

A FEW OBSERVATIONS ON THE APPLE MAGGOT
PARASITE—*BIOSTERES RHAGOLETIS*,
RICHMOND.

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In the September number (1915) of the Canadian Entomologist appeared an article written by Mr. W. C. Woods of Orono, Maine, in which he discussed the presence of the new apple maggot parasite, *Biosteres rhagoletis*. As he had not seen the insect at work, the following short account should be interesting since it throws some light upon the manner in which the maggots are parasitized.

In August of this year, while observing the oviposition habits of the apple maggot near Digby, Nova Scotia, my attention was drawn to several small, brownish insects which were flying about the leaves. Presently one of them alighted upon an apple, and after slowly crawling over it in an erratic fashion for a few minutes, it raised itself high on its legs and began prodding the skin of the apple with its ovipositor. Previously this instrument had been stretched out behind the abdomen in a horizontal position, but it was now bent under it, and down in a vertical manner. First using the two heavier and outer pairs of the ovipositor to pierce the skin, they were eventually raised up slightly while the lighter-coloured, more slender egg-tube was plunged into the apple to a depth of about one-quarter of an inch. After a pause of a few seconds the whole was withdrawn and the insect moved to a new spot, recommencing the operation at once. Five punctures were made in rapid succession before I caught it. This insect was later determined by Mr. E. A. Richmond, of Cornell University, as *Biosteres rhagoletis*.

Thus it appears that this parasite is a larval one, and this, no doubt, accounts for the high percentage of mortality among the larvæ and pupæ of the apple maggot.

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