ant species is roy the foliage
They are not ies, but bear the back and a pierced with these increase e conspicuous transformation appears to be; until the folbe unusually mple of which black head and n and legs.



rms, when fullof black spots. a leaf and seek Selandria barda is a saw-fly differing from the former in begin entirely black, with the exception of the red portions of the thorax, and in having the upper wings darker. It has been recently recorded * as infesting ash trees in Iowa, and we may safely expect that its habits will be the same here. (Figure 36 from Mr. Osborn's report illustrates this insect in its several stages.) The eggs are laid in the leaf-stem and produce, in two or three days, whitish worms, having black heads and feet. As the worms grow older they become of a clear green colour, retaining their jet-black heads and thoracic legs. I have only captured one specimen of this saw-fly myself, but it may be more abundant in other parts of the Province.

The larvæ of Selandria caryæ, which feed in the United States upon butternut and hickory, are remarkable from the dense covering of a white floculent substance which they secrete, and which gives them the appearance of little masses of cottony wool.

Macrophya is an extensive genus containing larger and handsomer species than the foregoing, but their habits are apparently less obnoxious, and not so well recorded. *M. niger*, as the name indicates, is black, but the tips of the antennæ are white. *M. flavicoxæ* is another black species, having the legs handsomely banded with white.

The genus Allantus contains species very similar in general appearance, but having shorter and thicker antenne. A. basillaris is very abundant in July and August on the flowers of Spiræa and Solidago. It is a handsome fly, half an inch long, and black, with liberal markings of yellow, and has quite a wasp-like look.

The last, and typical genus of the sub-family, is Tenthredo, which contains more than thirty Canadian species, some of considerable size and beauty. T. rufipes (Allantus leucostoma of Kirby's Fauna Bor. Am.) appears to be the commonest species here. It is half an inch long; black with reddish legs, of which the hinder pair are partly black. T. atroviolacea is of the same size and colour, but the legs are dark and the wings violaceous or cloudy, instead of transparent. T. grandis, T. tricolor, and T. mellina are also large handsome species. Of the larvæ of these interesting species I am, however, unfortunately ignorant, probably they are not very injurious as the winged insects do not appear to be abundant.

SUB-FAMILY 4.—LYDINÆ.

The members of this family are distinguished by their multi-articulate antennæ, which usually have from fifteen to thirty-six joints, and vary much in shape, being short or long, simple, serrate or pectinate. The larvæ feed upon evergreens. Only two genera, Lophyrus and Lyda occur in Canada; each contains several species.

Lophyrus abietis is a robust fly about one quarter of an inch long, and with large transparent wings expanding more than half an inch. The antennæ are short; those of the females being stout, serrated, and containing eighteen joints; those of the male are broadly pectinate and cause him to appear very different from his mate. In colour also the sexes differ, the male being black and the female yellowish or ferrugineous. The worms, when young, are brownish, but subsequently become of almost the same shade of green as the leaves on which they feed (those of fir and spruce) and upon which it is, therefore, difficult to see them. The head is pale, and there is a white stripe along each side. The flies are said to emerge in May, and produce larvæ which feed in July and August and there may, perhaps, be two broods. I found both young and mature larvæ feeding together on 23rd August last, and the winged insects were also captured on the same day upon the trees (spruce). The full-grown larvæ spun their cocoons two or three days later, from which the flies will issue next spring.

Lophyrus Abbotis is a slightly larger saw-fly, very similar in appearance, the larvæ of which are often found abundant on the white pine (Pinus strobus) greedily devouring the foliage, to the injury and even destruction of the trees. (In Fig. 37 the insect is

^{*}Mr. Henry Osborn in Bulletin of the Iowa Agricultural College, reprinted in Aug. number of Can. Ent. Vol. xvi., p. 148.