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# A Revision of the Rove-Beetle Genus *Charhyphus* (Coleoptera, Staphylinidae, Phloeocharinae)

By Lee H. Herman, Jr.[1]

## ABSTRACT

*Trigites* Handlirsch, 1907, and *Siberia* Blackwelder, 1952, are placed as junior synonyms of *Charhyphus* Sharp, 1887, and the genus and its species redescribed, illustrated, placed into a key and their phenetic relationships and biology discussed. *Charhyphus arizonensis* is newly described. The position of the fossil species, *Charhyphus coeni*, is not certain. *Charhyphus* should be in the Phloeocharinae, not the Piestinae where some of the species had previously been placed.

## INTRODUCTION

Revisions of many parts of the higher classification of the Staphylinidae are badly needed, and the Phloeocharinae, which has never been adequately delimited, is no exception. The present paper suggests characteristics for the delimitation of the subfamily and moves two species from the Piestinae to the Phloeocharinae. Formerly, three of the species now included in *Charhyphus* were placed under different generic names.

*Charhyphus brevicollis* Sharp (1887), described from one specimen collected in Guatemala, was placed in what is now the Phloeocharinae. *Hypotelus picipennis* Le Conte (1863) was described from the midwestern United States and put in the Piestinae. Fauvel (1878), recognizing that

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the species did not belong in *Hypotelus*, erected *Triga* for it. Scudder (1900) described a fossil species, *Triga coeni*, from Miocene deposits in Florissant, Colorado. The preoccupied *Triga* was renamed *Trigites* by Handlirsch (1907) and later *Pseudeleusis* by Bernhauer (1923) who was unaware of the previous change. In 1933 Bernhauer described, in the Piestinae, *Chapmania paradoxa* from Siberia. The generic name was preoccupied and changed to *Siberia* by Blackwelder (1952).

The three species in three genera, *Charhyphus*, *Trigites*, and *Siberia*, were never compared with one another, one species because it had been put in a different subfamily, and the others presumably because they were from different parts of the world and because they had been put into different tribes of the same subfamily. They share many characteristics, among which are the broad membranous region between the labrum and clypeus (fig. 7), the fused gula and submentum (fig. 8), the characters of the hypopharynx (fig. 6), the serrate lateral margin of the pronotum (figs. 1–4, 13), the poorly exposed procoxae (fig. 13), the single pair of laterosclerites per abdominal segment (fig. 15), the cuticular combs of abdominal terga IV and V (figs. 15, 16), and the long, coiled, aedeagal flagellum (fig. 23). These characters seem to be sufficient reason for considering *Charhyphus brevicollis*, *Trigites picipennis*, and *Siberia paradoxa* to be congeneric rather than in three genera based on slight punctational and proportional characters.

*Charhyphus picipennis* and *C. paradoxa* were both previously included in the Piestinae (in *Trigites* and *Siberia* respectively), apparently because they have abdominal laterosclerites and "globose procoxae," the presence of which is a key characteristic for Piestinae but is possibly an adaptation to subcortical habitats. Staphylinids living under bark are generally dorsoventrally flattened (the degree varies), and the procoxal relief is reduced by having the apex of the coxae directed mesially (for example, in some Piestinae) or posteriorly (for example, *Eleusis*, *Eumalus*, and *Cephaloxynum*). When the prohypomeron and prosternum cover the coxae leaving only a small portion of the apex exposed, globose coxae are produced. The procoxae of almost all the Piestinae are further modified by possessing a groove on the mesial surface into which the prosternal process fits. The rotating coxae slide on this "tongue and groove" mechanism and cannot be moved laterally from the midline. This same structure is also found in some genera of the Osoriinae (for example, *Osorius*, *Holotrochus*, *Leptochirus*, and *Priochirus*).

In addition to the lack of the procoxal mesial groove (figs. 13, 14), *Charhyphus picipennis* and *C. paradoxus* also possess a pair of combs of cuticular processes on abdominal terga IV and V (figs. 15, 16) and a

hypopharynx as shown in figure 6. These three structures, all either absent or modified in the Piestinae, suggest that *Charhyphus* is unrelated to genera in the Piestinae but should be in the Phloeocharinae where it shares these characters with at least the type species of *Phloeocharis*, *P. subtilissimus*.

I have seen neither *Pseudophloeocharis*[1] Steel (1950), *Phloeognathus* Steel (1953), nor the remaining species of *Phloeocharis*, and can only suggest that the characters of the abdominal terga and of the hypopharynx are useful as derived characters for delimitation of the subfamily. *Ecbletus leechi* Moore (1965) and *E. simplex* Sharp (1887), which also have been included in the Phloeocharinae, lack the procoxal mesial groove, but for neither species have I been able to study the hypopharynx. Abdominal terga IV and V of both species of *Ecbletus* possess a patch of cuticular processes in the same position as the tergal combs of *Charhyphus* spp. The configuration of the cuticular processes is different in *Charhyphus* and *Ecbletus*.

*Rimulincola* Sanderson (1946) and *Derops* Sharp (1889) have been included in the Phloeocharinae (Sharp, 1889; Herman, 1970), but there is little doubt that they do not belong here. They do not have the combs or cuticular processes on abdominal terga IV and V, and their hypopharynx is different from that of *Phloeocharis* or *Charhyphus*. Based on characters of the larvae (Herman, unpublished observations), they may be found to be in the Tachyporinae or, when considering some peculiar abdominal structures, they may be placed in a separate subfamily.

With the exception of *Charhyphus paradoxus*, whose habitat is not known for certain, the species are found under the bark of logs. *Charhyphus arizonensis* and *C. brevicollis* have been collected from pine logs at 8200 feet elevation in Arizona and 8500 to 10,000 feet elevation in Guatemala respectively. *Charhyphus arizonensis* was collected from the moist northwestern slopes of Barfoot Peak in the Chiricahua Mountains of Arizona. The logs from which the species was taken were moist and sappy under the bark. *Charhyphus picipennis* has been collected from logs in the eastern and midwestern United States. A collection from an oak log by Henry Dybas is the only record of the species of tree harboring *C. picipennis*. The habitat of *C. paradoxus* is surmised to be subcortical both because of its

[1]In the original description this generic name was spelled *Pseudophloecharis*. Undoubtedly, the author meant *Pseudophloeocharis* because this is the name he used in a later paper (Steel, 1953) and because in the article containing the original description (Steel, 1950) the subfamilial name, Phloeocharinae, and its type genus, *Phloeocharis*, were similarly misspelled throughout the paper, that is, Phloecharinae and *Phloecharis* respectively. I consider *Pseudophloecharis* to be a *lapsus calami* and, therefore, changing the name to *Pseudophloeocharis* is a justifiable emendation.

dorsoventrally flattened body and because the other members of the genus live there.

I do not have enough information to hypothesize phylogenetic relationships, but relationships based on similarity can be suggested. Since both *C. arizonensis* and *C. brevicollis* have an elliptical ridge on the mesosternum, they may be more closely related to each other than to *C. paradoxus* or *C. picipennis* which lack the ridge. Further, the last two species are similar in nearly all respects, in fact barely separable.

## ACKNOWLEDGMENTS

I am indebted to the following for the loan of types and/or specimens: Hugh Leech (California Academy of Sciences), J. M. Campbell (Canadian National Collection), Henry Dybas (Field Museum of Natural History), and P. J. Hammond (British Museum [Natural History]).

### ABBREVIATIONS

AMNH, the American Museum of Natural History
CAS, California Academy of Sciences
CNC, Canadian National Collection
FMNH, Field Museum of Natural History

### *CHARHYPHUS* SHARP

*Triga* FAUVEL, 1878, p. 182 (preoccupied by *Triga* Gray, 1867). MOORE, 1963, p. 47 (type species, *Triga picipennis* [Le Conte] [Blackwelder, 1952]).

*Charhyphus* SHARP, 1887, p. 709 (type species, *Charhyphus brevicollis* Sharp [Blackwelder, 1952]).

*Trigites* HANDLIRSCH, 1907, p. 731 (proposed to replace *Triga* Fauvel, 1878; type species, *Trigites picipennis* [Le Conte] [Blackwelder, 1952]; new synonymy).

*Pseudeleusis* BERNHAUER, 1923, p. 63 (proposed to replace *Triga* Fauvel, 1878; type species, *Pseudeleusis picipennis* [Le Conte] [Blackwelder, 1952]).

*Chapmania* BERNHAUER, 1933, p. 121 (preoccupied by *Chapmania* Monticelli, 1893; type species, *Chapmania paradoxa* Bernhauer [Blackwelder, 1952]).

*Siberia* BLACKWELDER, 1952, p. 351 (proposed to replace *Chapmania* Bernhauer, 1933; type species, *Siberia paradoxa* [Bernhauer] [Blackwelder, 1952]; new synonymy).

DIAGNOSIS: *Charhyphus* can be separated from *Phloeocharis* by the presence of the elytral epipleural ridge and the presence of only one pair of laterosclerites per abdominal segment. *Ecbletus* can be separated by the suture that divides the submentum and gula; this suture is absent in *Charhyphus*. Other members of the Phloeocharinae have not been studied.

DESCRIPTION: Length approximately 2.5 to 3.9 mm. Body dorsoventrally flattened. Color reddish brown. Labrum with broad, moderately deep, rounded emargination (fig. 7), without distinctive membranous lobes on

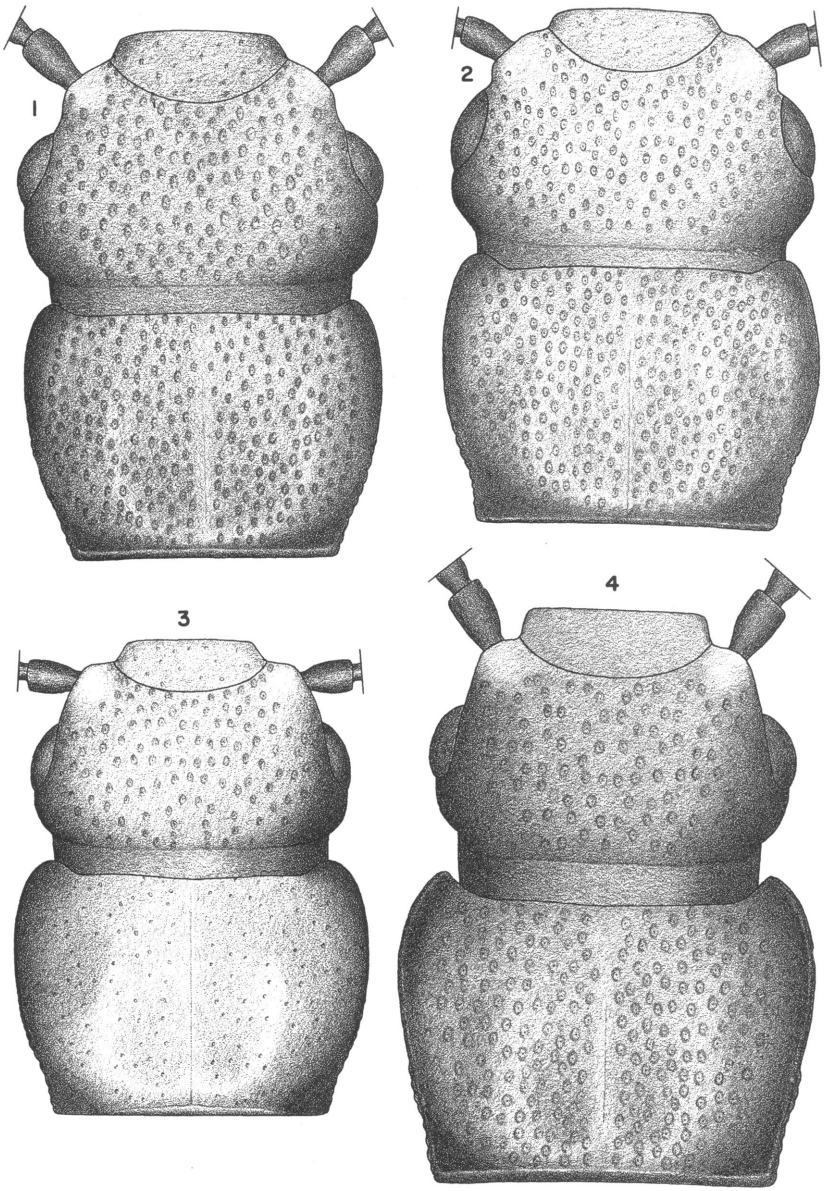



FIG. 1. *Charhyphus picipennis* (Le Conte), head and pronotum, dorsal view.
FIG. 2. *Charhyphus paradoxus* (Bernhauer), head and pronotum, dorsal view.
FIG. 3. *Charhyphus arizonensis*, new species, head and pronotum, dorsal view.
FIG. 4. *Charhyphus brevicollis* Sharp, head and pronotum, dorsal view.

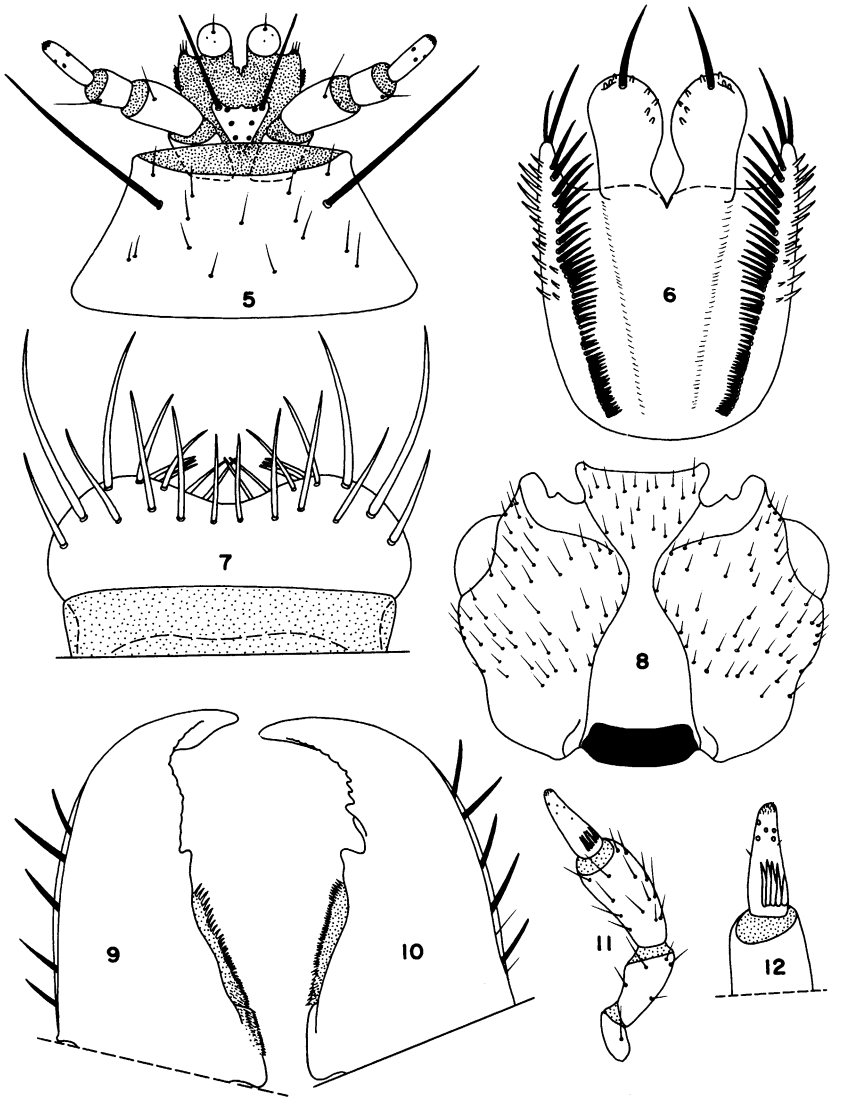
anterior margin and with setae arising from ventral edge; dorsal surface with numerous setae (fig. 7). Anteclypeus large and membranous and appearing to allow extrusion of labrum anteriorly from head (fig. 7). Supra-antennal ridge low, poorly developed and broadly rounded (figs. 1–4). Epistomal suture present and broadly rounded (figs. 1–4). Dorsum of head with transverse groove at base (figs. 1–4). Mandibles asymmetrical (figs. 9, 10); mesial margin with a few large and many small denticles (figs. 9, 10); outer side with groove containing setae (figs. 9, 10). Maxillary palpus four-segmented; fourth segment with series of longitudinal processes at base (figs. 11, 12). Labium as in figure 5; palpus three-segmented; ventral surface with triangular sclerite near submentum; hypopharyngeal surface as in figure 6; anterior portion with four lobes (fig. 6); median lobes spatulate, aboral surface with apex sclerotized, adoral surface membranous (fig. 6); lateral lobes acuminate and with setae that are continuous with lateral row of setae (fig. 6); adoral surface membranous and with lateral cuticular processes (fig. 6). Gular sutures separated and sinuately divergent posteriorly (fig. 8); gula not pubescent (fig. 8); submentum and gula not divided by submental suture (fig. 8); submentum pubescent (fig. 8).

Pronotal lateral marginal bead present (figs. 1–4). Protergosternal suture present (fig. 13). Procoxal fissure open, protrochantin exposed (fig. 13). Postprocoxal lobe present (fig. 13). Procoxae without groove on mesial surface (fig. 14). Prosternal process short and poorly developed (fig. 13); process not fitted into procoxal groove.

Scutellum with apex exposed from under prothorax. Elytral epipleural ridge present. Mesocoxae narrowly separated by elongate mesosternal process (fig. 17).

Tibiae without longitudinal row of spines. Tarsal formula 5–5–5.

Abdomen with one pair of laterotergites per segment (fig. 15) on segments III to VII. Segment VIII without laterotergites. Sternite II partially developed, weakly sclerotized, fused to sternite III but separated by suture; surface with rounded, median ridge (fig. 20); posterior margin with rounded, posteriorly directed median process (fig. 20); median process part of median ridge (fig. 20). Sternite III with rounded median ridge on base as continuation of ridge on sternite II (fig. 20). Terga IV and V each with pair of mesially directed combs of cuticular processes (figs. 15, 16). Tergum IX of male connected basally, not with midbasal separation on dorsal surface (fig. 26); posterior margin emarginate and with tergum X fitted within (fig. 26); segment IX asymmetrical (fig. 29); sternum IX elongate, posterior margin membranous and with cuticular




FIGS. 5–7. *Charhyphus arizonensis*, new species. 5. Labium, ventral view. 6. Hypopharynx of labium. 7. Labrum, dorsal view.

FIG. 8. *Charhyphus picipennis* (Le Conte), head, ventral view.

FIGS. 9–11. *Charhyphus arizonensis*, new species. 9. Left mandible, dorsal view. 10. Right mandible, dorsal view. 11. Maxillary palpus.

FIG. 12. *Charhyphus picipennis* (Le Conte), apex of maxillary palpus, segments 3 and 4, enlarged.

processes (fig. 26). Sternum X of male ovoid and with posterior margin fimbriate (fig. 26).

Aedeagus with base of median lobe bulbous and apex long, slender and acuminate (figs. 23–25). Parameres long and slender (figs. 23–25) with base broad and deltoid; inner surface with scattered setae (fig. 23). Flagellum elongate and coiled within base of median lobe (fig. 23).

Female genitalia as in figures 27, 28.

SYNONYMY: *Trigites* and *Siberia* are herein placed as junior synonyms of *Charhyphus* because the differences between the species are ones of punctation, proportion, and the presence or absence of a mesosternal ridge, and the species all share numerous features including those discussed in paragraph three of the introduction.

DISCUSSION: The generic descriptions of the mandibles, hypopharynx, aedeagus, female genitalia, and segments IX and X of the male are based on *Charhyphus arizonensis* and *Charhyphus picipennis*, because the only existing material for study of the other two species were holotypes.

KEY TO THE SPECIES OF *Charhyphus*

1. Mesosternum without basal elliptical ridge (fig. 18) . . . . . .2
   Mesosternum with elliptical ridge on base (fig. 19) . . . . . 3
2. Eyes short, postocular region long (fig. 1), eastern United States and Canada . . . . . *picipennis*
   Eyes long, postocular region short (fig. 2), western Union of Soviet Socialist Republics . . . . . *paradoxa*
3. Pronotal punctation large, deep, coarse, and dense (fig. 4) . . . *brevicollis*
   Pronotal punctation small, shallow, fine, and moderately dense (fig. 3) . . . . . *arizonensis*

## *Charhyphus arizonensis*, NEW SPECIES

Figures 3, 5–7, 9–11, 17, 19, 22–24, 30

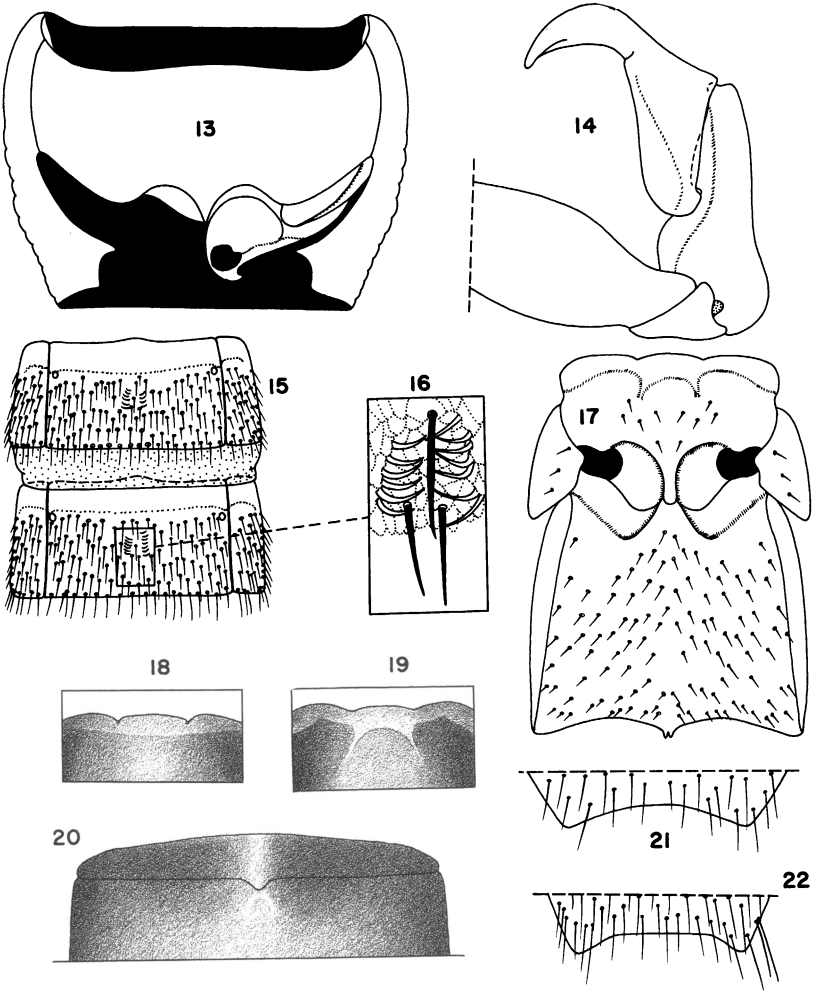
TYPE LOCALITY: U. S. A.: Arizona, Cochise County, Chiricahua Mountains, northwest slope of Barfoot Peak, 8250 feet elevation, under bark of pine log, May 6, 1968, collected by Lee H. Herman, Jr.

HOLOTYPE: Deposited at the American Museum of Natural History.

PARATYPES: Nine, same collection data as holotype, deposited with the holotype.

DIAGNOSIS: *Charhyphus arizonensis* can be easily separated from both *C. picipennis* and *C. paradoxus* by the presence of the elliptical ridge on the mesosternum (fig. 19) and by the small, shallow, sparse pronotal punctation (fig. 3). The pronotal punctation will also allow separation from *C. brevicollis* (cf. fig. 3 and 4).

DESCRIPTION: Holotype. Male. Length 3.3 mm. (range 2.5–3.7).




FIGS. 13–16. *Charhyphus picipennis* (Le Conte). 13. Prothorax, ventral view, right coxa removed. 14. Procoxa, trochantin and base of femora. 15. Abdominal segments IV and V, dorsal. 16. Abdominal segment V, dorsal, median portion enlarged.

FIG. 17. *Charhyphus arizonensis*, new species, pterothorax, ventral view.

FIG. 18. *Charhyphus picipennis* (Le Conte), mesosternum, median portion of base.

FIG. 19. *Charhyphus arizonensis*, new species, mesosternum, median portion of base.

FIGS. 20, 21. *Charhyphus picipennis* (Le Conte). 20. Abdominal sterna II and III. 21. Sternum VIII, male, apex.

FIG. 22. *Charhyphus arizonensis*, new species, sternum VIII, male, apex.

Color reddish brown. Dorsum of head dark reddish brown. Labrum, antennae, maxillary, and labial palps pale reddish brown. Venter of head, mandibles, pronotum, elytra, and abdomen reddish brown. Prosternum and pterothoracic sterna and pleura dark reddish brown. Legs dark yellowish brown.

Dorsum of head shining, not polished, with dense, distinct microgranulate ground sculpturing, with moderately dense, moderately large and moderately deep punctation (fig. 3); punctation ovoid (fig. 3). Punctation of clypeus small and more shallow than on dorsum. Eyes small (fig. 3). Postocular region approximately equally as long as eye (fig. 3). Head less strongly flattened than in *Trigites picipennis* (cf. figs. 3 and 1). Venter of head with broad median depression.

Pronotal lateral margin sinuate (fig. 3) and basal two-thirds serrate (fig. 3); pronotum broader anteriorly than posteriorly (fig. 3); surface shining, not polished; surface with dense microgranulate ground sculpturing, with small moderately dense, shallow punctation (fig. 3); punctures ovoid (fig. 3); middorsal groove present but shallow (fig. 3); surface with broad, shallow depression each side of groove (fig. 3).

Elytral surface shining, not polished; with shallow punctation. Mesosternum with elliptical ridge on base (fig. 19).

Abdominal sternum VIII of male with shallow, rounded emargination of posterior margin (fig. 22).

Parameres of aedeagus with relatively few setae on inner surface (figs. 23, 24).

VARIATION: The other specimens studied do not differ from the holotype in any important characters. The color is somewhat lighter or darker on some specimens, but the head is always darker and the appendages always lighter than the remaining parts.

DISTRIBUTION: Known from Arizona in the Chiricahua (type locality) and the Santa Catalina Mountains.

MATERIAL EXAMINED: 17 specimens.

*United States:* Arizona: Pima Co., Santa Catalina Mountains, June 16, 1968, at 8000 ft. (K. Stephan, 6 specimens, AMNH); Santa Catalina Mountains, May 28, 1933 (Bryant, 1 specimen, CAS). Also the 10 specimens from the type locality.

ETYMOLOGY: This species is named for the state where it was discovered.

### *Charhyphus brevicollis* Sharp

Figures 4, 30

*Charhyphus brevicollis* SHARP, 1887, p. 709 (type locality, Guatemala, Totonicapan, 8500 to 10,000 feet, under bark of pine tree; holotype deposited in the British

Museum [Natural History]; type examined).

DIAGNOSIS: *Charhyphus brevicollis* can be separated from *C. picipennis* and *C. paradoxa* by the presence of the elliptical mesosternal ridge (as in fig. 19) and the deeper pronotal impression (fig. 4). *Charhyphus brevicollis* can be separated from *C. arizonensis* by the larger and more coarse punctation of the head and pronotum (fig. 4) and the larger size.

DESCRIPTION: Holotype. Female. Length approximately 3.9 mm.

Color reddish brown. Dorsum of head reddish brown. Labrum pale reddish brown. Antenna, maxillary palpus, labial palps, venter of head, mandibles, prothorax, elytra, pterothorax and abdomen reddish brown. Legs pale reddish brown.

Head, pronotum, elytra and mesosternum as described for *C. arizonensis* with the following exceptions.

Dorsum of head with large, dense, deep punctures (fig. 4). Eye moderately large (fig. 4). Postocular region slightly shorter than length of eye (fig. 4). Pronotal punctation dense, coarse, deep and large (fig. 4).

Male unknown.

DISTRIBUTION AND MATERIAL EXAMINED: The species is known from mountains in Mexico and Nicaragua. The Nicaraguan locality is that of the holotype, and the Mexican locality is as follows.

Mexico, Mexico: Real de Arriba, Temascaltepec, June, 1933 (H. E. Hinton, R. L. Usinger, AMNH, 2 specimens, Blackwelder collection).

*Charhyphus paradoxus* (Bernhauer), new combination

Figure 2

*Chapmania paradoxa* BERNHAUER, 1933, p. 122 (type locality, eastern Siberia, Ussuri, Vladivostok, holotype deposited at the Field Museum of Natural History, Chicago, Illinois).

*Siberia paradoxa* (Bernhauer): BLACKWELDER, 1952, p. 351.

DIAGNOSIS: *Charhyphus paradoxus* can be separated from *C. picipennis* by the larger eye, the shorter postocular region of the head (cf. figs. 2 and 1), and the widely disjunct geographical distribution. *Charhyphus paradoxus* is separated from *C. arizonensis* by the larger, more dense pronotal punctation (cf. figs. 2 and 3) and by the absence of the elliptical ridge on the mesosternum (as in fig. 18). The last character (fig. 18) will allow separation of *C. paradoxus* from *C. brevicollis*.

DESCRIPTION: Holotype. Female. Length approximately 3.5 mm.

Color generally reddish brown. Dorsum of head dark reddish brown. Venter of head and mandibles reddish brown. Labrum, antenna, maxillary and labial palps pale reddish brown. Prothorax dark reddish brown.

Elytra reddish brown. Pterothoracic sterna and pleura dark reddish brown. Legs reddish brown. Abdomen dark reddish brown dorsally, and reddish brown ventrally.

Head, thorax, and elytra as described for *C. arizonensis* except as follows.

Dorsum of head with dense, large and deep punctation (fig. 2). Eye large; postocular region smaller than length of eye (fig. 2). Pronotal punctation large, deep, and dense (fig. 2); midlongitudinal groove present but weak (fig. 2). Metasternum without elliptical ridge on base (as in fig. 18).

DISCUSSION: *Charhyphus picipennis* and *C. paradoxus* are very similar and there are few characters by which to separate them. As they are so widely disjunct geographically, the eastern United States and eastern Siberia, and there are slight anatomical differences they are herein retained as separate species. If additional collections of *C. paradoxus* indicate intergradation of the characters, then the status of these taxa will have to be reevaluated.

DISTRIBUTION AND MATERIAL EXAMINED: The species is known only from the type locality, and I have studied only the holotype.

### *Charhyphus picipennis* (Le Conte), new combination

Figures 1, 8, 12–16, 18, 20, 21, 25–29, 30

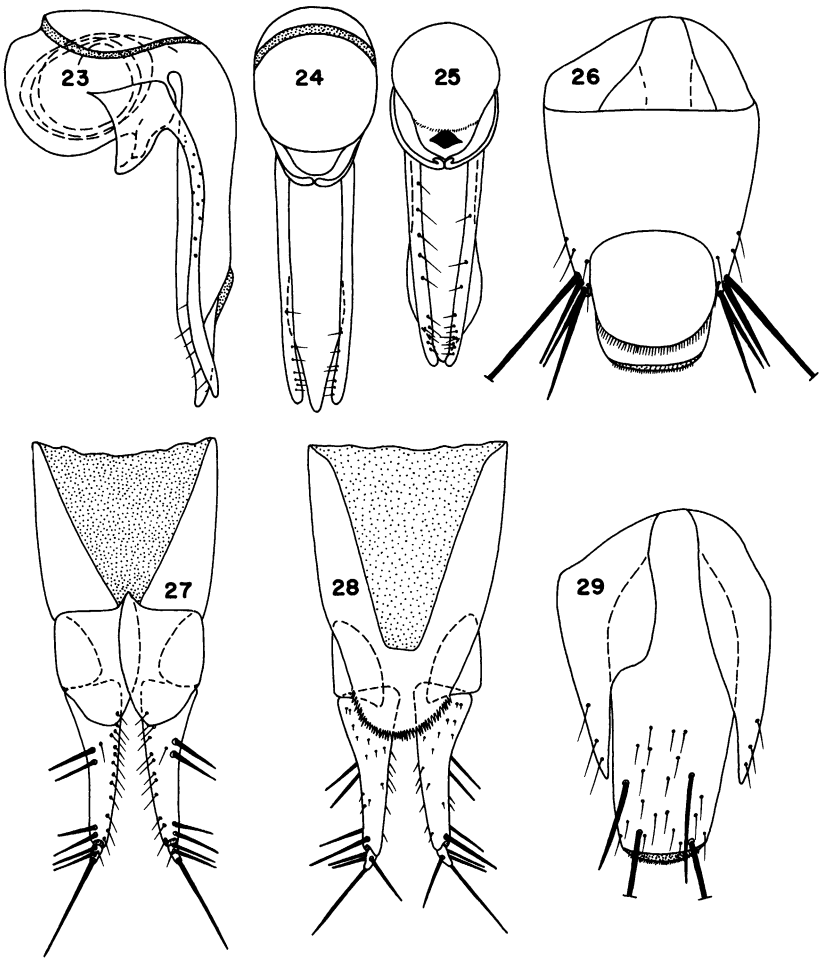
*Hypotelus picipennis* LE CONTE, 1863, p. 59 (type locality, middle states and Kansas; lectotype deposited at the Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; type not examined).
*Triga picipennis* (Le Conte): FAUVEL, 1878, p. 183; SCUDDER, 1900, p. 78.
*Trigites picipennis* (Le Conte): HANDLIRSCH, 1907, p. 731.
*Pseudeleusis picipennis* (Le Conte): BERNHAUER, 1923, p. 63.

DIAGNOSIS: See the diagnoses of *C. arizonensis*, *C. paradoxus*, and *C. brevipennis* for differential characters.

DESCRIPTION: Length approximately 2.7 to 3.9 mm.

Color reddish brown. Dorsum of head reddish brown to blackish brown. Venter of head dark reddish brown to reddish brown. Mandibles reddish brown. Labrum, antenna, maxillary and labial palps pale reddish brown to reddish brown. Prothorax reddish brown to dark reddish brown. Elytra yellowish brown to reddish brown with infusions of black. Pterothoracic sterna and pleura dark reddish brown to reddish brown. Legs yellowish brown to pale reddish brown. Abdomen dark reddish brown to reddish brown.

Head, thorax, and elytra as described for *C. arizonensis* except as follows.




FIGS. 23, 24. *Charhyphus arizonensis*, new species. 23. Aedeagus, lateral view. 24. Aedeagus, ventral view.

FIGS. 25–29. *Charhyphus picipennis* (Le Conte). 25. Aedeagus, ventral view. 26. Abdominal terga IX and X, male, dorsal view. 27. Female genitalia, ventral view. 28. Female genitalia, dorsal view. 29. Abdominal segment IX, tergum and sternum.

Dorsum of head with dense, large, and deep punctation (fig. 1). Eye large (fig. 1); postocular region longer but approximately equal to length of eye (fig. 1). Head strongly flattened. Pronotal punctation large, deep, and dense; middorsal groove absent or obsolete (fig. 1). Mesosternum

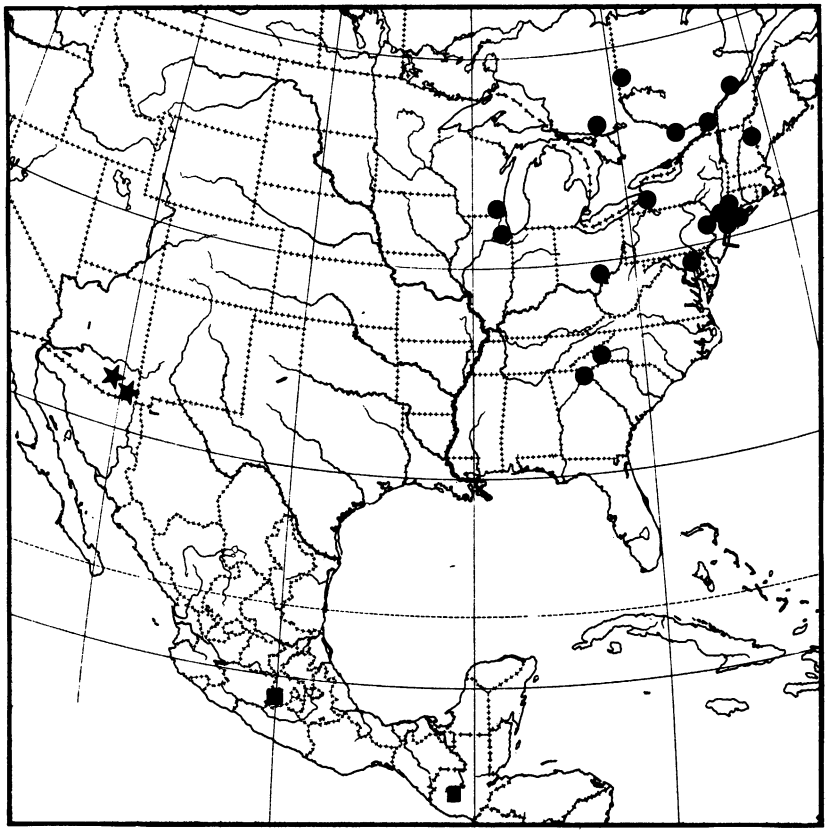


FIG. 30. Distribution map for *Charhyphus* [dots, *C. picipennis* (Le Conte); stars, *C. arizonensis*, new species; squares, *C. brevipennis* Sharp; *C. paradoxus* (Bernhauer) from Siberia not included].

without elliptical ridge on base (fig. 18). Parameres of aedeagus with numerous setae on inner surface (fig. 25).

DISTRIBUTION: *Charhyphus picipennis* is known from the eastern United States and Canada as far west as western Ontario, Wisconsin, Illinois, and Kansas. In the eastern United States it is known as far south as Georgia in the mountains.

MATERIAL EXAMINED: 56 specimens.

*Canada:* Ontario: Ottawa, Apr. 24, 1913, Sept. 2, 1912 (Beaulieu, CNC); Sudbury, 1893 (CNC). Quebec: Duparquet, Sept. 18, 1943 (G. Stace Smith, CAS); Montreal Isl.; Sainte-Foy, May 5, 1961 (J. C. Aubé,

CNC), May 15, 1934 (Fr. Firmin, CNC). Ste-Cátherine Port, July 17, 1953 (J. C. Aubé, CNC).

*United States:* Georgia: Rabun Co., Clayton, Apr. 1–12, 1940 (CNC). Illinois: Cook Co., Palos Park, May 16, 1943 (H. Dybas, FMNH), under bark of oak log. Maryland: Baltimore, June 10 and 12, 1909 (F. E. Blaisdell, CAS). North Carolina: Buncombe Co., Black Mountains, May 27, (AMNH); New Hampshire: Coos Co., Randolph, Sept. 10–17, 1940 (E. L. Bell, AMNH). New Jersey: Bergen Co., Englewood, May 3, 1903 (AMNH); Union Co., Crawford, May 18, 1908 (AMNH), Roselle, Apr. 17, 1917 (AMNH); Warren Co., Phillipsburg, Sept. 3, 1914 (J. W. Green, CAS). New York: Erie Co., Hamburg, Apr. 4, 1909 (M. C. Van Duzee, CAS); Kings Co., Flatbush (R. P. Dow, AMNH); Queens Co., Brownsville, Mar. 15, 1911 (AMNH), Jamaica, May 5, 1908 (R. P. Dow, AMNH); Richmond Co., Arlington, Staten Island, May 24, 1908 (AMNH); Rockland Co., Ramapo Mountain, May 5, 1900 (AMNH); Suffolk Co., Wyandanch, May 28, 1916 (F. M. Schott, AMNH); Westchester Co., Peekskill (CAS), Sept., 1893 (AMNH). Ohio: Athens Co., Athens, Jan. 14, 1934 (W. C. Stehr, CNC). Pennsylvania: Northampton Co., Easton, Apr. 30, 1933, Aug. 16, 1933, Sept. 24, 1933 (J. W. Green, CAS). Wisconsin: Walworth Co., Delavan (FMNH).

### *Charhyphus coeni* (Scudder), new combination

*Triga coeni* SCUDDER, 1900, p. 78, pt. 9, fig. 5; HANDLIRSCH, 1907, p. 731.
*Trigites coeni* (Scudder): HANDLIRSCH, 1907, p. 731.

This species is a fossil described from Miocene deposits of Florissant, Colorado. It is transferred to *Charhyphus* simply because it has been included in *Trigites*. The characters in the description and the photograph of the specimen offer no compelling evidence for believing the species belongs to this genus.

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