

# The Canadian Entomologist

Vol. LII.

LONDON, NOVEMBER, 1920.

No. 9

## POPULAR AND PRACTICAL ENTOMOLOGY.

### WALKING STICKS.

BY C. B. HUTCHINGS,

Division of Forest Insects, Entomological Branch, Ottawa.

Walking Sticks belong to the Order of Orthoptera and are classed under the family Phasmidae, the members of which present a great variety of form. It may be said without exaggeration that the Phasmids exhibit some of the most peculiar, curious objects to be found anywhere in natural history. Among this strange group of insects are those that resemble leaves of trees, lichen-covered bark, stems of grasses and sticks; and so faithfully are these protective characteristics portrayed that an observer may readily be deceived by them even when actually aware of the presence of the insect. It may be worthy of passing notice to mention here that to the Phasmids belong some of the largest insects known. In the Tropics, where both sexes develop wings they attain their greatest size, six inches being a common length.

The particular species to which this paper refers is popularly known by a variety of names such as "stick insect," "stick bug," "specter," "prairie alligator," "devil's horse," "devil's darning needle," etc; the correct name, however, is the thick-thighed walking stick, an appropriate one given by reason of the remarkably dilated femora.

It was during the summer of 1918, while engaged on an oak-borer problem in Queen's Park, Aylmer, Que., ten miles northwest of Ottawa City, that the writer came upon a number of thick-thighed walking sticks, (*Diaperomera femorata* Say), defoliating oak, basswood and hazel. Several specimens were collected for the purpose of making a closer study of the life-history of these extraordinary insects and of obtaining notes on egg records, feeding, general habits and other biologic data. Observations were continued during 1919, and the results of the two seasons work are briefly recorded in this paper.

*Ecology.* The particular locality where most of the collecting was done was in a thickly wooded lot covered with a mixed growth, for the most part red oaks, but also containing a considerable proportion of maple, ash, basswood, hazel, hickory, ironwood, beech, elm, service-berry and large numbers of sumach and hawthorn. Here small, green, young nymphs of the walking stick were often to be found during June wandering about on the ground over dead leaves and mosses, trying to locate some convenient twig or trunk of a suitable host plant to crawl upon; or, what was more frequent, would be seen on the trunks of the oaks, awkwardly and lazily plodding their way upwards over the roughened bark to the tender, green leaves above, where not only abundant food awaited them, but also excellent protection from enemies was afforded by means of their deceptive colouration. Searching carefully under the large basswood leaves, and by moving quietly among the under growth many specimens of half-grown nymphs