

6 at *c*, and this is supposed to be parasitic upon the *Syrphus* larvæ. In Canada, Dr. James Fletcher informs me he has bred *Praon cerasaphis* and *Aphidius Fletcheri*, a new species recently described by Ashmead; while in Delaware, Professor E. Dwight Sanderson has bred another species of the genus *Aphidius*, namely, *A. Washingtonensis*, from the destructive green-pea louse.

In my field observations I have found the predaceous insects very important factors in the destruction of this plant louse. I have observed four groups of insects at work upon them: First, and most important, the *Syrphus* flies; second, lady beetles; third, lace-winged flies; and fourth, soldier beetles.

Of the *Syrphus* flies, we bred *Allograpta obliqua*, Say; *Syrphus Americanus*, Weid., and *Sphærophoria cylindrica*, Say. The first named was by far the most abundant and important species. On a farm where 600 acres were planted in peas, and where the plant louse totally destroyed 480 acres, the larvæ of *A. obliqua* so completely destroyed the plant lice by the second week in June that hardly a specimen could be found. In the language of the proprietor, who owns a large cannery, he says: "The last few days I packed, the separator sieved out about 25 bushels of green worms, which no doubt proves they destroyed the plant lice." These "green worms" were the larvæ of *A. obliqua*, illustrated in Fig. 6. The other two species were not so abundant.

Of the lady beetles the most important were *Coccinella 9-notata*, *Hippodamia convergens*, *Megilla maculata* and *Coccinella sanguinea*.

The larvæ of *Chrysopa oculata*, Say, were also abundant upon the infested vines. I observed the soldier beetle, *Podabrus rugulosus*, Lec., feeding voraciously upon the plant lice.

From what I have seen of the ravages produced by the destructive green-pea louse, and our inability to combat it on a large scale, I consider it one of the most important pests on the already long list of noxious insects. Whether it will appear again next year over the same general territory on the field pea remains to be seen; but I am of the opinion it will not be as destructive as the season just past. The superabundance of *Syrphus* flies and lady beetles over certain areas will certainly have a balancing effect in nature.