specimens were not bilaterally symmetrical and would have been placed in *affinis* on the basis of one antenna and *populicandepilfollus* on the basis of the other antenna.

Bodenheimer and Swirski (1957) reported the secondary host of *affinis* to be *Ranunculus*. As the secondary hosts of the two species are the same and some specimens have characteristics of both species, it appears that *affinis* and *populicandepilfollus* may be synonymous or perhaps that there is hybridization between the species.

**References**


(Received 28 March 1966)

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**A Redescription of *Metanopedia brunneiceps* (Ashmead) (Hymenoptera: Platygasteridae) With Notes on its Geographical Distribution and Host Relationships**

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and

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**Abstract**

*Metanopedia stierius* Brues, 1910 is considered a new synonym of *Trichacis brunneiceps* Ashmead, 1887. The genus *Metanopedia* Brues is redefined and *Metanopedia brunneiceps* (Ashmead) new combination is proposed. The latter species is redescribed and illustrated, its geographical distribution and host relationships are listed and discussed.

Brues (1910) erected the genus *Metanopedia* for the Neotropical species *Metanopedia stierius* Brues. Ashmead (1887, 1893) had earlier described three species of *Trichacis* Foerster from North America. Fouts (1924) recognized that these Ashmeadian species were conspecific and re-examination of the types confirms his conclusion. However, Fouts listed *Trichacis arizonicensis* Ashmead as a new species.
and *Trichacis bruneipes* Ashmead as synonyms of *Trichacis rubicola* Ashmead, citing 1893 as the year of the original descriptions of all three species. *T. bruneipes* was, in fact, described first in 1887 (*Can. Ent. 19: 131*). *T. rubicola* and *T. arizonensis* are, therefore, synonyms of *T. bruneipes*. Examination of the types of *Trichacis bruneipes* Ashmead and *Metanopeda siscia* Brues (examination by the senior author) has shown that these are also conspecific, Ashmead's name having, of course, priority. Brues apparently miscounted the antennal segments in *M. siscia*, considering the tiny segments 3 and 4 as one segment, and thus he states the antenna to be 9-segmented in *Metanopeda*. However, we still consider *Metanopeda* Brues a good genus. It comes close to its nearest relatives *Trichacis* Forr. and *Platygastra* Latr., yet differs from both distinctly by having the antennal segments 3 and 4 very tiny and segment 5 very large in both male and female. The 4-segmented gaster in female is also a very remarkable character for a *Platygastridae* genus. Females of *Uroacrynops* Mann & *Gastrotylops* Brues have a similar spatulate apical segment, but the former has a 4-segmented gaster while the latter is 5-segmented. A brief redefinition of *Metanopeda* Brues follows:

Antennae 10-segmented, segments 3 and 4 very small, adpressed to each other, segment 5 large in both sexes; lateral ocelli closer to eye margin than to median ocelli; prothorax elongate, easily visible from above, gradually sloping from mesonotum to head, not vertical as in most *Platygastridae*, with raised, transversely striated saddle-shaped band anteriorly; mesoscutum extending posteriorly as a thin plate over the base of scutellum; scutellum densely covered with long hairs; wings veinless; gaster of female with four visible segments, the apical segment elongate and spatulate, gaster 5-segmented in male.

**Type-species:** (*Metanopeda siscia* Brues, 1910) = [*Trichacis bruneipes* Ashmead, 1887].

### *Metanopeda bruneipes* (Ashmead) new combination


(Frocc.).

*Trichacis bruneipes* (†): Dalla Torre, 1898. *Cat. Hym. 5: 481.*


**Female** (Figs., 1–3). Head transverse, slightly wider than thorax, from shining, with uniform, fine reticulation, with several coarse transverse striations immediately above antennal sockets; vertex with prominent transverse striations, separated from occiput by fine carinae; occiput with several deep, curved striations extending to level of base of labium; lateral ocelli twice as far from median ocelli as from eye margin; antennae 10-segmented; segments 3 and 4 very small, 4 closely united to 5; 5 large, as long as 2, 3, and 4 combined, segments 7–10 gradually expanded and forming a club.

Prothorax elongate, with raised, saddle-shaped band anteriorly bearing coarse transverse striations; anterolateral margin expanded ventrally where it bears a number of curved carinae, sponia well developed; mesoscutum with well-defined grooves close to and parallel with the lateral margins, extending from the anterior end of the parapsidal furrows to the posterior margin of the scutite; parapsidal furrows complete and well developed, converging only slightly posteriorly; median area between furrows slightly elevated and projecting posteriorly.
Figs. 1-5. *Melenophorus brumneipes* (Ashmead): 1, female, dorsal view; 2, female, lateral view of head and thorax; 3, female, antenna; 4, male, dorsal view of abdomen; 5, male, antenna.
<table>
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<td>5.10.1946</td>
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<td>Hosted galls on Crepis biennis L.</td>
<td>5.12.33</td>
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*Compiled by Panganky; additional information is available from his records in the U.S.N.N.
as a thin, rounded plate over the depressed base of the scutellum; posterior margin on each side of median projection with long hairs; mesopleura bare, shining; scutellum broad basally, median area raised and projecting posteriorly; surface shining with coarse punctuation, covered with long fuscous hairs that make the scutellum appear semicircular from above; metapleura entirely covered with long hairs; propodeum obscured from above; with two small lamellae dorsally, wings venetous, fore-wings with short marginal fringes, only slightly longer at apex, hind wings with fringes about one third of width of wing, surface proximal to hamuli bare; all tarsi 5-segmented.

Gaster with four visible segments; longer than head and thorax combined; laterotergite very wide on all segments; segment 1 transverse, tergite with two longitudinal carinae medially, depressed lateral areas with fine hair; sternite entirely covered with hair; tergite 2 with hair-filled depressions on each side of raised, median projection at anterior margin; sternite 2 also with median projection and lateral hair-filled areas; with a deep groove laterally, extending from the anterior margin to about halfway along the sternite, area between groove and laterotergite with prominent row of long hairs; segment 3 transverse, tergite and sternite with transverse rows of punctations and hairs; segment 4 triangular, rounded posteriorly, spatulate, transparent at tip with ovipositor visible internally; deep longitudinal striations on basal one third of tergite and on basal two thirds of sternite; tergite slightly longer than sternite.

Malta (Figs. 4, 5). Antennae 10-segmented; segments 1 and 4 small; 4 asymmetrical, very loosely united to segment 5; distal segments not differentiated into club; all segments moderately hairy. Gaster 7-segmented, segments 1 and 2 as in the female; segments 3–6 transverse, tergites and sternites each with a transverse row of long hairs; segment 7 bluntly triangular, bare.

The holotype (♀) of *Tribalitis brunneipes* (Cat. No. 23478 U.S.N.M.; unique) is in poor condition; the head is missing and the thorax slightly crushed; however, sufficient material remains so that there is no doubt about its identity with the other species mentioned above. The types of all species listed above as synonyms were examined and compared. Variation: A series of specimens of both sexes was examined (see Table 1). There is some variation in color, from red-brown to black, and in the female in the relative length of the segments of the gaster. The holotype of *T. brunneipes* has a relatively short gaster with segment 4 about one third of the length of the gaster; in other female specimens segment 4 may be more than half of the length of the gaster, giving these specimens a very different superficial appearance. The shorter apical segment in some specimens is not due to retraction of its basal portion into segment 3. No correlation was observed between the length of gaster and either geographical distribution or different hosts.

Geographical Distribution and Host Relationships (see Table 1)

The available geographical records show *M. brunneipes* to range from Costa Rica to Mexico and the Caribbean, and throughout the U.S. to southeastern Canada. This is a rather unusual type of distribution. No related forms are known either from the Palearctic region or from America south of Panama. The phylogenetic diversity of plants and their Itonid gall formers would indicate that *M. brunneipes* has an unusually wide choice of hosts. Considering both its wide host range and geographical distribution it is surprising that *M. brunneipes* exhibits relatively little morphological variation. Although some of the host records are incomplete, it is presumed that all potential hosts are gall midges (Itoniidae).

Acknowledgments

We wish to thank Dr. J. G. Rozen, Jr. (American Museum of Natural History) and Mr. C. F. W. Muesebeck (U.S. National Museum) for the loan of material, and the latter for locating and interpreting Pergande’s notes on the biology of the parasite. Thanks are also extended to Dr. L. K. Smith (Canada Department of Agriculture) and Dr. H. K. Tonnes (American Entomological Institute, Ann Arbor, Michigan) for supplementary material.
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Fouts, R. M. 1925. A revision of the North American wasps of the subfamily Pter-
(Received 28 March 1966)

New North American Trichoptera
By D. G. DENNING and JAN SYKORA

Abstract
The majority of caddisflies selected for discussion in this paper are from Mexico. The Mexican Trichoptera fauna should contain a large number of genera and species, however, relatively few have been recorded or described from that country. The phylogeny of many neartic species will be better understood when our knowledge of the Mexican fauna is more complete. With this in mind as the objective, most of the new species selected for description herein will further elucidate our knowledge of the Trichoptera.

One new species of Warnoldia, four new Polycentropus, two new Limnephilus
and two new Oscheius have been selected for description. The unknown female
of Limnephilus discolor is described. Types are in the senior author's collection
unless otherwise indicated.

Warnoldia arcopa Denning new species
This new species is a member of the arizonensis group and is related to planae
Ross and esperantis Ross. It is closest to planae, which was described from Chiapas,
Mexico.

Male. Length 4 mm. General color light brown. Wings uniformly light tan, thorax
and head slightly darker, tegulae enlarged, legs and spurs light yellowish; spurs 2-4-4.
First and second maxillary segments short and thick, setose. No modifications of seventh and eighth
sterna. Genitalia as in Fig. 1. Eighth tergum mesal margin knob-like from lateral aspect;
from dorsal view, Fig. 1A, apical margin linearly ovate, resulting in a pair of acute apices.
Ninth segment annular, slender, no modifications. Ninth and tenth terga fused, tenth tergum
extending caudad more than half the length of the claspers, from lateral aspect, Fig. 1, an
acute point occurs cephalad to apex, apex bulbous and transparent, viewed dorsally, Fig. 1B,
tergum extends beyond cerci, lateral flanges acute, apex transverse, narrow, arrow-shaped.
Cerci long, digitate. Claspers short (similar to anila Ross); basal segment short and wide.
Porosity surface concave; apical segment constricted laterally, apex rounded, flat mesal surface
bears a circular pad of short, dark scales. Fig. 1C. Aedeagus lightly sclerotized, bulbous
base arises in seventh and eighth sternum, a pair of internal heavily sclerotized spines present,
apex tubular, semi-membranous.

Female. Length 4 mm. Similar in size, color and general characteristics to male.
Abdomen lightly sclerotized, no modifications, tapering gradually to the apical segment. A
pair of internal sclerotized apodemes extend parallel from ninth segment to intersegmental
membrane of seventh. A pair of internal apodemes extend from margin of eighth segment
to the seventh where they cross each other. Fig. 1D.


R. K. Akia. Allotype female, same data as for holotype. Paratypes three males
and two females, same data as for holotype (from H. Rodney Dodge collection).

Polycentropus femoralis Denning new species
This new species is the third member of the artilio-erasperns complex. Major
differences are discernible in the claspers, cerci and aedeagus. The de-