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NEW OR LITTLE KNOWN CRANE-FLIES FROM
NEW ENGLAND.

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THE two species described as new in this paper are characterized at this time in order to be available for the forthcoming list of the Diptera of New England. Records of the capture of two other flies that had been unrecorded from these States are added. The unique type of *Tipula insignifica* was included in material kindly submitted to me for examination by Mr. C. W. Johnson, to whom my sincere thanks are extended for many kindnesses in the past.

Family ANISOPODIDAE.

Subfamily *Axymyiinae*.

Axymyia furcata McAtee.

Eupeitenus atra Coquillett (*nec* Macquart), Ent. News, vol. 20, p. 106, text-fig., 1909.

Axymyia furcata McAtee, Proc. Ent. Soc. Washington, vol. 23, p. 49, 1921.

Axymyia furcata Shannon, Proc. Ent. Soc. Washington, vol. 23, p. 50-51, 1921.

This rare anisopodid fly had been taken hitherto only in New York, Pennsylvania and northern Virginia. The writer captured a single female specimen on the eastern slopes of Mt. Toby, Franklin Co., Massachusetts, May 17, 1924. Down this slope of Toby a large mountain stream pours over densely moss-covered boulders, reaching the lower levels near the Central Vermont Railroad siding near Montague. The specimen of *Axymyia* was swept from vegetation along this stream, at an altitude of approximately 600 feet, where it was associated with various Tipulidae, notably small swarms of *Ormosia nubila* (O. S.) and *Ormosia meigenii* (O. S.) and numerous scattered individuals of *Tricyphona vernalis* (O. S.) and *Tipula iroquois* Alexander. When at rest in the net, the fly resembles a small lepidid or a species of Anisopus. Like the species of Tipulidae with which it was associated, this fly is presumably a member of the vernal Dipterous fauna of the Canadian-Transition life-zone.

Family TIPULIDAE.

Subfamily Limoniinae.

Ormosia notmani Alexander.*Ormosia notmani* Alexander, Canadian Ent., vol. 52, p. 225, 1920.

This crane-fly was described from a single specimen taken at Keene Valley, Essex Co., New York, in late May. It has since been found commonly at Amherst, Massachusetts, where it flies during the month of May. In 1923, the fly was on the wing from May 8 to May 20; in 1924, from May 3 to May 29. During the early part of its flight-period, it is associated with such crane-flies as *Ormosia innocens* (O. S.), *Ormosia nubila* (O. S.), *Neolimnophila ultima* (O. S.), *Dicranota eucera* O. S. and *Rhaphidolabis cayuga* Alexander. At the end of this flight-period, all of the above have disappeared and have been replaced by *Dicranomyia liberta* O. S., *Erioptera (Hoplolabis) armata* O. S. and *Tricyphona inconstans* (O. S.). This interesting little crane-fly is characteristic of small sunken streams flowing between high dirt banks. In the hollows of such banks the flies lurk and swarm in small dancing groups over the water. Besides the above records for Hampshire Co., the fly has been taken at the following stations in Franklin Co.: Mt. Toby, altitude about 700–800 feet, May 20, 1923; Fish-hatchery, near Sunderland, May 5, 1924.

Ormosia fernaldi, new species.

General coloration brownish gray; antennae of male relatively elongate; wings tinged with gray, the stigma more infuscated; cell *1st M*₂ open by the atrophy of the outer deflection of *M*₃; cell *1st A* widest at the wing-margin; outer dististyle of male hypopygium oval in outline, smooth; inner dististyle produced into a long, straight, simple rod.

Male.—Length about 3.2 mm.; wing about 4 mm.

Female.—Length about 3.5 mm.; wing 4–4.2 mm.

Rostrum and palpi dark brown. Antennae relatively elongate, in the male, if bent backward, extending to some distance beyond the base of the abdomen; flagellar segments elongate-cylindrical to fusiform; antennae black throughout. Head dark gray.

Thorax dark brownish gray without distinct stripes, the pleura somewhat clearer gray. Halteres pale brown, the knobs yellowish. Legs with the coxae brownish gray; remainder of the legs dark brown. Wings tinged with gray, the costal and stigmal regions vaguely more infuscated; veins darker brown. Venation: *Sc*₁ ending opposite *r*, *Sc*₂ near midlength of *Rs*; *r* at fork of *R*₂₊₃; cell *1st M*₂ open by the atrophy of the outer deflection of *M*₃; basal deflection of *Cu*₁ just before the fork of *M*; anal veins gently divergent, cell *1st A* being widest at the margin; distal third of vein *2d A* running generally parallel to vein *1st A*.

Abdomen dark brownish gray. Male hypopygium with the apparent ninth sternite (morphologically the ninth tergite) conspicuously projecting as a depressed lobe, widened outwardly, the caudal margin gently concave. Outer dististyle a small, flattened-oval appendage arising from a wider base, the apex obtusely rounded; inner dististyle broad and flattened at base, near midlength suddenly narrowed into a long, straight, blackened tip, the apex simple and obtusely rounded; angle of curvature of this style filled with a pale membrane that is set with microscopic tubercles. Gonapophyses appearing as slender rods that are gently sinuous, the tips subacute, extensively blackened.

Habitat.—Massachusetts.

Holotype, ♂, Fish-hatchery, near Sunderland, Franklin County, altitude 200 feet, May 5, 1924 (C. P. Alexander). *Allotopotype*, ♀; *paratopotypes*, 1 ♂, May 2, 1924; 4 ♀ ♀, with the type. The type is in the collection of the writer; a paratype in the collection of the Boston Society of Natural History.

This interesting vernal crane-fly is named in honor of Professor Henry T. Fernald, to whom the writer is greatly indebted for invaluable advice and suggestions during the course of his studies on this group of flies. *Ormosia fernaldi* somewhat resembles *Ormosia notmani* Alexander, from which it is readily distinguished by the longer antennae and the structure of the male hypopygium. The fly is characteristic of the Alnus-Caltha-Chrysosplenium association, although sometimes occurring in the open where the alder has been cut away. It flies in early May in company with *Ormosia arcuata* (Doane), *Ormosia innocens* (O. S.), *Ormosia nubila* (O. S.), *Rhaphidolabis cayuga* Alexander, *Tricyphona mcateei* Alexander and *Tipula dejecta* Walker.

Subfamily Tipulinae.

Tipula insignifica, new species.

Belongs to the *marmorata* group; wings with the usual pattern almost obliterated; male hypopygium of simple structure, the eighth sternite unarmed.

Male.—Length about 9 mm.; wing 11.8 mm.

Frontal prolongation of the head moderately elongate, brown, the nasus very long and slender, concolorous; palpi dark brown. Antennae with the scapal segments light yellow, the first segment a little infuscated and pruinose dorsally at base; flagellar segments black, the segments only slightly incised. Head gray, the vertex with a brown median line that is slightly widened behind.

Mesonotal praescutum gray with three dark-gray stripes that are little evident on this background; scutum gray, each lobe with two dark-gray areas, the more mesal one much the larger; scutellum and postnotum gray, with a continuous though ill-defined darker-brown median line. Pleura gray, the dorso-pleural membrane buffy. Halteres pale, the knobs infuscated. Legs with the coxae pale brown, slightly pruinose; trochanters brownish yellow; femora brown, the bases yellowish, the tips grading insensibly into brownish black; tibiae brown, the tips dark brown; tarsi brownish black. Wings with a very faint brownish tinge, cell *Sc* and the stigma darker brown; a vague darker seam in cell *M* along vein *Cu*, interrupted near midlength by an ill-defined subhyaline area; oblitative areas before the stigma and across the end of cell *1st M*₂; veins dark brown, most of the longitudinal veins indistinctly seamed with darker. Venation: distal section of vein *R*₂ preserved but with no macrotrichiae beyond the base; basal section of *R*₂ virtually lacking; *R*₂₊₃ about one-third longer than the distal section of *R*₂; *Rs* straight, a little longer than *R*₂₊₃; *m-cu* about its own length from the proximal end of cell *1st M*₂.

Abdomen obscure brownish yellow, the caudal margins of the subterminal segments very narrowly ringed with paler; hypopygium a little darker. Male hypopygium with the ninth tergite relatively large, the caudal margin with a broad V-shaped notch, the broad lateral lobes thus formed obliquely truncated. Basistyle fused with the ninth sternite, indicated by a suture beneath; outer dististyle a flattened-cylindrical fleshy lobe of nearly equal width throughout its length, the apex obtuse, the surface provided with very short, stout setae; inner dististyle a highly compressed blade jutting into the notch of the tergite.

Viewed from beneath, the mesal face of the basistyle is seen to bear an elongate pale cushion on either side of the genital chamber, the narrowed apex directed dorsad, the surface only sparsely setiferous. Region of ninth sternite beneath subcarinate medially. Eighth sternite unarmed.

Habitat.—New Hampshire.

Holotype, ♂, Alpine Garden, Mount Washington, New Hampshire, altitude 5000–5500 feet, September 21, 1919; in the collection of the Boston Society of Natural History.