e upon the work of their produce rendering much they, too, have by following the histories of their

scientific men to ope the economic asting time over technical; there es." As a matter in the practical ave done just as se ultra-scientists we find more and who only aim at

rious insects are

y being brought farmer furnishes d their numbers use which affects ly, and embraces deration now are different kinds of se, luckily for us, be plants of the ill actually starve s in our fields of ion of all others; consequently the and wide for their eir numbers down erage of seven or oo low, and some states, in a little e to between 500 ple 85, the poplar e-tenth of all the he amount of loss ere circumstances visable for me to would not believe hose who wish to

tural produce dea in one year the lover-seed midge" le insect (the Hop , injured the crop

can only be preich cause it. The ways the same in which feed upon animal food as grubs, and entirely upon vegetables in their perfect state. Again, some, as the large Silkworm Moths, are very voracious as caterpillars, but when they reach the perfect state have the mouth parts undeveloped, and take no food. By finding out their habits in all the different stages we are enabled to attack them at their most vulnerable points. The one great object of the Entomological Society of Ontario is to gather together all possible information concerning injurious insects, and, whenever anything is discovered which it is thought may be useful to keep them in check, to publish it abroad and make it known as widely as possible. Nobly assisted by the Provincial Government we have now carried on our investigations for over twenty years. Through the medium of our annual reports to the Minister, which he includes in his report of the Agriculture and Arts Department, and also by means of the Canadian Entomologist, the monthly organ of the Society, a large amount of useful knowledge has been distributed amongst those most likely to benefit from it. I take pleasure in publicly making the announcement that the members of our Society wish it to be known that they hold whatever knowledge they have acquired entirely at the service of any one who may apply to them, and they will always be glad to answer questions and give advice concerning injurious and beneficial insects. Arrangements have been made during the present meeting to issue regularly in every number of the Canadian Entomologist, after 1st January next, at least one article upon economic or popular entomology. These will be prepared especially for those who are not entomologists, but who wish to learn something about the science; or for those who have not time nor perhaps inclination to take up entomology as a study, but who require simple and plainly-expressed information concerning the common pests which attack farm and garden crops.

Notwithstanding the large amount of injury annually due to the attacks of insects, and the enormous hosts of these creatures, the actual number of different kinds which must be classed as "first-class pests" is comparatively small. Of many of these the life-histories have already been worked out and remedies have been discovered, so that, with reference to most of the common crop insects, the farmer can now, for the trouble of asking for it, obtain advice which will enable him to stop or mitigate all the ordinary attacks to which his crops are liable. When a growing crop is observed to be attacked, the first thing to be done is to discover, if possible, the nature of the enemy. It is at this point that the value of knowing the life-histories of the common crop pests is made manifest, nay, is even indispensable, or much valuable time may be lost by the adoption of improper methods of prevention. It is sometimes possible to prevent serious loss by prompt action. This is particularly the case with those insects which are less active or more vulnerable during their preparatory stages than when they have reached their perfect form. A fact which is probably known to all of you present, but which cannot be too often repeated, is that the lives of all insects are divided up into four well marked periods or stages, during each of which their habits may be

widely different. These stages are:

1. The egg, during which no injury can be done.

2. The caterpillar, during which stage, as a rule, the largest amount of the injury is perpetrated, as, indeed, the very name indicates. The word caterpillar means "foodpillager," a title, the application of which, I think, few will contest the propriety. (Fig. 1, a).

3. The chrysalis or pupa stage, in which, in most of the orders, the insect remains quiet and takes no food. (Fig. 1, b).

4. The perfect insect. (Fig. 1, c).

Some insects are injurious in all their stages after they leave the egg; but most of them only in the caterpillar form, or as caterpillar and perfect insect. Their habits, as I have said, vary greatly in the different orders, and there are, too, a great many orders, families, and species. Notwithstanding this, it will be found that the amount of knowledge necessary, for one who has not made a special study of entomology, to secure good results in combating their ravages, is neither extensive nor difficult to obtain. In apply-