

The next chapter treats of Butterflies and Moths (*Lepidoptera*). After giving an account of many different species with their varied modes of attack and the special measures to be adopted in each case, the authoress goes on to say: "But for the most part these and various other means of prevention or remedy have to be applied, not as broad measures of treatment, but as *special* measures for each *special* attack, involving necessarily *special* outlay. For these reasons the pressing need has long been felt of having some kind of application at hand which is cheap and sure in its action, and which can be brought to bear at once, when required, on any or all sorts of Moth-caterpillars together (whatever their various natures or previous histories may have been), and will kill the whole collection of ravaging hordes at once, without damaging the leafage; the experiments have been made, which have resulted, in some of our fruit-growing districts, in the successful introduction of spraying caterpillar-infested leafage with Paris-green, which has long been found serviceable in the United States and Canada." To Miss Ormerod, indeed, it is due that the British fruit-growers have been introduced to the use of arsenites, that their prejudices have been largely overcome, and that the successful experiments have been carried out. For several years she has been urging in her Reports the adoption of spraying with these poisons and using kerosene emulsions, and now the good results of acting upon her advice have become apparent in many quarters.

Chapter eight treats of Saw-flies, Ichneumons, Wasps and other members of the order *Hymenoptera*. Especial attention is paid to the beneficial species of Ichneumons that are parasitic upon various insects of all kinds. The next chapter deals with the Bug tribe (*Hemiptera*), including the Aphides and Scale-insects (*Homoptera*) and the Plant-bugs (*Heteroptera*); and the last chapter with Slugs, Eel-worms, Millepedes and Red-spider. In this concluding chapter there is given much sensible advice for ordinary people as to the way in which they should observe insects and deal with their attacks. We may make one or two quotations: "With a slight knowledge of the habits of insect life, added to his own of the agricultural measures that could be used to destroy the pest, or at least lessen the effect of its ravages, each grower would be fairly able to cope with attacks as they occurred; whereas if he depends only on advice, besides the damage from delay, he is very likely to get suggestions not suited to the particular circumstances. The farmer may not know the history of the insect; but on the other hand, the Entomologist very seldom knows the practical workings of growing a crop, which it is necessary to know before advising measures which can be depended on to answer at a paying rate."

"In many cases the different items of treatment which go to make up good farming will of themselves keep down a great deal of insect attack. By good cultivation of the soil, and proper as well as liberal manuring, by rotation of crops, and clearing fields and borders of useless trash and weeds, we turn out a great quantity of the pests which are harboring in the ground, and also ensure a good, healthy growth, such as will support the crop under moderate attack; and by the rotation of crop and absence of weeds we are often able to present starvation to our grubs, as many of them will only (or, perhaps, we should say, *can only*) live on special food. These are the broad principles which are sure to be of use. We shall not be free from insects any more than we shall be free from weeds; and we need a great deal more solid field information about the habits of crop insects (and experiences of paying means of prevention) before we can think we have them thoroughly in hand. Nevertheless, the last few years have added enormously to our information, and have shown us how at least we may greatly diminish the amount of injury our crops suffer."

This stock of information, as far as Great Britain is concerned, has been almost entirely brought together by the unselfish labors and painstaking enthusiasm of Miss Ormerod herself. While aided by a large number of practical observers scattered over the country, she stands alone among hundreds of collectors of insects, and many eminent students of entomology, in devoting her talents, her knowledge, her time and her means to the most useful and patriotic pursuit of the study of the science in its economic aspect.

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