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The Dignity of a Calling is its Utility.

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Entomology for the Farmer and Fruit Grower.

One of the questions of the day asked by every observant farmer and fruit grower is "how shall I meet the attack of these hosts of insect enemies that annually prey upon my crops?" As it would require volumes to answer fully this question, the object of this short article is not so much to attempt an answer, as to put the questioner on a line of study by which he may answer it for himself.

Insect life has been made of late years the subject of much investigation and numerous valuable books and reports have been published, by the study of which, along with personal investigation, the enlightened agriculturist or horticulturist is enabled to wage successful warfare against insect foes. The idea

of reading a few books on the subject, or of spending some time studying the insects themselves, should not frighten him. Both of these will become not only a means of profit, but a source of pleasure.

It is impossible to say just how much entomology the farmer or fruit grower should know. There is no limit to the information he might gain in the study of insects that would be of benefit to him in devising methods for preventing and repelling insect ravages. He should at least be familiar with the most common insects which attack the particular crops which he grows. He should be able to distinguish between injurious and beneficial species.

The majority of insects are vegetable feeders, but there are a great many that feed upon or within the bodies of other insects. These are called predaceous or parasitic, and in the main are beneficial, as they destroy many injurious forms. The lady beetles, or "lady birds," as they are often called, are amongst the most beneficial of our predaceous insects. Their food consists almost entirely of plant lice and insect eggs. But perhaps the most numerous and most active of our insect friends are the Ichneumons. There are many species of these wasp-like creatures, some very minute and others large and formidable looking. These pierce the skin and lay their eggs in the bodies of caterpillars where their young are hatched and nourished, thus destroying annually countless numbers of injurious larva. Such active allies should be known by him who fights insects, lest through sheer ignorance he slay friend and foe alike.

Nor is it sufficient to know an insect in any one of its stages of growth. The husbandman if possible should be able to recognize it in all stages of development. Insect life begins with an egg, from which hatches the first active form, the larva, generally known as a caterpillar, grub, or maggot. As all actual increase in size is during this stage, the larva has a voracious appetite and in this form is usually most injurious to vegetation. The length of larval life varies with different