

Proceedings of
the United States
National Museum



SMITHSONIAN INSTITUTION • WASHINGTON, D.C.

Volume 118

1966

Number 3530

NOTES ON CERTAIN NEARCTIC TRICHOPTERA
IN THE MUSEUM OF COMPARATIVE ZOOLOGY

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The collection of Trichoptera in the Museum of Comparative Zoology at Harvard University is one of the most important depositories in the New World of types and other important material. During the summers of 1961 and 1962 it was my good fortune to be able to spend a number of weeks studying and preparing notes and illustrations on some of this material.

Many of the male types of Nearctic caddis flies in this collection were illustrated by Ross (1938b) and most of the other species have been figured or synonymized in later works of the same and other authors. However, there remains a small number of species whose status has never been clarified. In many instances the problem has been that the type is female. Now, with our increasing ability to discriminate between the females of the various species, and with the collection of longer series containing both sexes, it is possible in many cases to associate these female types with the males of the same species. In other cases the uncertainty about the species status has resulted from the failure of the earlier workers to figure or study the cleared, relaxed genitalia of the male types.

In this paper an attempt is made to elucidate many of these enigmatic species. On occasion the result has been the synonymy with some well-known, adequately figured species, while in other cases it has been necessary to prepare figures for a species not well illustrated by present-day standards. In the genus *Dicosmoecus*, and to a lesser degree in *Leptocella* and *Brachycentrus*, it has been necessary to do a more complete study of all the related species. No attempt is made to give descriptions or complete bibliographies of any of the species. The original description is cited and a subsequent reference is added to an adequate figure whenever one exists, and in a few cases some salient characters are pointed out.

I wish to thank Dr. P. J. Darlington, Jr., and Dr. H. E. Evans for their help during my visits.

Family Psychomyiidae

Phylocentropus carolinus Carpenter

FIGURES 1a,b

Phylocentropus carolinus Carpenter, 1933, p. 43, fig. 9.

The original figures of this species were prepared from an unrelaxed specimen. The figures here presented were prepared from the cleared, relaxed type.

Family Hydropsychidae

Diplectrona californica Banks

FIGURES 1d,e

Diplectrona californica Banks, 1914, p. 253, fig. 63.

Diplectrona margarita Denning, 1965, pp. 83-84, figs. 14-15. [New synonymy.]

Because the genitalia of this species have not been well illustrated, figures are given of the unique male type.

Denning recently described *D. margarita* from San Bernardino County, Calif. His figures of the genitalia of *margarita* leave no doubt that it is the same as *californica*.

Aphropsyche doringa (Milne), new combination

Diplectrona doringa Milne, 1936, p. 68.

Aphropsyche aprilis Ross, 1941, p. 79, fig. 60. [New synonymy.]

The male holotype of *doringa* is present in the collection in the Museum of Comparative Zoology rather than lost, as stated by Ross (1944). The type is identical to Ross's figures of *aprilis* and to a male in my collection from North Carolina.

Hydropsyche carolina Banks

FIGURE 1c

Hydropsyche carolina Banks, 1938, p. 77, figs. 8, 9.

The male genitalia of this distinctive little species have not been adequately figured previously. The forewing has a crescentic band of yellowish hair subapically, a patch basally in the anal area, and others at intermediate spots.

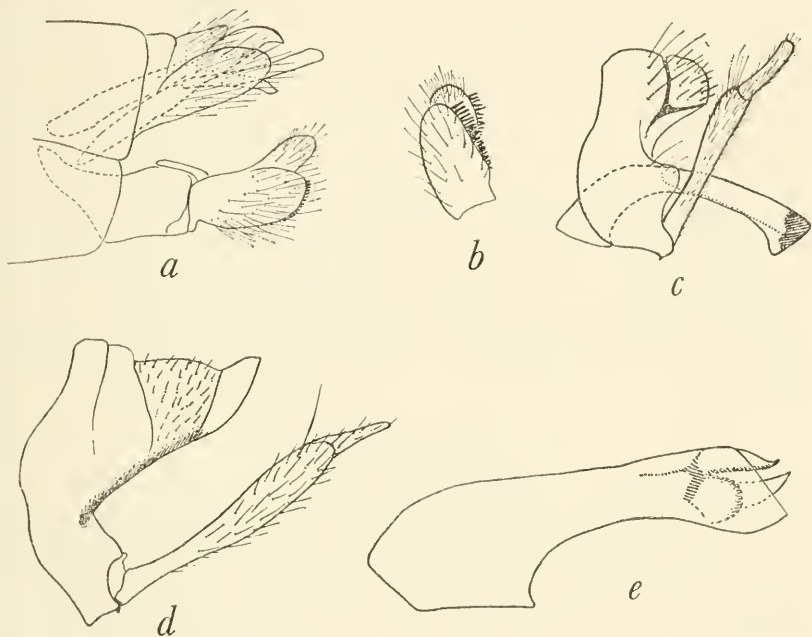


FIGURE 1.—*Phylocentropus carolinus*: a, male genitalia, lateral; b, clasper, ventral. *Hydropsyche carolina*: c, male genitalia, lateral. *Diplectrona californica*: d, male genitalia, lateral; e, aedeagus, lateral.

Family Limnephilidae

Genus *Dicosmoecus*

The taxonomic situation among the North American species of this genus is still rather confusing, even after studying the types and much more additional material of most of the species. Differences exist between these specimens, especially in the armature of the lateral sheaths of the aedeagus and in the structure of the basal ridge of the clasper. Presently I am able to recognize 5 different kinds of males, based mainly on these structures. Although these 5 genitalic kinds, which are being considered species, do not intergrade in the

material studied, each is somewhat (or sometimes highly) variable, and intergrades may be found in the future.

***Dicosmoecus atripes* (Hagen)**

FIGURES 2a-f

Platyphylax atripes Hagen, 1875, p. 600.

Dicosmoecus jucundus Banks, 1943, p. 358, figs. 102, 108, 118. [New synonymy.]

Dicosmoecus nigrescens Banks, 1943, p. 359, figs. 88, 90, 93, 96. [New synonymy.]

This species appears to be the most variable in the genus, especially in the armature of the lateral sheaths of the aedeagus. There is a great variation in the number of spines present and in their arrangement. In general the species may be said to possess sheaths that are round or slightly depressed, generally bearing on the outer side (but sometimes on the inner also) a variable number of rather long, slender spines. The upper end of the basal ridge of the clasper is barely separated from the ridge and not developed into a sharp spine. Figures are given of the lateral penis sheaths of the holotypes of *atripes*, *jucundus*, and *nigrescens*, as well as 3 other specimens, to show the degree of variability encountered in this species.

The types of all three species as well as other males from Colorado, Utah, New Mexico, California, Montana, Wyoming, and Idaho were studied.

***Dicosmoecus gilvipes* (Hagen)**

FIGURES 2g,h

Platyphylax gilvipes Hagen, 1875, p. 601.

This is a large species often with the veins strongly marked with fuscous. The lateral sheaths of the aedeagus are quite constant and distinctive in structure. The sheaths are compressed and bear on their upper and lower margins a row of rather short, broad spines which vary greatly in number and exact placement. The basal ridge of the clasper bears a distinct sharp tooth at its upper end.

All the males Banks determined as *D. grandis* Ulmer are this species. However, because the type of *grandis* is female and not in this country, I am not synonymizing *grandis* at this time. In addition to the type of *gilvipes*, males from California, British Columbia, Nevada, Oregon, and Idaho were seen.

***Dicosmoecus pallicornis* Banks**

FIGURE 2i

Dicosmoecus pallicornis Banks, 1943, pp. 359-60, figs. 82, 83, 86, 87.

In coloration this species is paler than the others, and the wings are much more pilose. The lateral sheaths of the aedeagus are distinctive, being short, blunt, and tipped by a cluster of short setae. This species is known only from California.



FIGURE 2.—*Dicosmoecus atripes*: *a*, lateral sheaths of aedeagus of type of *nigrescens*, dorsal; *b*, same of type of *jucundus*, dorsal; *c*, same of type of *atripes*, dorsal; *d*, same of specimen from Modoc Co., Calif., dorsal; *e*, same of specimen from Richel Lodge, Mont., dorsal; *f*, same of specimen from Provo Canyon, Utah, dorsal. *Dicosmoecus gilvipes*: *g*, clasper of male, dorsal; *h*, lateral sheath of aedeagus, lateral. *Dicosmoecus pallicornis*: *i*, lateral sheath of aedeagus, dorsal. *Dicosmoecus palatus*: *j*, aedeagus, lateral. *Allocosmoecus partitus*: *k*, male genitalia, lateral; *l*, aedeagus, dorsal. *Philocasca antennata*: *m*, male genitalia, lateral; *n*, aedeagus, dorsal.

***Dicosmoecus palatus* (McLachlan)**

FIGURE 2j

Stenophylax palatus McLachlan, 1872, p. 63.*Dicosmoecus obscuripennis* Banks, 1938, p. 76, figs. 4, 5. [New synonymy.]

No significant differences could be found between the type of *obscuripennis* Banks from Alaska, and an example of *palatus* McLachlan from the River Kolyma, Siberia. The lateral sheaths of the aedeagus in this species are very long and slender and are capped by a few spines and 1 or 2 nearer the base. The basal ridge of the clasper is long with the upper end slightly separated, but not developed into a sharp tooth. These specimens of this species are a bit smaller than the other species and colored a more uniformly darker brown.

Dicosmoecus frontalis* (Banks), new combinationDrusinus frontalis* Banks, 1943, pp. 350-351, figs. 28, 29.

The unique female type of this species was studied. The genitalia of the type indicate that the species does not belong in *Drusinus* but in the Dicosmoecinae, most probably in *Dicosmoecus*. *D. aureoventris* Davis is probably a synonym, but until a series containing both sexes becomes available, I hesitate to establish the synonymy.

***Allocosmoecus partitus* Banks**

FIGURES 2k,l

Allocosmoecus partitus Banks, 1943, pp. 365-366, figs. 73, 74, 76.

This very large caddis fly bears a striking superficial resemblance to the larger species of *Dicosmoecus*. The genitalia, however, are totally different and fully substantiate a separate generic status. The figures were drawn from the unique male type.

Pseudostenophylax edwardsi* (Banks)Anisogamus edwardsi* Banks, 1920, p. 345.*Anisogamus atripennis* Banks, 1924, pp. 440-441. [New synonymy.]

The abdomens of the female type of *atripennis* and the allotype and another female of *edwardsi* were cleared and studied. No differences could be found between their genitalia, and additionally the two types bear the same data. The type of *atripennis* is larger and more uniformly dark brown than *edwardsi*, but these are apparently only superficial differences.

Pseudostenophylax sparsus* (Banks)Halesus sparsus* Banks, 1908a, pp. 63-64, fig. 12.*Stenophylax calypso* Banks, 1911, p. 350, fig. 25.*Drusinus virginius*.—Ross (not Banks), 1944, p. 202, fig. 696.

This species is fairly common over most of eastern North America. Ross (1944) published the only good figure of the male genitalia of this

species but unfortunately misidentified it as *virginicus* Banks. The type of the latter is a female of a species of *Pycnopsyche* and is discussed further in that genus.

***Oligophlebodes minuta* (Banks)**

Halesus minutus Banks, 1897, p. 28.

Apatania pictula Banks, 1943, p. 355, figs. 3-6. [New synonymy.]

Oligophlebodes minutus.—Ross, 1944, pp. 283-284, fig. 944.

The abdomen of the male type of *pictula* was cleared and found to be typical of *minuta*.

***Pycnopsyche virginica* (Banks), new combination**

FIGURES 3a,b

Potamorites virginicus Banks, 1900, p. 256.

In addition to the female type of this species, I have studied 2 males that agree with the type in coloration, size, and structure. Since the male of this species has not been figured previously, I give figures of this sex here. The species belongs to the *lepida* group of the genus. Only the type of the species from Richmond, Va., a male from Myrtle Beach, S.C. (Oct. 25, 1943, C. T. Parsons), and another male from Faison, N.C. (Oct. 31, 1956, light trap), are known to me.

***Philocasca antennata* (Banks)**

FIGURES 2m,n

Stenophylax antennatus Banks, 1900, pp. 254-255.

The unique male type of this species which has not been illustrated previously, is shown here.

***Clostoecca disjuncta* (Banks)**

Anisogamus disjunctus Banks, 1914, p. 156, fig. 22.

Anisogamus disjunctus.—Ross, 1938b, p. 28, fig. 43. [Lectotype designated.]

Clostoecca sperryi Banks, 1943, pp. 352-353, figs. 1, 4, 5. [New synonymy.]

The genitalia of the types of the two species were compared and found to be identical. In coloration *sperryi* is more distinctly marked, probably due to its comparative freshness.

***Psychronia brevipennis* (Banks)**

FIGURES 3c-e

Pislopteryx brevipennis Banks, 1904, p. 108, fig. 3.

Figures are given here of the genitalia of the unique female type with the hope that they will permit the recognition of this species.

***Limnephilus sperryi* (Banks)**

FIGURES 3i,j

Rhadicoleptus sperryi Banks, 1943, pp. 346-347, figs. 2, 11, 12.

The male type of this species is illustrated here. The first segment

of the foretarsus in this species is twice the length of the second segment.

***Limnephilus costalis* (Banks), new combination**

Asynarchus costalis Banks, 1901, p. 286.

Anisogamus costalis, Ross, 1938b, p. 28, fig. 44. [Lectotype designated.]

This species is related closely to the preceding, and must be transferred to *Limnephilus*. Ross (1938b) illustrated the genitalia of the type of this species.

***Limnephilus concolor* Banks**

FIGURES 3m,n

Limnephilus concolor Banks, 1899, pp. 207-208.

Limnephilus concolor.—Ross, 1938b, p. 35. [Lectotype designated.]

The lectotype of this species is a female without abdomen, not a male as stated by Ross (1938b). The accompanying figures were prepared from the female lectoparatype. Other specimens of this species have been seen from California and British Columbia, but no collection has contained males. In all probability this is the female of the species generally called *assimilis* Banks, but it might be the female of *L. productus* Banks or *L. diversus* (Banks).

***Limnephilus bifidus* Banks**

FIGURES 3k,l

Limnephilus bifidus Banks, 1908b, p. 263, fig. 11.

Limnephilus bifidus.—Ross, 1938b, p. 34. [Lectotype designated.]

Figures are presented of the lectotype female of this species in the hope that they will permit its recognition. In coloration the species is marked in the manner of *L. moestus* Banks or *L. sericeus* (Say).

***Limnephilus pallens* (Banks)**

FIGURES 3f-h

Zaporata pallens Banks, 1920, p. 342, fig. 105.

The accompanying figures were prepared from the male type. The second segment of the foretarsus is about $\frac{3}{4}$ the length of the first segment, and the eighth tergum is produced into a scabrous lobe mesally. I have seen additional series from Southhampton, Northwest Territory, and Brooks Lake, Alaska.

***Limnephilus sericeus* (Say)**

Phryganea sericea Say, 1824, p. 309.

Anabolia decepta Banks, 1899, pp. 208-209. [New synonymy.]

Limnephilus sericeus.—Ross, 1944, p. 192, figs. 655, 644. [Neotype designated.]

The male type of *decepta* was studied and found to be the same as *sericeus* (Say).

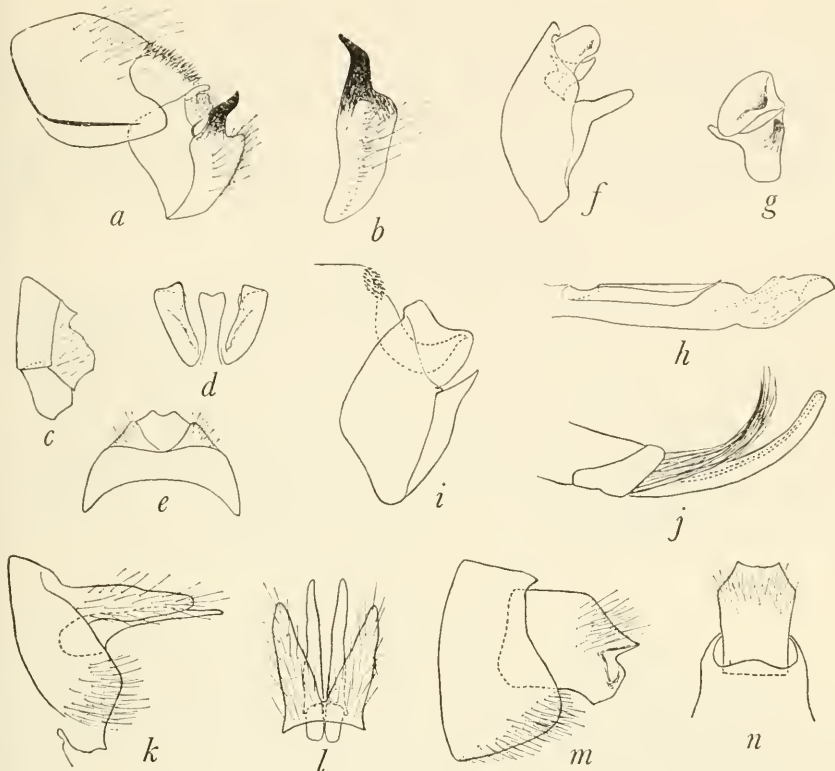


FIGURE 3.—*Pycnopsyche virginica*: a, male genitalia, lateral; b, clasper, caudal. *Psychronia brevipennis*: c, female genitalia, lateral; d, mesal processes of eighth sternum, ventral; e, genitalia, dorsal. *Limnephilus pallens*: f, male genitalia, lateral; g, cercus and tenth tergite, caudal; h, aedeagus, lateral. *Limnephilus sperryi*: i, male genitalia, lateral; j, aedeagus, lateral. *Limnephilus bifidus*: k, female genitalia, lateral; l, genitalia, dorsal. *Limnephilus concolor*: m, female genitalia, lateral and slightly caudal; n, genitalia, dorsal.

Asynarchus montanus Banks

Asynarchus montanus Banks, 1907, p. 119.

Anabolia curta Banks, 1920, p. 345, fig. 57. [New synonymy.]

Limnephilus curtus.—Ross, 1938b, p. 35. [Lectotype designated.]

Limnephilus montanus.—Ross, 1938b, p. 37. [Lectotype designated.]

Asynarchus curtus.—Schmid, 1954, pp. 81–84, figs. 18, 19.

The female lectotype of *montanus* was studied and found to be the female of the species generally called *curtus* (Banks). Schmid in 1954 synonymized *Limnephilus batchawana* Denning and *L. coneris* Ross with *curtus* Banks, all of which now fall under *montanus* Banks.

Platycentropus indistinctus (Walker)

Limnephilus indistinctus Walker, 1852, p. 37.

Platycentropus indistinctus.—Better and Mosely, 1940, pp. 159–161, fig. 80. [Holotype figured.]

Hylepsyche fraternus Banks, 1943, pp. 349–350, fig. 33. [New synonymy.]

The female type of *fraternus* is inseparable in any way from the female of *indistinctus*.

Platycentropus amicus (Hagen)

Hallesus amicus Hagen, 1861, pp. 265–266.

Platycentropus plectrus Ross, 1938a, pp. 169–170, fig. 111. [New synonymy.]

The unique female type of *amicus* was studied and found to be the female of the species more recently described as *plectrus* by Ross. In addition to the female type of *amicus* and a male paratype of *plectrus*, I have seen the following specimens: Manumuskin, N.J., Oct. 8, 1901, 1 female; Kingston, R.I., Sept. 6, 1907, Barlow, 1 female; Lakehurst, N.J., Aug. 31, 1955, Anderson and Franclemont, 2 females; Sept. 1, 1956, Knowlton and Franclemont, 1 male.

Family Leptoceridae

Setodes guttatus (Banks)

FIGURE 4c

Oecetina guttatus Banks, 1900, p. 257.

Because no figure of the male of this species has been published, the accompanying one of the type was prepared.

Triaenodes helo Milne

FIGURES 4a,b

Triaenodes helo Milne, 1934, p. 12.

The figures were prepared from the unique type of the species which has not been figured previously. The genitalia of the type are badly broken, the dorsal processes of the tenth tergum, the cerci, and the aedeagus are broken off and missing, and the claspers with their attached processes are dissociated from the rest of the capsule. (They are shown in their probable position in the accompanying figure.)

Athripsodes slossonae Banks

Athripsodes slossonae Banks, 1938, p. 77; fig. 7

Athripsodes ophioderus Ross, 1938a, p. 157, fig. 92. [New synonymy.]

Athripsodes daggyi Denning, 1947, p. 254, fig. 6. [New synonymy.]

The type of *slossonae* does not seem to differ significantly from the descriptions of *ophioderus* and *daggyi*. The few examples seen of this species all differ slightly among themselves in the exact contours of the genital parts but agree closely in their general structure, leading to the conclusion that this species is somewhat variable.

***Athripsodes transversus* (Hagen)**

Leptocerus transversus Hagen, 1861, p. 279.

Leptocerus inornatus Banks, 1914, p. 263, fig. 42. [New synonymy.]

Athripsodes transversus.—Ross, 1944, p. 233, fig. 790, 797.

Both the holotype of *inornatus* at the U.S. National Museum and a male paratype at the Museum of Comparative Zoology are unquestionably denuded specimens of *transversus*.

***Leptocella albida* (Walker)**

Leptocerus albidus Walker, 1852, p. 71.

Leptocella coloradensis Banks, 1899, p. 215. [New synonymy.]

Leptocella gracilis Banks, 1904, p. 110. [Preoccupied.]

Leptocella exilis Banks, 1905, p. 19. [New name for *gracilis* Banks 1904. New synonymy.]

Leptocella coloradensis.—Ross, 1938b, p. 22. [Lectotype designated.]

Leptocella albida.—Betten and Mosely, 1940, pp. 61–63, fig. 28. [Holotype figured.]

The types of both *coloradensis* and *exilis* are males, and their genitalia and that of *albida* all seem identical. In coloration both seem well within the variability of *albida* as presently defined.

***Leptocella minuta* Banks**

Leptocella minuta Banks, 1900, p. 257.

Leptocella minuta.—Ross, 1938b, p. 22. [Lectotype designated.]

Although this species is also a probable synonym of *albida*, it is not being synonymized at present because the male allotype lacks its abdomen and shows small colorational differences. The types are slightly smaller than typical of *albida* and bear a few small brownish spots along the veins apically.

***Leptocella texana* Banks**

Leptocella texana Banks, 1905, p. 19.

At some time the species labels in the collection of the Museum of Comparative Zoology for this species and the next became transposed. The labels on the specimens, however, are still correct. This transposition of labels led Ross (1938) to designate a lectotype for *texana* from the syntypic series of *intervena*, clearly an invalid designation.

The unique type of *texana* lacks abdomen but is probably a female. The wings are white but heavily marked with brown along the veins.

***Leptocella intervena* Banks**

Leptocella intervena Banks, 1914, p. 262, figs. 15, 50.

Leptocella texana.—Ross (not Banks), 1938b, p. 23.

Leptocella diarina Ross, 1944, pp. 218–219, figs. 752–760. [New synonymy.]

As mentioned under *texana*, the species labels of this and the preceding were transposed, causing Ross (1938b) to make an invalid lectotype designation for *texana*.

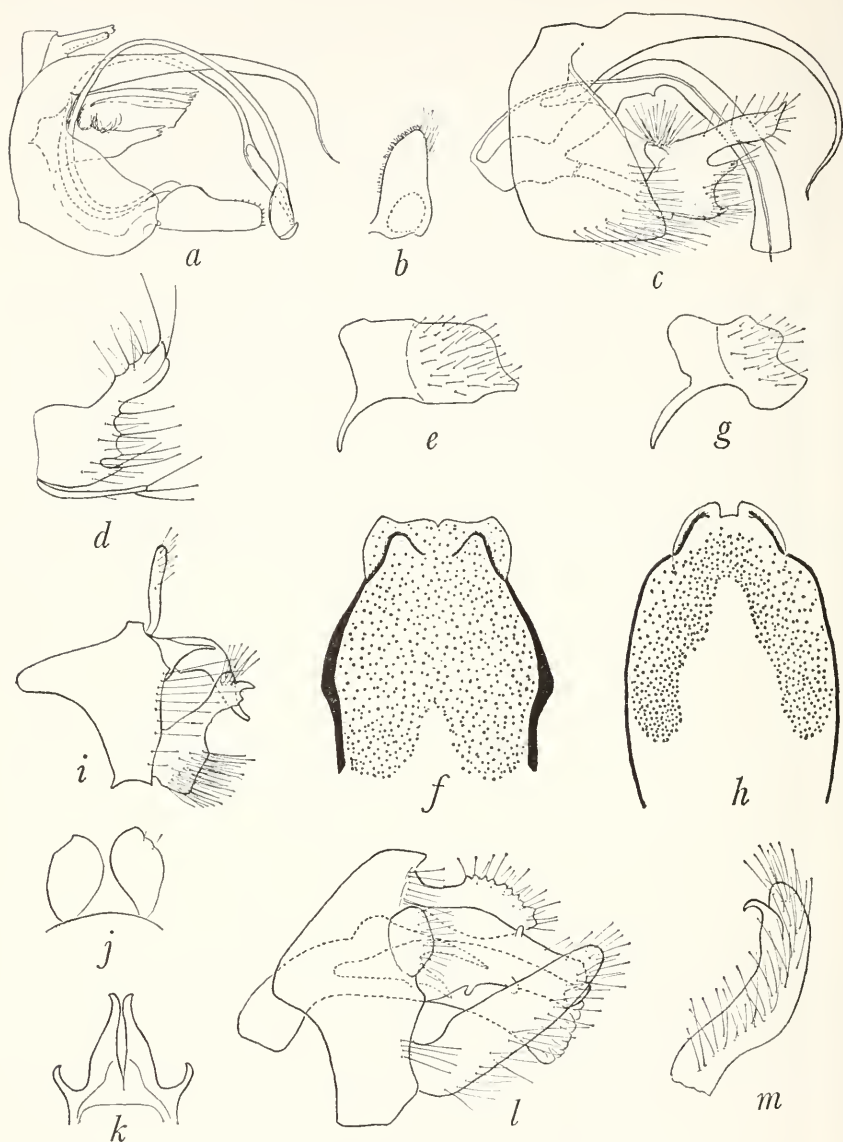


FIGURE 4.—*Triaenodes helo*: a, male genitalia, lateral; b, clasper, ventral. *Setodes guttatus*: c, male genitalia, lateral. *Leptocella stigmatica*: d, clasper, lateral. *Brachycentrus incanus*: e, female ninth and tenth terga, lateral; f, eighth sternum, ventral. *Brachycentrus nigrisoma*: g, female ninth and tenth terga, lateral; h, eighth sternum, ventral. *Oligoplectrum dimicki*: i, male genitalia, lateral; j, cerci, anterodorsal; k, tenth tergum, dorsal. *Pseudogoera singularis*: l, male genitalia, lateral; m, clasper, ventral.

Part of the syntypic series of *intervena* is at the U.S. National Museum, where the type was stated to be placed, and part at the Museum of Comparative Zoology. I am designating here as lectotype a male in the collection of the U.S. National Museum, bearing the following labels: "Zavalla Co., Nueces Riv. IV.26.10 Tx/at light/Hunter & Pratt Coll/Type No. 18273 U.S.N.M./*Leptocella intervena* Bks. Type [in Banks' writing]/Lectotype *Leptocella intervena* Bks. Designated Flint 1965."

The only difference between the lectotype of *intervena* and a male paratype of *diarina* at the Museum of Comparative Zoology is in the darkness of the V-marks along the posterior margin of the forewing. In *diarina* they are nearly black, in *intervena* mostly brown, a difference I do not think to be of specific value, considering the lack of other characters.

In all likelihood more material will show *intervena* to be a synonym of *texana* and possibly even of *albida*.

***Leptocella stigmatica* Banks**

FIGURE 4d

Leptocella stigmatica Banks, 1914, p. 262, fig. 48.

Leptocella stigmatica Ross, 1938b, pp. 22-23. [Lectotype designated.]

This species is recognized easily by its nearly black coloration and the large eyes and shape of the clasper in the male.

Family Brachycentridae

Genus *Brachycentrus*

The genus *Brachycentrus* in northeastern North America contains at least six species easily recognized in the male sex. In certain species the females are also distinctive, for example, *B. nigrisoma* (Banks), *B. lateralis* (Say), and *B. americanus* (Banks). However, there are three species, *B. incanus* Hagen, *B. numerosus* (Say), and *B. fuliginosus* Walker, in which I am totally unable to differentiate between the females. To compound this difficulty, the types of two of these, *incanus* and *fuliginosus*, are unique females. Because, then, I am unable to obtain conclusive evidence from the types as to which name goes with which species, the names will be applied here as they are recognized in the literature.

***Brachycentrus incanus* Hagen**

FIGURES 4e,f

Brachycentrus incanus Hagen, 1861, p. 272.

Brachycentrus incanus.—Denning, 1941, pp. 202-203, fig. 8. [Male allotype designated.]

Figures are here presented of the female type of this species.

There is enough variation in this species and *numerosus* so that all characters which were thought to be distinctive were found to overlap when more material was examined.

I have seen males of this species from the District of Columbia, Maryland, New Jersey, New York, Ontario, Pennsylvania, and Virginia.

***Brachycentrus numerosus* (Say)**

Phryganea numerosa Say, 1823, p. 160.

Brachycentrus numerosus.—Ross, 1944, pp. 264–265, figs. 899, 902. [Neotypes designated.]

Although males of this species and the preceding are easily separated, no differences could be found between the females.

Males of this species from Massachusetts, Michigan, North Carolina, and Quebec were studied.

***Brachycentrus fuliginosus* Walker**

Brachycentrus fuliginosus Walker, 1852, p. 88.

Brachycentrus fuliginosus.—Betten and Mosely, 1940, pp. 177–178, fig. 89. [Holotype figured.]

Brachycentrus fuliginosus.—Leonard and Leonard, 1949, pp. 7–8, figs. 5–8. [Male figured.]

The figures of the female type presented by Betten and Mosely do not show any differences from females of *incanus* or *numerosus*. Figures of a male, presumed to be this species, are to be found in Leonard and Leonard. The species, of which I have seen no examples, is recorded from Michigan, Ontario, and Quebec.

***Brachycentrus lateralis* (Say)**

Phryganea lateralis Say, 1823, p. 161.

Brachycentrus lateralis.—Ross, 1944, pp. 265–266, figs. 900, 903. [Neotypes designated.]

This species appears to have paler legs, antennae, and pilosity than related species. It is possible to separate the females of this species from those of the *incanus* type. In *lateralis* the setal area of the ninth and tenth terga is confined to the apical third, rather than occupying a half or more of the segment.

Males from Illinois, Michigan, Quebec, and Pennsylvania were examined.

***Brachycentrus nigrisoma* (Banks)**

Figures 4g,h

Sphinctogaster nigrisoma Banks, 1905, p. 12.

Brachycentrus notabulus Milne, 1936, p. 112. [New synonymy.]

The unique female type of this species was studied and found to be identical to the female allotype of *notabulus* Milne. The female sex

is quite distinctive in this species, in the shape of both the ninth and tenth terga and the eighth sternum.

Material from New York and Virginia has been seen.

***Oligoplectrum dimicki* (Milne)**

Figures 4i-k

Brachycentrus dimicki Milne, 1936, p. 112.

Because no figures of this species have been published previously, the male type is illustrated here.

Uncertain Placement

***Pseudogoera singularis* Carpenter**

Figures 4l,m

Pseudogoera singularis Carpenter, 1933, p. 38, figs. 2, 12.

Additional figures of the male type of this species are presented here. The genitalia show a single dorsal plate flanked by a pair of slightly ventrad plates which have a button-like cercus at their bases. The clasper has a small mesal hook near its apex. This plan of the genitalia seems quite different from that of the Goerinae and it is unlike that of any other taxon with which I am familiar. Several searches at the type locality, Deep Creek near Bryson City, N.C., have failed to turn up any more adult examples or larvae likely to be those of this species.

Pending more information, *P. singularis*, therefore, is retained in the Goerinae, where originally it was placed.

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