

A detailed description of this type is as follows: Head: light yellow with dark mottlings on the genæ and vertex, and with dusky areas around the eyes and along the clypeal sutures; clypeus, yellow, dusky in the centre. Body: the prothoracic shield is dark greenish-grey, mottled with black and lighter shades of grey, and with an indefinite white median line. The general colour of the body is dark green, with a dull creamy dorsum mottled with reddish-brown, and with a white median line of varying intensity running the length of the body. This line is generally margined with dark green. Laterally, the body is dark olive green mottled with a lighter shade which forms a single, or in some cases a double, indefinite light line along its entire length. The spiracles are small and black, and are situated on a lighter creamy band which merges into the indefinite green of the venter, though it is sharply contrasted with the dark green of the laterals. The tubercles are not prominent, those on the dorsum are black and shining, while the ventral tubercles are light green. From each arises a short, black hair. The true legs are fuscous, and the five pairs of prolegs are provided with lateral plates of green chitin. The anal shield is but little contrasted with the body colour, and has a well-defined median line.

This type of larva is sometimes much like that of the common Red-backed Cutworm (*Euxoa ochrogaster*), from which it is distinguished by its more dull coloration, especially that of the dorsum, which is more yellowish and mottled, by the dark margins of the median line which give it a more striped appearance, and by the more extensive mottling on the head.

Another variety of the larva, which is almost as common as the above, has the dorsum almost entirely dark green, though on the posterior half of each segment there are two creamy patches.

Still other larvæ are found in which all pigment is reduced, and the dorsum is almost white.

All of these varieties intergrade, and since among the larvæ from one moth's eggs nearly all degrees of variation are found, while all of the three varieties of moths can be bred from any variety of larva, it is seen that larval and adult variations are not specifically correlated.

PUPÆ.

The pupæ are indistinguishable from those of other species of this genus, and of the closely related genera which we have studied. The length varies, but it is usually about two-thirds of an inch (17 to 18 mm.), while the diameter at the base of the thorax is about one-fifth to one-quarter of an inch. The colour varies according to the maturity of the pupa and to the variety of the inclosed moth. When first disclosed the pupa is light straw yellow, but when mature it may be pitchy black if it contain a dark *auxiliaris* s.s. adult, or chestnut red if the inclosed moth is of the *agrestis* variety. The cremastral spines are very variable in disposition and shape, though in most normal pupæ they consist of two stout spines. These may be close set, or wide apart, strongly divergent or parallel, and occasionally they are set on a prominence. They tend, however, to be more often closely set, and to run parallel, than in other related species. One or more subsidiary spines may be present. Since the pupæ of our common field and garden cutworms show these variations also, we have found no method of distinguishing with certainty those of any one species of the *Euxoa* group from the other related forms. In all species we have been able, however, to distinguish the sex by the position of the genitalia. The disposition of the female genitalia on the pupa indicates that it consists of the external organs of three segments, whereas that of the male is confined to a single segment.

ADULTS. (FIG. 3.)

The moths of this species, as previously stated, are very variable in appearance, and no attempt will be made here to give technical descriptions of the varieties. They are fairly uniform in size, and the spread wings are usually between $1\frac{1}{2}$ inches and $1\frac{3}{4}$ inches in expanse. The antennæ of both sexes are