

Article VI.—NOTES AND DESCRIPTIONS OF ITONIDIDÆ  
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The classification of the myriad and diversified gall midges has progressed to such an extent that it is desirable to study material characterized before the present system had been satisfactorily worked out.

Through the courtesy of Dr. F. E. Lutz, Associate Curator of Invertebrate Zoology, it was possible not only to examine but to make microscopic preparations of some of the species described by William Beutenmuller, provided no unique specimens were subjected to the hazards of mounting under glass. This has permitted referring a number of species to the more closely defined modern genera and the detection of a few synonyms not previously known. Advantage has also been taken of this opportunity to characterize more fully several species.

The following gives the results of these recent studies.

*Lasioptera podagræ* Beutenmuller is a synonym of *Neolasioptera erigerontis* Felt. This error was primarily due to misidentification of the food-plant.

*Cecidomyia clavula* Beutenmuller, described in Can. Ent., XLV, 1913, p. 416, is a species of *Lestodiplosis*. It is entirely different from the *Cecidomyia clavula* Beutenmuller described in the Bull. Amer. Mus. Nat. Hist., IV, 1892, p. 269, a species of *Lasioptera* characterized in the imago in Bull. Amer. Mus. Nat. Hist., XXIII, 1907, p. 396, and undoubtedly the true maker of the gall. *Lestodiplosis* is an inquiline.

*Cecidomyia rudbeckiæ* Beutenmuller, described in Bull. Amer. Mus. Nat. Hist., XXIII, 1907, p. 388, is also a species of *Lestodiplosis*, an inquiline and not the maker of the deformity with which it was associated.

A reference of *Cecidomyia verbenæ* Beutenmuller, described in Can Ent., XXXIX, 1907, p. 306, to *Itonida* was confirmed by the study of a microscopic preparation made from type material.

*Cecidomyia vernoniæ* Beutenmuller, described in the Bull. Amer. Mus. Nat. Hist., XXIII, 1907, p. 389, is one of the trifli and probably inquiline, though the condition of the material available does not permit a positive generic reference.

*Cecidomyia nyssæcola* Beutenmuller, described in the Bull. Amer. Mus. Nat. Hist., XXIII, 1907, pp. 387-388, is likewise a member of the trifli and,

like the preceding, the condition of the material does not permit a definite generic reference.

*Cecidomyia unguicola* Beutenmuller, described in Bull. Amer. Mus. Nat. Hist., XXIII, 1907, p. 388, cannot be referred to a definite genus owing to the condition of the scanty material available.

Studies of microscopic preparations of other specimens permitted definite generic references and in addition to the original description we have given below structural details impossible of discernment except in balsam preparations.

### ***Dasyneura meibomiæ* (Beutenmuller)**

*Cecidomyia meibomiæ* BEUTENMULLER, Bull. Amer. Mus. Nat. Hist., XXIII, 1907, p. 390; Can. Ent., XLV, 1913, pp. 415-416.

The larva and gall of this species were first described and later the adults. These were characterized as follows.

Male and female.—Eyes large, contiguous at the vertex, black; face semi-translucent, dull orange red. Antennæ yellowish brown with erect black hairs. Thorax dull, semi-translucent red, with rather long, blackish hairs in grooves on top, forming two parallel lines, and a few hairs at the sides; scutellum dull semi-translucent red. Abdomen dull, semi-translucent, orange red, sparsely with brown black hairs; tip of abdomen blunt. Under side of body dull red. Legs fuscous. Expanse, 3.50 mm. Length, 1.33 mm.

The following structural details were drafted from microscopic mounts made from the type material.

Male.—The antennæ about three-fourths the length of the body, sparsely haired; 16 segments, the fifth with a stem about three-fourths the length of the cylindrical basal enlargement, which latter has a length one-half greater than its diameter, a sparse subbasal whorl of moderately short setæ, and subapically an irregular band of long, strongly curved setæ. Terminal segment somewhat produced, narrowly oval, with a length nearly three times its diameter. Claws rather long, moderately stout, and with a moderately short tooth near the basal third. The pulvilli a little shorter than the claws. Genitalia: basal clasp segment moderately long, stout, terminal clasp segment rather short, somewhat swollen basally, curved. Dorsal plate rather long, deeply and narrowly emarginate, the broad lobes nearly parallel and narrowly rounded apically. Ventral plate rather broad, deeply and triangularly emarginate, the lobes tapering to an irregularly truncate, setose apex. Halteres rather short, stout, setose externally and irregularly tuberculate distally.

Female.—The antennæ about half as long as the body, sparsely haired; 15 to 17 sessile segments, the fifth with a length about one-half greater than its diameter, the terminal segment produced, with a length about three times its diameter and tapering to a narrowly rounded apex. Palpi: first segment short, quadrate, the second one-half longer, broad, the third twice the length of the first, slender, and

the fourth a little longer than the third. Ovipositor when extended about half the length of the abdomen, the terminal lobes rather broad, with a length three times the width, tapering distally and very sparsely setose.

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### **Hyperdiplosis meibomiifoliæ** (Beutenmuller)

*Cecidomyia meibomiifoliæ* BEUTENMULLER, Can. Ent. XXXIX, 1907, p. 306.

An examination of the single male in the type material showed that it was undoubtedly referable to the trifoli. The original description is as follows.

Male and female.—Eyes black. Thorax and abdomen pale orange, the latter somewhat darker dorsally. Antennæ and legs fuscous. Wings blackish, hyaline. Length, 1.25 to 1.50 mm.

The following technical details were drafted from a microscopic preparation.

Female.—Antennæ nearly as long as the body, sparsely haired; 14 segments, the fifth with a stem three-fourths the length of the cylindrical basal enlargement, which latter has a length one-half greater than its diameter, basally a sparse whorl of stout setæ and subapically a band of longer coarser setæ. Low circumfili occur near the basal third and apically. Terminal segment slightly produced and with a slender setose finger-like process about three-fourths the length of the enlargement. Palpi: first segment short, subquadrate, the second nearly three times its length, the third a little longer and more slender than the second and the fourth about as long as the third, the third vein joining the margin of the wing well beyond its apex. Claws long, slender, simple and strongly curved, almost forming a right angle. The pulvilli less than half the length of the claws. Ovipositor short, with a length about one-third that of the abdomen, the lobes narrowly oval, with a length three times the width and sparsely setose.

New York State Museum number, a2863.

### **Itonida myricæ** (Beutenmuller)

*Cecidomyia myricæ* BEUTENMULLER, Can. Ent. XXXIX, 1907, p. 306.

The original description is as follows.

Male and female.—Eyes dark brown; front semi-translucent, sordid white. Antennæ as long as the body, fuscous; first and second joints semi-translucent, white. Thorax dull brown, smooth, with two yellowish longitudinal lines on the dorsum; posterior portion and scutellum dull amber-yellow, sides of thorax dull amber-yellow marked with brown. Abdomen dull amber-yellow above and below, sparsely beset with brown hairs. Legs fuscous. Wings hyaline, with black scales. Halteres semi-translucent, yellowish. Length, .75 to 1 mm.

The following technical details were drafted from microscopic preparations made from the type material.

Male.—Antennæ with 14 segments, the fifth having stems with a length one and one-half times and twice their diameters, respectively; basal enlargement subglobose and with a circumfilum reaching nearly to the middle of the basal portion of the stem; distal swelling with a length nearly one-half greater than its diameter, a distinct constriction near the basal third and moderately low circumfili basally and subapically, the latter not reaching the tip of the segment; terminal segment somewhat produced, the basal portion of the stem with a length nearly four times its diameter, the distal enlargement subcylindrical, tapering slightly distally, with a length fully twice its diameter and apically with a rather short, stout finger-like setose appendage. Palpi: the first segment irregular, the second a little longer, broader, the third one-half longer and more slender than the second and the fourth one-half longer and more slender than the third. Eyes holoptic. Third vein uniting with the margin well beyond the apex of the wing. Claws long, simple, the pulvilli about half the length of the claws. Genitalia: basal clasp segment moderately long, stout; terminal clasp segment rather long, stout, evenly curved; dorsal plate, short, broad, deeply and roundly emarginate, the lobes tapering to a narrowly rounded apex; ventral plate a little longer, broad, broadly and roundly emarginate, the lobes rather broadly rounded; style moderately long, stout.

Female.—Antennæ with 14 segments, the fifth with a stem one-half the length of the cylindrical basal enlargement, which latter has a sparse basal whorl of stout setæ, a subapical band of rather long, slender setæ and moderately high circumfili at the basal third and apically. Terminal segment produced, the enlargement subcylindrical, with a length fully three times its diameter and apically a short, somewhat irregular setose, finger-like appendage. Ovipositor when extended about as long as the abdomen, the terminal lobes tapering, slender, the length about four times the greatest width and sparsely setose. Other structural characters practically as in the male.

New York State Museum number, a2862.

This species runs in our table near to *Itonida tecomiæ* Felt, from which it is very easily separated by a number of characters.