

with the following segments than in these specimens. In this respect and in sensoriation it fits *nudus* (De Geer) of both Del Guercio and Chlodkovsky, except that IV certainly is not "much" longer than VI. Furthermore the rostrum does not reach to the end of the abdomen, in reality scarcely to the middle. The cornicles are considerably smaller than those figured by Del Guercio for *nudus* De Geer. For these reasons the writer considers that *Lachnus pini* (Linn.) of Walker and Buckton is *Dilachnus taeniatus* (Mordw.), and so places it as a synonym.

The Genus *Diamesa* Meigen (Diptera, Chironomidae).

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Among the Chironomidae, taken in a tent trap which was set over a riffle near Fall Creek, Ithaca, N. Y., were specimens of a species of *Diamesa* with yellow thorax. As this form appears to be new, it is described herewith. There are several European species which resemble it, *D. gaedii* Meigen approaching it most closely. This European species differs, however, in having a brownish border at the anterior end of the median, and at the posterior end of the lateral thoracic stripes; a median yellow stripe on the metanotum, and a relatively longer fore basitarsus.

Diamesa fulva n. sp.

♀. Length 2.2 mm. Head yellow, a diffuse brownish spot on each side of the median suture on the vertex; front broad, over half the width of the head, including eyes, in frontal view. Eyes black, somewhat emarginate, glabrous, facets large. Antennae with eight visible segments, yellow basally, apical segment fuscous, with dusky hairs; the basal segment large, disc-like, the second, third and fourth segments slightly longer than broad, second and third not sharply separated from each other, fifth, sixth and seventh about twice as long as broad, eighth fusiform, not quite as long as the preceding three taken together, total length of antenna 0.25 mm. Epistome subtriangular, sub-fuscous, dorsal surface with rather long bristly hairs, transverse suture very distinct; palpi four-segmented, first and second segments subequal, third slightly longer, fourth about twice as long as the second; total length of palpus about 0.5 mm.

Thorax yellow, whitish pruinose, subshining, dorsum with three broad, more or less distinct ferruginous vittae, laterals anteriorly, mid-

dle one posteriorly abbreviated; collar incised, angles rounded; scutellum yellow, large, tumid, with very few yellowish hairs; pleura pale yellow, pectus deeper yellow; metanotum blackish brown.

Abdomen elongate oval, compressed, hairs pale; tergum blackish brown, posterior margins of the segments paler; venter dull green, posterior margins of the segments paler green; valves of the ovipositor about as broad as long, racket-shaped, yellow.

Wings hyaline, with distinct milky tinge, anterior veins heavy, yellowish, with few setae; posterior veins almost colorless; posterior branch of radius arched, ending slightly proximad of the tip of the media, costa produced over one-fourth the distance beyond the tip of the radius towards the tip of the media; wing surface finely and irregularly roughened as in *D. walilii*, without true punctations; anal lobe strongly produced, hind margin with a fringe of pale hairs. Halteres white.

Fore legs subfuscous, except coxae and extreme bases of femora which are yellow, first tarsal segment over 0.8 as long as the tibia; middle and hind legs, including coxae, yellow; knees, extreme tips of tibiae and basal tarsal segments, and the whole of the last four tarsal segments fuscous; tibial spurs distinct, posterior pairs longest; fourth tarsal segments on all the legs broadened and emarginate apically, and but little over half as long as the fifth segment; tarsal claws simple, empodium shorter than the claws.

Ithaca, New York, May 30, 1914.

The above description was largely drawn from a pinned specimen which was later mounted on a slide. The *type* will be placed in the Cornell University collection. The single pinned paratype, from the same locality, does not differ from the above.

Though Kieffer mentions "hairy eyes" among the generic characters of *Diamesa* sens. str., I am not inclined to erect a new genus for the species on this character alone, especially as the male is still unknown. Our three species of *Diamesa* as now restricted may be distinguished as follows:

- a. Smaller species, female less than 2.5 mm. long; thorax yellow; eyes glabrous. *D. fulva* n. sp.
- aa. Larger species, over 4 mm. long, thorax black or cinereous.
 - b. Terminal antennal segment of male twice the length of the others combined; keel of the last tergite produced caudad about as far as the apex of the basal segment of the clasper and beyond the tip of the inner process of this segment (fig. 5, Muttkowski, 1915) *D. mendotae*.
 - bb. Terminal antennal segment of male not over 1.6 times as

long as the others combined including the large basal segment, or twice the length of segments 2 to 7 combined; dorsal keel not produced as far as the tip of the inner process of the basal segment of the clasper; eyes densely short haired, all claws of the male somewhat broadened at the tip, flat and brush like; fore basitarsus nearly 0.7 as long as the corresponding tibia.
waltlii.

Mr. Muttkowski (p. 118, 1915) calls attention to the noticeable difference in the form of the larval labium of *D. mendotae* and *D. waltlii* and ventures the opinion that I may have confused my material of *D. waltlii* and *Cardiocladius* (*Thalassomyia*) *obscura* when writing my papers (1903, 1905).

There is however no error in my rearing records of these species. In the first place, the arrangement of the teeth in the labium is subject to considerable variation within a genus as may be seen in *Chironomus*, and there seems to be no reason why this should not also be so in *Diamesa*. Secondly, I find in my notes the following: "Six reared specimens of *Diamesa* and their six cast larval and pupal skins. Reared Nov. 24. Material collected from swift water, Cascadilla Creek, Nov. 14." The figures in my 1905 paper were based in part on this material. The figures in 1903 paper were made from specimens taken at an earlier date.

In the third place, the larva of *Thalassomyia obscura* is not full grown until spring, the adults appearing from May to September, while the larva of *Diamesa waltlii* in this locality is full grown only in the fall and winter, the adults appearing from November to April. Specimens collected in late fall and early winter therefore cannot be confused.

Concerning the early stages of *D. fulva* all that can be said is that the larvae must live in flowing water, since the adults were captured under a tent trap placed over a riffle. The larvae of the other two species found in this country and that of *T. (Cardiocladius) obscura* may be distinguished as follows:

1. Middle tooth of labium at least as wide as three lateral teeth, broadly truncate and with convex margin.....*T. obscura*
2. Middle tooth of labium broad, margin concave.....*D. mendotae*
3. Middle tooth of labium narrow, not twice as wide as the first lateral tooth.*D. waltlii*

In my balsam mounts of the pupal exuviae of *D. waltlii* I failed to see the respiratory filament. In a pupa of *Diamesa*, which I believe to be *D. waltlii*, recently collected in Cascadilla Creek on the rocks near the falls, the filaments are visible as delicate colorless tubes as described by Muttkowski for *D. mendotae*. In other particulars, including the arrangement of the marginal setae on the lateral carina, Muttkowski's description of *D. mendotae* applies equally well to *D. waltlii*.

REFERENCES.

1903. JOHANNSEN. Aquatic Nematoceros Diptera. N. Y. State Museum, Bul. 68: 328-441.
1905. JOHANNSEN. Aquatic Nematoceros Diptera II. N. Y. State Museum, Bul. 86: 76-330.
1915. MUTTKOWSKI. New Insect Life Histories. Bul. Wis. Nat. Hist. Soc. XIII: 109-122.

A State Insect Survey Project.

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In former years the writers, jointly and separately, published a number of papers in ENTOMOLOGICAL NEWS bearing on the insect fauna of North Carolina,—giving lists of species in certain groups, distribution and seasonal notes, as indicated by our records. We were avowedly accumulating data on the insect life of the State as a whole. We believed that this was desirable, as no such study had been undertaken in any neighboring state, and we considered that the variety of conditions presented in North Carolina, render it a "Key" state to the general insect fauna of the southeastern group of states. Florida is an exception for obvious reasons.

From time to time we have received inquiries regarding this work, the methods and progress.

The collections and records have steadily increased in volume, in interest and we believe in scientific value. They are a source of continual reference and study. And after twenty years we are making better progress than at any time in the past.

In 1915 "A Study of the Insect Fauna of the State, etc.," was formally listed as one of the permanent projects of work



Johannsen, O. A. 1921. "The genus *Diamesa* Meigen (Diptera, Chironomidae)." *Entomological news, and proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia* 32, 229–232.

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