

It is interesting to know that attacks from grasshoppers, wireworms, white grubs and often from cutworms, too, can be prevented by simply following the practices of good up-to-date farming in which a short rotation of crops with fall ploughing and thorough preparation of the soil before seeding play a very important part. This is a great source of encouragement to the man who is trying to do his best. A short rotation of crops means that there will be no old pasture fields on the farm. These are the favourite breeding places of grasshoppers, wireworms and white grubs. It is a rare thing to find serious outbreaks of these pests on farms where no old pasture fields exist. Again, a short rotation of crops means that the insects in any particular field are deprived of their special food and either have to starve or seek this food elsewhere, often failing to reach it; for instance, wireworms and white grubs attack grasses and such cereals as wheat, oats and barley, but seldom do any injury to peas or clover; hence a short rotation of crops in which clover or peas play a part will help to starve them out. Good farming, moreover, means careful preparation of the soil for the seed and the selection of good plump seed, with the natural result that the plants will be more vigorous and thus better able to withstand the attacks of insects than weaker plants on poorly farmed land. An illustration of this is seen in the case of the Hessian fly. This insect delights in attacking weak or unthrifty wheat plants. I have counted as many as 1000 of the pupæ in a single square yard in a poor field of wheat. It is not at all uncommon to see two fields close together, one scarcely at all injured by the Hessian fly and the other severely injured; the chief reason for the difference being the better seed and condition of the soil in the former. I am not speaking now of the value of late sowing to prevent Hessian fly attack, though this is often very helpful. My aim has been to show that the better a man farms, whether he knows anything about insects or not, the less injury will be done by these to his field crops.

It is impossible to go into this subject now in fuller detail, but, in conclusion, it may be well to say that we should never get into a panic about insects and fear that some day some new and terrible pest will come to our country that will do incredible damage. New pests are not arriving so frequently as most people think,