

Sapromyza pernotata, sp. n.

Male.—Similar to *fraterna* in colour and markings.

Differs in structure of the male hypopygium from *fraterna*, the thoracic chaetotaxy being the same. The eighth tergite has the lateral extension with a short process the apex of which is produced in the form of a slightly forwardly directed sharp thorn at its anterior angle, while in *fraterna* this tergite has a broader process which has a backwardly directed, curved sharp thorn at apex anteriorly. The small furcate process mesad of the above process is differently shaped in the two species. In *fraterna* there are two subequal thorns, while in *pernotata* on is much larger than the other.

Length 4 mm.

Type and one male paratype.—Cedar Lake, Ill., August 4, 1906, in a tamarack bog.

Type in collection of Illinois State Natural History Survey.

Sapromyza imitatrix, sp. n.

This and the next species belong to the same group as *bispina* Loew, which contains species with the following characters: Entire body and legs yellowish testaceous, wings unmarked, the cross-veins usually darker than the others, but the adjoining membrane not infuscated; arista with short hairs; thorax with 4 pairs of strong dorsocentrals and well-developed acrostichals; hind tibia of male with soft erect hairs on antero- or postero-ventral surface or on both; and the apical abdominal sternite with two long slender processes.

Male.—Differs from *bispina* in having the processes of apical sternite almost uniform in width, rounded at apices; the hind femur with long, fine hairs on entire length of both antero- and postero-ventral surfaces, and the hind tibia with long, fine hairs from base to well beyond middle on postero-ventral surface, while the antero-ventral surface is bare.

Female.—Differs from *bispina* in having the prosternum bare, and the hind femur with a long setulose hair near apex on postero-ventral surface.

Length 4-4.5 mm.

Type.—Male, and one male paratype, Clementon, N. J., May 30, 1895. Allotype, Anglesea, N. J., July 19, 1891. Paratypes, one male, Riverton, N. J., July 7; one female, DaCosta, N. J., June 4, (C. W. Johnson).

Type in collection of C. W. Johnson.

Sapromyza fratercula, sp. n.

Male.—Differs from *imitatrix* in having the hind femur with very few sparse hairs on postero-ventral surface, and those on antero-ventral longer and stronger on apical half and almost absent on basal; the hind tibia with fewer hairs on postero-ventral surface and some at base on antero-ventral; the eighth tergite with a slight ridge on lateral extension posteriorly; and the small, median thorn at base of the large, slender forwardly directed hypopygial process furcate instead of simple.

Length 5 mm.

Type and two male paratypes, Powderville, Mont., June 15, 1916, (R. Kellogg and M. Hanna). Type in collection of U. S. Bureau of Biological Survey.