

CALOGRAMMA FESTIVA, Donovan,—

a Caterpillar destructive to *Crinum asiaticum*.

In Singapore, the caterpillars of *Calogramma festiva* (a moth), destroy the foliage of *Crinum asiaticum* completely. They live socially, devouring all the green parts of the plant, filling the angles between the leaves and elsewhere with their dejecta, where a mass of putridity arises, among which they may pupate. The putridity is due to the wet dejecta harbouring, in the climate of Singapore, fungi which attack and rot the leaf tissues below, in such a way as to cut off the upper part of the leaf from the bulb; and then the whole blade dies.

The eggs are laid in patches on the plant, covered with a buff felt from the mother moth's body. They are prettily ribbed to the apex. The caterpillars on hatching have a transparent skin with small black bristles arising from swollen bases; and after eating green tissue they look green. They feed by eating the surface of the plant, but seem at a great disadvantage if placed on an old leaf. When three days old, a transverse saddle mark appears behind the head and another on the back before the prolegs, while three faint longitudinal milky white lines become apparent. A day later, dark plum-coloured pigment appears elsewhere in the skin, and also fine milky white lines become apparent between the other lines; when five days old they are already half an inch long, and yellow pigment begins to appear in the dorsal line.

The caterpillars grow to a length of $1\frac{1}{2}$ inches. They appear when full grown to have no hair at all, but in reality have the same kind of scattered small bristles which are present on emergence from the egg. They may be described then as follows:—The skin is black with a narrow median orange brown line down the back, and a nearly even white line down each side half way between the middle of the back and the spiracles. Irregular fine white lines ramify rather sparingly on either side of the straight white line, and every white line is interrupted (but not the orange line) in the segment between the legs and the prolegs, and less definitely on the last segment. Underneath the caterpillars are of a rich brown, and the head is of the same colour.

At maturity the caterpillar has a way when disturbed of raising the fore part of its body and of moving it by jerks.

The life cycle has been observed to occupy seventy five days, so that four broods occur easily within one year.

The moth, which was identified by Dr. R. Hanitsch, is figured in Moore's *Lepidoptera of Ceylon*, iii, plate 146, fig. 6, and described on page 21 of the text.

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