

hatch and that the caterpillars can be easily reared, should appeal to teachers of zoology and insect life, especially when it is considered how readily the food-plant may be grown in the garden.

DESCRIPTION.

Egg.—Echinoid in type ; firmly attached to the leaflet by a flattened base, top flattened to a lesser extent, the centre being occupied by a moderately deep pit, at the bottom of which is a very fine network. Chalky-white when first laid, which colour is retained in those specimens kept unmoistened indoors, but is changed to a brownish in those moistened or exposed in the field. From this it would appear as if the change in colour is due to staining from the juices of the leaflet rather than anything inherent in the egg. The surface shows a raised network, the intersections of which are enlarged into blunt, thickened knobs, while the ridges between are thinner and lower. Near the base of the egg the network is finer, the spaces more numerous and the raised intersections less prominent. Two eggs gave the following diameters: Vertical, 0.45 mm.; equatorial, 0.7833 mm.; vertical, 0.46 mm.; equatorial, 0.7833 mm.

First Instar.—On emergence the caterpillar is nearly cylindrical, slightly broader in the thoracic region ; venter flat. As it grows the thorax becomes highest at the third thoracic segment, sloping gradually caudad and abruptly cephalad, and the first thoracic segment is now very large, and at least twice the cephalo-caudal diameter of the succeeding segment ; between the sutures highly arched.

Head small, rounded, dark brown, retractile ; at rest the thoracic segments are swung forward around a transverse axis, so that the head comes to lie directly underneath the first thoracic segment and is withdrawn into it.

Colour pale clay yellow or pale brown, but after feeding a few days changing to pale green ; lateral and dorsal surfaces, except for a very small central area on the dorsal surface of each segment, thickly studded with minute black dots.

Each half of the caterpillar bears six rows of prominent tubercles ; the two dorsal and the substigmatal rows give rise to colourless bristles, while the other three rows, dorso-lateral, lateral and sub-ventral, are without bristles ; the tubercles are slightly elevated above the surface, on each segment those of the inner dorsal row are placed cephalad of those in the outer dorsal row, and are at least twice the height of the tubercles of both the outer dorsal and substigmatal rows, which are very flat.