

veloped and is quite apparent while the larva is emerging from the egg. It is the principal means of attachment for the newly hatched larva, which is able to hold much more firmly with it than with the legs.

In feeding, the young larvæ are gregarious as a rule and frequently may be observed arranged in the form of a circle or arc with the heads pointed outward. Larval groups of 10, 13, 11 and 16 were thus observed. Later the larvæ spread and usually feed singly. They are found as a rule on the under surface of the leaf but in confinement, and in shady places they were observed sometimes feeding on the upper surface. In feeding, only the epidermis is eaten, and this is in contrast with the adult which consumes all the tissue. At times there did not appear to be as many young larvæ in a group as one would expect from the number of eggs in a mass, and this may be explained by the fact that recently emerged larvæ were observed feeding on eggs which had not yet hatched; three were feeding on one egg, two on another, and two others on one each.

When full grown the larva attaches itself to the leaf, usually the under surface, by means of the sucker-like disc at the anal extremity, and changes to the pupa which rests with its posterior end within the cast skin of the larva from which it could be pulled with little effort. This stage was found to cover a period of two to three days.

The pupa is yellowish brown in colour; meso- and metathorax dark at centre; margin of wing-pads dark; abdomen with a row of broad dark spots on either side of centre, giving the effect of a light, medial, dorsal line; beyond these is a second row of broad, dark spots near the lateral margin. Length 4 mm.; width 2.5 mm.

Certain pupæ were noted which did not rest close to the leaf surface and upon examination these were found to be parasitized. These pupæ were in a more erect position and it was noted that the anterior ventral surface was more or less broken, exposing from two to four parasitic larvæ or pupæ. Parasites bred from such specimens were kindly determined for us by Mr. Girault, of the Bureau of Entomology, as *Celopisthia rotundiventris* Girault and *Pleurotropis tarsalis* Ashmead, and judging from the condition of the specimens when they were bred, the former is a primary parasite