

# A REVIEW OF THE PHILEURINI OF AMERICA NORTH OF MEXICO

(COLEOPTERA—SCARABAEIDAE)

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This review is not written with the intent of entering into the controversy as to the correct names to be applied to our older species, but is presented as the result of a study of the Casey types. Previous to Casey's 1915 memoir dealing with the *Phileurini* there were three described species from America north of Mexico, two doubtfully recorded from this region and one from Lower California. In the genus *Phileurus*, Casey described as new one species from Mexico and five species and one subspecies from the United States. In *Archophileurus* he described as new two species from Mexico and one from the United States. The author after a careful examination of the types and the genitalia of the male types has concluded that all ten of these species described by Casey from both Mexico and the United States are synonyms. *Phileurus clathratus* Casey, described from Brazil, has the male genitalia quite similar to that of *P. castaneus* Hald. but sufficiently different as to probably represent another species or subspecies, the status of which will have to be determined by a worker with adequate material from this region.

In studying the older species the author was unable to locate the LeConte type of *P. vitulus* but from a study of additional Lower California material it has been found that this species is undoubtedly synonymous with *illatus* Lec. The lectotype (No. 3333 M. C. Z.) of *illatus* also bears the LeConte label of *vitulus*. Concerning the two species doubtfully recorded from the United States, Arrow<sup>1</sup> does not include *P. valgus* (Linn.) in the genus and considers *P. castaneus* Hald. [*P. valgus* O1. (nec. Linn.)] as occurring in this country. The arrangement and synonymy given by Arrow is in some question but a discussion of this is beyond the scope of this paper.

The species and synonymy within the tribe should appear in our lists as given below. The Mexican species described by Casey are included as they are synonymous with our United States species.

The writer would like to express his thanks and appreciation to Dr. E. A. Chapin of the United States National Museum for the privilege of studying and dissecting the Casey types and for

<sup>1</sup> Arrow. G. J., 1937, *Coleop. Catag.* 21:89, par. 156.

his constructive suggestions. Thanks are also due C. W. Leng whose material largely forms the basis of this study and to Thomas G. Aitken for going over the manuscript.

*Phileurus truncatus* (Beauv.)

*Scarabaeus truncatus* Beauv., 1807, Ins. Afr. et Amer.,  
p. 41

*Phileurus recurvatus* Csy., 1915, Memoirs on the Coleop.,  
6:266 (New Synonym)

*Phileurus illatus* Lec.

*Phileurus illatus* Lec., 1854, Proc. Acad. N. S. Phila.,  
7:80

*Phileurus vitulus* Lec., 1866, Smiths. Misc. Coll., 6:80  
(New Synonym)

*Phileurus phoenicis* Csy., 1915, Memoirs on the Coleop.,  
6:267. Type female (New Synonym)

*Phileurus puncticollis* Csy., 1915, Memoirs on the  
Coleop., 6:268. Type female (New Synonym)

*Phileurus castaneus* Hald.

*Phileurus castaneus* Hald., 1843, Proc. Acad. N. S.  
Phila., 1:304

*Phileurus texensis* Csy., 1915, Memoirs on the Coleop.,  
6:268. Type male (New Synonym)

*Phileurus sulcifer* Csy., 1915, Memoirs on the Coleop.,  
6:269. Type male (New Synonym)

*Phileurus floridanus* Csy., 1915, Memoirs on the Coleop.,  
6:270. Type male (New Synonym)

*Phileurus sulcifer carolinae* Csy., 1915, Memoirs on the  
Coleop., 6:269. Type female (New Synonym)

*Archophileurus cribrosus* (Lec.)

*Phileurus cribrosus* Lec., 1854, Proc. Acad. N. S. Phila.,  
7:80

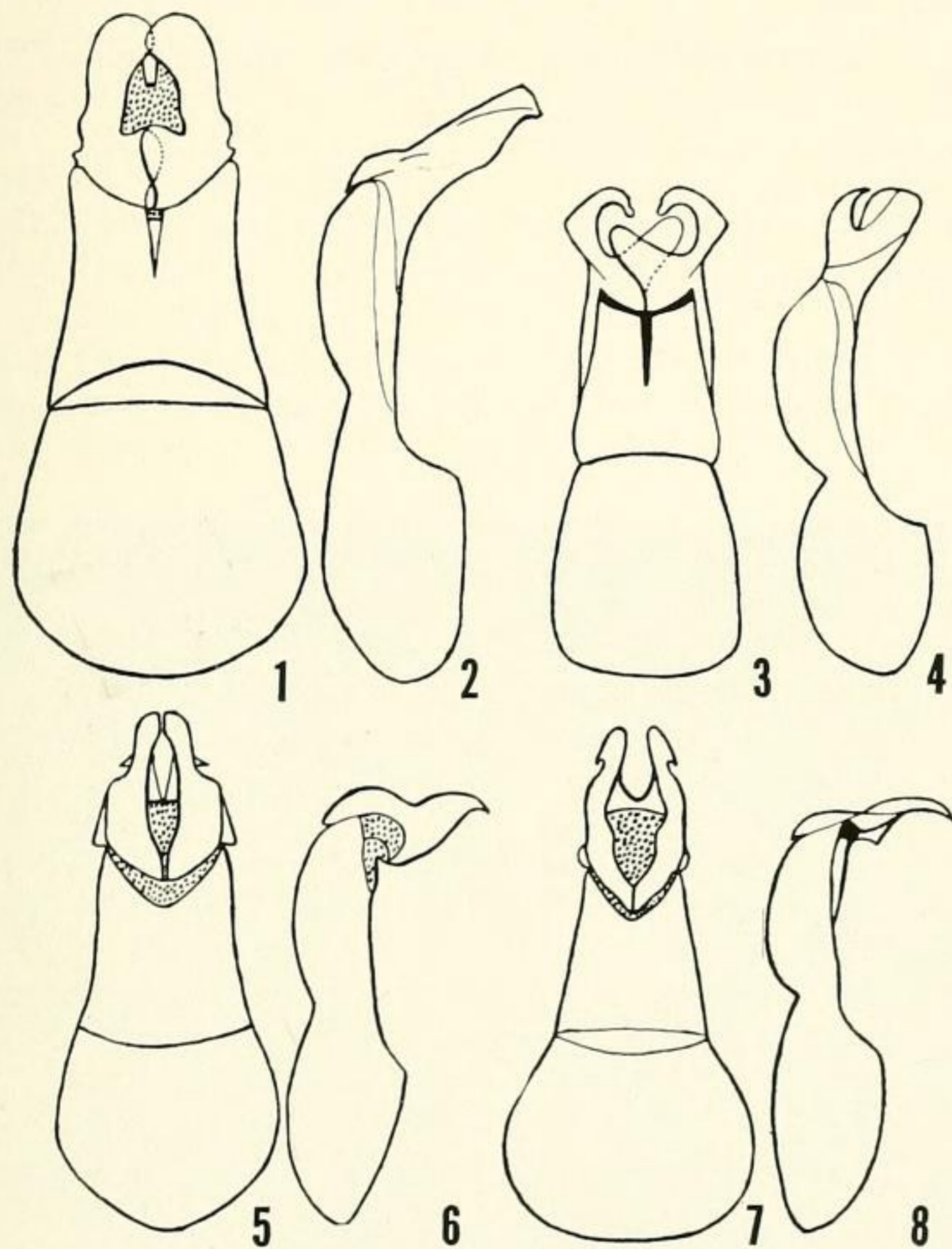
*Archophileurus bullatus* Csy., 1915, Memoirs on the  
Coleop., 6:274. Type male (New Synonym)

*Archophileurus longulus* Csy., 1915, Memoirs on the  
Coleop., 6:273. Type female (New Synonym)

*Archophileurus brevis* Csy., 1915, Memoirs on the  
Coleop., 6:272. Type female (New Synonym)

KEY TO THE GENERA AND SPECIES OF PHILEURINI IN  
THE UNITED STATES

1. Head with a transverse ridge at base of clypeus, median portion of head not depressed and sides without tubercles.  
..... *Archophileurus cribrosus*  
Head without transverse ridge, median portion depressed, sides in front of eye with small or large tubercles.....*Phileurus*-2
2. Front tibiae with impression between first and second dentations truncate at base; elytral interspaces two, four and six enlarged and raised to form costae.....*castaneus*  
Impression between first and second dentations with apex sharp, not truncate ..... 3
3. Canthus prominent, formed by a continuation of lateral margin of head, frontal tubercles not situated on lateral margins of head ..... *illatus*  
Canthus small, formed by a continuation of a vertical ridge from the frontal tubercle which is situated on margin, lateral margin of head not continuous to canthus, base of frontal tubercle with vertical groove formed by insertion of antenna.....*truncatus*



EXPLANATION OF PLATE 37

- Fig. 1. Male genitalia of *Phileurus truncatus* (Beauv.) (dorsal).
- Fig. 2. Male genitalia of *Phileurus truncatus* (Beauv.) (side).
- Fig. 3. Male genitalia of *Phileurus castaneus* Hald. (dorsal).
- Fig. 4. Male genitalia of *Phileurus castaneus* Hald. (side).
- Fig. 5. Male genitalia of *Phileurus illatus* Lec. (dorsal).
- Fig. 6. Male genitalia of *Phileurus illatus* Lec. (side).
- Fig. 7. Male genitalia of *Archophileurus cribrosus* (Lec.) (dorsal).
- Fig. 8. Male genitalia of *Archophileurus cribrosus* (Lec.) (side).