## DISSEMINATION OF NOXIOUS INSECTS.

attack and destroy it. We imported the midge but did not bring the parasites with it. In the case of the cabbage butterfly it is different; here the parasite has accompanied or followed the butterfly, and although it is not capable of spreading itself so rapidly over a given district, yet it industriously follows up and finds its victims wherever they may establish themselves and, within three or four years becomes so numerous that it keeps the troublesome butterfly under. For man to know how best to fight his insect foes, he must first acquire a knowledge of their life history, so as to acquaint himself with their most vulnerable points and thus be enabled to strike them when they are least capable of resistance.

All larvae which feed on the foliage of plants or trees may be destroyed by arsenical compounds, such as Paris green or London purple, both of which are best used mixed with water and applied with a sprinkler of some sort. Powdered hellebore, which is less poisonous, is also an efficient remedy for some species. Insect powders, which are the powdered flowers of one or more species of Pyrethrum, are also inimical to insect life, and, being non-poisonous to the higher forms of life, may be used to advantage with such an insect as the cabbage worm, where there is a difficulty in washing off a poisonous application from the leaves. Hot water may also be used in many instances where poisons are objectionable, since plants can usually endure without injury a temperature which produces great discomfort among insects and causes them to loose their hold on the leaves of the plants they are feeding on and drop to the ground. Insects in the caterpillar state are very subject to disease of a fungoid character which often sweeps them off by thousands. Many experiments have been made with the view of introducing such disease amongst them, and some measure of success has attended the efforts, but much further experimenting must be undertaken before practical methods can be devised. It is also well known that some odors are objectionable to insects, and that they will be repelled from plants pervaded with such odors. Many experiments are being tried in this direction just now, and it is hoped that some good practical results may shortly be arrived at.

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