane Hollow, Hocking Co., Ohio, VI-26-56, ELS, (ELS). The Hocking Co. examples exhibit no apparent variation from the type series which, in as much as the species is apterous, would seem to indicate that the distribution is probably nearly continuous between the previously published areas and Hocking Co., Ohio. The Ohio examples were found in grass beneath a choke-cherry tree.

#### **Tychiinae**

The name *Tychius tomentosus* (Herbst) (1797, p. 278) must replace that of *Tychius stepheni* Schönherr in our literature in as much as the latter is a synonym of the former as stated by Klima (1934, p. 25). Sir Guy A. K. Marshall, dean of the weevil specialists, comments in a

letter, "With regard to *Tychius tomentosus*, Stephens recorded it under that name originally. Schönherr, without explanation, gave Stephens' specimens a new name, *stephensi* (sic), though admitting that he had not seen the specimens. In Schönherr's vol. 7 Boheman sunk *stephensi* as a synonym of *tomentosus* Herbst—quite rightly in my opinion."

It is regrettable that it is necessary to change the name of a species of economic importance in as much as the name *Tychius stephensi* has come into common usage in our literature. However, it is necessary to change the name in as much as *T. tomentosus* is a familiar species in Europe. The Rules of Zoological Nomenclature, Bulletin of Zoological Nomenclature, vol. 4, 1950, pp. 234–235, Conclusion 4(3) (a & b) are not applicable here.

I herewith propose the combination *Hamaba minima* (Blatchley), **new combination**, to replace the combination *Paragoges minimus* Blatchley. The species *minima* differs from the genotype of *Paragoges* LeConte by the deeply and widely cleft tarsal claws and sparser vestiture of broad lanceolate and setose scales. In *Paragoges* the claws are widely separated and simple, the vestiture very dense, the oblong scales overlapping. From the other species of *Hamaba* (Casey, 1910) it may be distinguished as follows:

- 1. Humeri reddish, the remainder of the elytra blackish; (Bahama Islands) . . . . . *dispersa* Casey
- 1'. Elytra reddish brown to blackish, the humeri not paler than the remainder of the elytra . . . . . 2
- 2. Range Florida and the Keys; base of elytra not to very feebly bisinuate; vestiture prostrate or nearly so . . . . . *minima* (Blatchley)
- 2'. Range Bahama Islands; base of elytra rather strongly bisinuate; vestiture rather hispid, many scales semierect to erect . . . . . *bahamensis* Casey

**Petalochilinae**

Previously *Nanus uniformis* Boheman (1844, p. 90) has been recorded from Cuba, Hispaniola, Puerto Rico, Guadeloupe, and with some doubt, from the United States. Five specimens were found in the trunk of a banana tree lying near the beach near Marco, Fla., IV-28-53, NJ & ELS. At first it was believed that these were recent immigrants, probably carried in the banana trunk from the Antilles, and were probably only temporarily introduced. However, two examples were later found in a dying banana tree near Fort Myers, Fla.

In 1952 Kuschel (p. 271) put the genus *Nanus* in the Petalochilinae. He based his removal of this genus from the Cossoninae to the Petalochilinae because the third elytral striae is united with the sixth striae apically rather than the eighth as in nearly all other Curculionidae. The structure of the striae is the key character used for separating the subfamily Petalochilinae from other subfamilies of the Curculionidae. Other characters Kuschel mentions are "the superficial scrobes, the considerable length of the anterior portion of the prosternum and the particular form of the femur." I fail to find a characteristic that could be termed superficial scrobes in most of the material examined. The prolongation or lengthening of the prosternum is present in all the material examined. The "particular form" of the femur apparently refers to the stoutness of the latter as they are rather prominently swollen in most of the material.

The genus *Hormops* LeConte also will have to be placed in the Petalochilinae as it has the characteristics of this subfamily. Kuschel also placed *Phyllotrox* Schönherr (genotype *semirufus* Boheman) and *Notolomus* LeConte (*bicolor* LeConte) in this subfamily. I have not examined specimens of *semirufus* (Brazil), but several species of *Phyllotrox* from Brazil and the Antilles have been studied and are found to possess the characteristics set forth by Kuschel. However, the species from the United States examined do not have the third and sixth elytral striae united apically. Thus, it would seem that they do not belong to either the genus *Phyllotrox* or the subfamily Petalochilinae. Due to the confusion surrounding the status of the species generically, the author is trying to obtain as much material as possible in order to revise the genus "*Phyllotrox*" of American authors.

Two hundred eighty-seven examples of *Notolomus bicolor* LeConte were examined and only five examples were found to have the third and sixth elytral striae united and in all of these the third was also united to the eighth apically. This also seems to be the case with *N. basalis* LeConte. Until more material in related genera is studied, it will be necessary to reserve an opinion as to the subfamily status of *Notolomus*.

## Barinae

*Stictobaris ornatella* Casey was described from Tepehuanes, Durango, Mexico (1920, p. 347) from a female. A single male has been sent to the author from Calabasas, Ar., VII-15-42, A. W. Ford. It differs from the female only in the slightly stouter rostrum which is a little more densely punctured and in the slightly concave first and second abdominal sternites. It may be separated from the other species described from the United States by the following key:

1. Setae yellowish and white, condensed at the base of the third elytral interval and on intervals two to five in a rather large area behind the middle; body oblong. . . . . 2
- 1'. Setae for the most part white, not in the least condensed at the points mentioned above. . . . . 3
2. Yellow setae of elytra narrower, much less robust than the white, the white slightly longer. . . . . *cribrata* (LeConte)
- 2'. Yellow and white setae on elytra of same size, the white slightly longer. . . . . *ornatella* Casey
3. Body rather robust, oblong, obtusely rounded at elytral apex; rostrum densely punctured. . . . . *pimalis* Casey
- 3'. Body narrow, rather narrowly rounded behind; size smaller; rostrum more sparsely punctured. . . . . *subacuta* Casey

*S. ornatella* Casey is narrower and less robust than the other species. The prothorax is not so closely, cribrately punctured as *S. cribrata* (LeConte). *S. cribrata* was described from Texas, recorded from Arkansas and known also from Kansas and Missouri. It has been reared from wheat heads. *S. pimalis* Casey was described from Arizona, *subacuta* Casey from Las Vegas, Nevada.

*Pseudocentrinus ochraceus* (Boheman) (1844, p. 237) has not as yet been recorded in any of our lists of Coleoptera of the United States. It was listed from the United States in both the *Biologia Centrali-Americana* (Champion, 1908, p. 326) and Blackwelder's checklist of Mexican, Central and South American, and West Indian Coleoptera (1947, p. 899).

The genus *Pseudocentrinus* Champion (1908, p. 325) may be defined as follows: rostrum stout, arcuate, moderately long; mandibles nearly straight along inner edge; antennal club oval, prothorax feebly constricted in front, broader than long; scutellum free; elytra a little wider than prothorax, narrowing from the rounded humeri; pygidium large, transverse, convex, vertical and fully exposed in the male, not visible in female; prosternum unarmed, sulcate; anterior coxae narrowly separated; abdominal sternite five transversely tumid in middle in female and sinuately truncated apically in male, 3 to 4 very short; femora unarmed; tarsal claws free, divergent, body elongate or oblong-rhomboidal, rather densely squamose. (Genotype: *Centrinus ochraceus* Boheman.) It was placed next to *Centrinogyna* Casey by both Champion and Casey because the apex of the pygidium is exposed in the males but not so in the females. This is a characteristic which *Centrinogyna* does possess, but the mandibles of the latter are dentate on the inner margin and the general form of that genus is more elongate and cylindrical. In our keys to the United States genera the males of *Pseudocentrinus* will key out near to *Odontocorynus* Schönherr because of the mandibular structure, exposed pygidium and general form, differing from that genus by the absence of the sexual modifications of the antennae. The females will key to *Geraeus* Pascoe, but differ from it in that *Geraeus* has the mandibles divaricate apically, with the inner margin more or less arcuate. It might be stated here that apparently the only species of *Geraeus* occurring in the United States in *Geraeus euryonyx* Champion (1910, p. 211) (*senilis* of Casey, 1892, p. 576, and *balteatus* Casey, 1920, p. 385) which occurs in Arizona and Mexico. From the generic description and the study of the genotype it would appear that *Pseudocentrinus* should be placed next to *Odontocorynus* in that both have similar mandibular structure and are very alike in general facies. It differs from that genus in that the former has the pygidium covered and the fifth abdominal sternite transversely tumid in the female; while the male lacks the sexual modification of the antennae; the prosternum in both sexes is abruptly sulcate.

*P. ochraceus* (Boheman) is elongate-rhomboidal in form; black to reddish black; densely squamose dorsally and ventrally; the prothorax with two darker vittae on the disc, the elytra with intermixed darker or ash gray scales, which are here and there condensed into patches. The rostrum is a little smoother in its apical half in the female than in the male, the antennae

inserted at about the middle in both sexes. The abdominal sternites 1 to 5 are broadly flattened down the middle in the male. Second funicular segment as long as 3 and 4 united. The elytra are flattened on the disc and have a rather prominent subapical callosity. The scutellum is moderately large and subquadrate.

Material from the United States has been studied from Brownsville, Texas (Wickham, USNM); Crystal City, Texas, I-14-50, J. R. Duncan, sweeping spinach, (USNM); Asherton (Dimmit Co.), Texas, I-15-53, C. E. Eastman, sweeping grasses, (ELS).

#### Rhynchophorinae

*Scyphophorus acupunctatus* Gyllenhal has previously been recorded with question from Florida. A single example was found on the flowers of sisal, *Agave sisalana* Perrine, Cape Sable, Fla., V-28-53, NJ & ELS, (ELS). Further examination of the plants failed to turn up additional specimens. *S. acupunctatus* occurs in southwestern United States, Mexico, and Central America. It has been found on this same sisal plant in Yucatan and another sisal in Nicaragua. In 1840, Dr. Henry Perrine introduced the afore mentioned sisal into the Florida Keys and the Everglades. It is quite possible that *S. acupunctatus* was introduced in some of these plants which were brought from the Yucatan.

*Cosmopolites sordida* (Germar) (1824, p. 299), a cosmopolitan species in the tropics, appears to have become established in southern Florida. Blackwelder (1947, p. 915) records it from the United States without definite locality. Six examples were collected from the same banana tree trunk as *Nanus uniformis* Boheman on the beach near Marco, Fla., IV-28-53, NJ & ELS. More examples were found at Flamingo (Cape Sable), V-2-53, NJ & ELS, and at Ft. Myers. At the latter locality it was also in the company of *Nanus uniformis* Boheman. Other examples have been sent by Dr. Howard V. Weems, Jr. of the Florida State Plant Board from Opalocka, G. B. Merrill; Fort Myers, IV-15-55, L. A. Hetrick, at *Musa*; Volusia, Miami, Larkin and Coconut Grove, all of these latter also from *Musa*. It is possible that many or possibly all of these latter were taken from imported bananas rather than domestic plants.

*Cosmopolites* Chevrolat (1885, p. 289) keys to *Rhodobaenus* in our keys to United States genera because the third tarsal segment is spongy ventrally and divided by a narrow line. It differs from *Rhodobaenus* in that *Cosmopolites* lacks the tooth or lamella next to the claw on the last tarsal segment; has the scutellum rounded and the elytral intervals strongly convex, occasionally the odd intervals are more prominently elevated than the even. The intervals are glabrous lacking the coating that covers the elytra and much of the ventral side. *Rhodobaenus* has a small tooth or lamella next to the claw on the last tarsal segment; scutellum elongate, triangular; all elytral intervals equal in elevation and flat. *C. sordida* is the only species in the genus.

#### Cossoninae

Dr. W. H. Anderson in 1952 (p. 305) pointed out that *Macrorhyncholus* Wollaston should be dropped from the North American lists in that the North American species there placed, *protractus* Horn, was not congeneric with the genotype or the exotic species placed in the group. He returned *protractus* to the genus *Rhyncholus* in which it was originally described. However, *protractus* Horn is not congeneric with the species of *Rhyncholus* differing from the North American species by the longer more prominent rostrum, the widely separated anterior coxae and the prominent (for Cossoninae) setae on the elytra. Because of the widely separated anterior coxae *protractus* must be placed in the Cossonini.

In 1954, while examining the Blatchley Collection at Purdue University I found that Blatchley had redescribed *protractus* Horn under the name *Trichacorynus sulcirostris* Blatchley (1928, p. 259) from "New Brunswick, N. J., X-8."

Hence we have *Trichacorynus protractus* (Horn), **new combination**, with *Trichacorynus sulcirostris* Blatchley a synonym, **new synonymy**.

*Trichacorynus brunneus* Blatchley, (genotype), (1916, p. 528) is apparently a valid species, distinct from *protractus* Horn, differing noticeably in that *protractus* has the head and rostrum more closely, evenly and deeply punctured and the anterior coxae not as widely separated.

Several examples of *T. protractus* have been received from York, Pennsylvania, VIII-18-22

Previously all records for *protractus* were from the west coast, chiefly southern California. These eastern examples of *protractus* may have been taken from timber recently brought in from California, it being quite possible that it is not even established in the east.

*Dynatopechus aureopilosus* (Fairmaire) (1849, p. 555) described from Tahiti has recently been collected at several localities along the west coast, and it would seem that it has become established in this country. The most recently collected examples were from Stevens Co., Wash., VIII-13-54, N. M. Downie. Material is also at hand from Barstow and Santa Barbara, California. An example is in the National Museum from Bakersfield, Calif., "Clothing, wooden jewelry." It is possible that the latter record was from jewelry imported from the South Seas.

The genus *Dynatopechus* Marshall (1931, p. 325) belongs to the Cossonini and may be separated from the other North American genera of the Cossonini by the five-segmented funicle. It should be placed between *Caulophilus* Wollaston and *Mesites* Schönherr.

*Dynatopechus aureopilosus* (Fairmaire) is black with two red stripes on the pronotum, a basal triangular red spot and a spot on each side of suture anterior to the declivity on the elytra, the legs reddish to reddish black.

*Cossonus spathula* Boheman (1838, p. 1035), which has been recorded from Central America and the Antilles, has been found on Cape Sable, Fla., IV-28-53, NJ & ELS, gumbo limbo. Two examples were found beneath the bark of a dead gumbo limbo tree. Further search failed to reveal additional examples. A single example has been received from "So. Fla." recently. It is also known from Cuba, Haiti, Puerto Rico, Jamaica, Grenada, Mexico, Central and South America. It may be distinguished from our other species of *Cossonus* by the very coarsely punctured prothorax and elytra and the very deep subapical constriction of the prothorax giving the appearance of a collar behind the head. This constriction is very noticeable even without the aid of a hand lens or microscope.

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