

the lower leaf surface, in time eating out all the green matter and leaving only the upper leaf surface and the veins. When eaten in this fashion, the leaves have a white, tissue-paper-like appearance (Fig. 3c) and, seen from a distance, an entire crop affected in this manner has a white, blasted appearance. Quite frequently, when the foliage is very tender, the larvae will eat right through the leaf, leaving holes similar to those caused by the butterfly larvae. In this case it is almost impossible to tell which of the two insects was responsible for the damage, although usually the holes made by the moth are relatively small.

Which Is Which?

As has already been pointed out, it is difficult to distinguish between the larvae of the butterfly and the moth in their younger stages. The writers have found that the simplest method to determine which is which is to touch the grubs at the posterior extremity. The result is that the butterfly larva will shift but little, whereas the moth larva will begin to wriggle, and if the leaf is held at a suitable angle the larva will drop from it towards the ground on a silken thread attached to the leaf surface (Fig. 6).

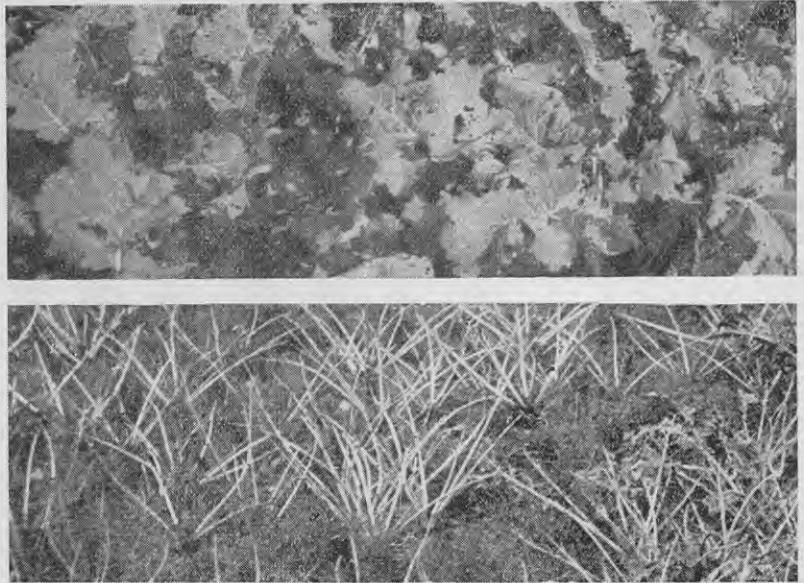


Fig. 4.—Butterfly injury on a field scale compared with a crop photographed before the appearance of this pest.

As the larvae grow older the differences between them become quite marked. That of the butterfly, at first light green in colour, becomes intense leaf-green as it grows to full size. A thin orange stripe appears down its

back, and the whole body is covered with a short pile of hairs, which give it a soft velvety appearance. It measures approximately one inch when full grown, and varies but little in width from head to tail. The moth larvae

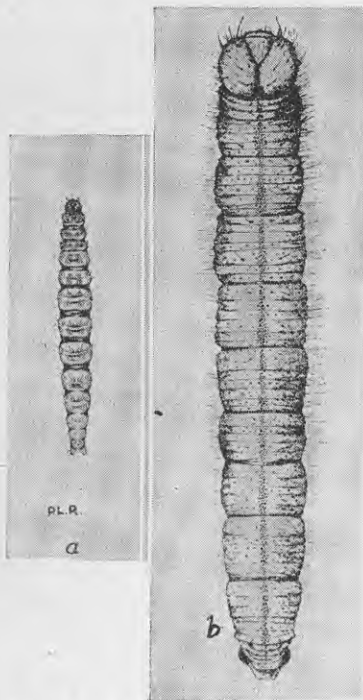


Fig. 5.—(a) Moth (after P. L. Robertson) and (b) butterfly larva (after Wilson) compared in regard to size, shape and general appearance.

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