Proceedings of the Iowa Academy of Science

1939

A Preliminary List of the Mycetophilidae (Diptera) Known to Occur in Iowa

H. E. Jaques
Iowa Wesleyan College

B. G. Berger
Iowa Wesleyan College

A PRELIMINARY LIST OF THE MYCETOPHILIDÆ (DIPTERA) KNOWN TO OCCUR IN IOWA

H. E. JAQUES AND B. G. BERGER

The Dipterous family Mycetophilidae is composed of small to medium sized flies, ranging from two to nine millimeters in length. These fungus-gnats are numerous both in species and in number of individuals to be found in a local habitat. Characteristics of the legs that are particularly noticeable are as follows: elongated coxae, thickened femur and, spured and setose tibia. The adult resembles a mosquito in that it has a small head, antennae with twelve to seventeen joints and a highly arched thorax. Predominating colors are yellow and black; the abdominal segments often have alternate bands of black and yellow. The males have a complex hypopygia, which is important in the identification of the species.
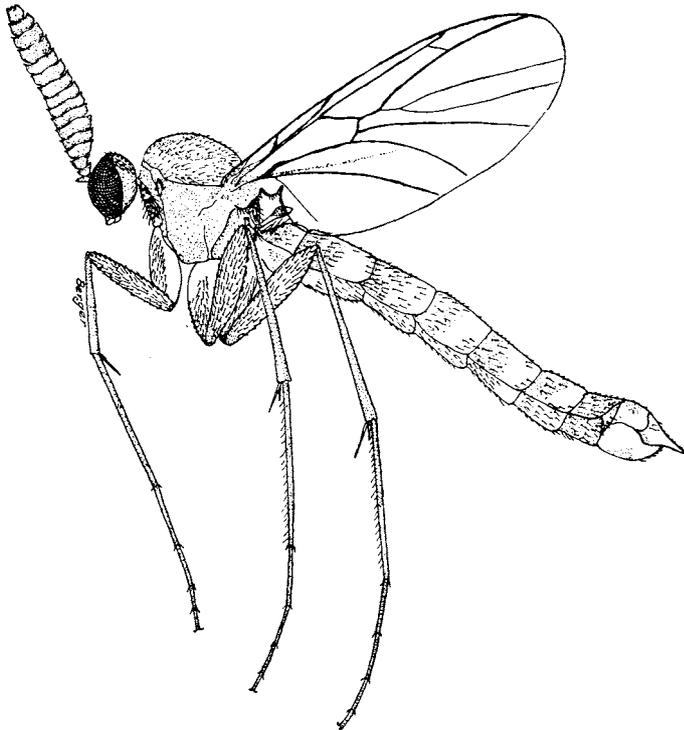

Fig. 1. *Ceroplatus militaris* Joh. ♂

Fig. 2. *Leia bivittata* (Say.) ♂

Adults of the species are found around decaying wood and fungi, along shaded streams and on damp or mossy rocks. In the spring of the year, a large number may be found around damp decaying leaves. The larvae are very common in or on the fungi, and often a great number are present in a single mushroom. The most satisfactory way in which to collect them is to use a sweeping net in an ideal habitat. With a few quick movements of the net the collector should force the small flies into the bottom of the net. By then grasping the net about three inches above the bottom the flies and other insects are kept in the end of the net so that it, with its contents may be thrust into a quart cyanine jar.[1] After a few minutes, depending upon the strength of the jar and the amount of insects caught the net may be opened and the desirable insects picked out by using a vacuum collector.[2]

[1] A tin can with a quarter-turn lid is better because it does not break but the collector cannot see the condition of the insects in the net through the tin can.
[2] See, "How to Know the Insects," Jaques, Fig. 10, p. 14.

We are very grateful to Miss. E. G. Fisher, Mr. C. T. Greene and Mr. A. Stone for the determination of the species.

The list which follows is a record of the Mycetophilidae in the Iowa Insect Survey Collection at Iowa Wesleyan College. Summer work of the survey is largely done at the Iowa Lakeside Laboratory and in connection with state wide trips associated with the Laboratory research.

Ceroplatus militaris Joh.
Platyura genualis Joh.
Sciophila novata Joh.
Sciophila pallipes Say
Neoempheria balioptera Lw.
Mycomya tantifla Lw.
Leia bivittata Say
Leia oblectabilis Lw.
Leia opima Lw.
Leia dryas Joh.
Leia plebaja Joh.
Docosia dichroa Loew
Cordyla volucris Joh.
Allodia beata Joh.

Exechia ovata E. G. F.
Mycetophila fastosa Joh.
Mycetophila inculta Lw.
Mycetophila mutica Lw.
Mycetophila perita Joh.
Mycetophila punctata Meigen
Mycetophila quatuornotata Lw.
Mycetophila socia Joh.
Mycetophila mitis (Joh.)
Mycetophila fungorum Deg.
Mycetophila scalaris Lw.
Zygomyia ornata Lw.
Zygomyia interrupta Moff.

IOWA WESLEYAN COLLEGE,
   MT. PLEASANT, IOWA.