

THE RASPBERRY GALL FLY—(*DASTROPHUS TURGIDUS*).

ASSET gives a brief description of this gall fly and its producer in the *Canadian Entomologist*, Vol. 2, p. 100. His specimens were collected in the State of Connecticut, and, although found in Ontario from Essex to Ottawa, very few notices of it have been published in Canada.

This gall has been more or less common on the stems of the wild raspberry, *Rubus Strigosus*, and on the cultivated varieties in the County of York during the last thirty years; and during this period it has occasionally increased so as to do noticeable injury to raspberry gardens. In one instance, near Toronto, the gardener took the galls to be knots, and when trimming cut them out and threw them into a fence corner. Of course, this did no good, and it was not until he was advised to burn them that he was able to rid his garden of the pest. The producers, as is the case with many gall producers, increase with astonishing rapidity, and were it not for the opportune—though gruesome—services of three species of parasites, raspberry culture in Ontario would soon come to an end.

But, as it is according to the order of nature that plant-eating insects are held in check by parasitic species, we generally find this check sufficient; unless natural relations are disarranged, usually by artificial means, such as the clearing of forests, the draining and cultivation of land, the introduction of foreign plants, and in various other ways. And so it is when conditions are unfavorable to the due increase of parasitic species, the leaf-eating species increase, and farm and garden crops are devoured, unless by some artificial means the balance of parasitic to phytophagous species is re-established.

It has been estimated that in the Province of Ontario there is an annual loss of over \$500,000 from the attacks of plant-eating insects, and many think that our mildly paternal Government might do a good deal more in preventing this controllable waste; for, indeed, to an intelligent and thinking community, as fruit growers and farmers, it is a very culpable waste.

And it should be considered an important duty by all who are engaged in garden or farm culture, to be able to recognize plant-eating and parasitic species at sight, and to keep a strict watch over them, carefully noting their respective increase or decrease. All this is very easy, especially to school boys and school girls, who should be carefully instructed not to destroy nor injure beneficial insects; for, indeed, the protection of these is of greater importance than the protection of insectivorous birds. To carry out these suggestions in the case of the raspberry gall, is especially easy. In the first place, the gall is usually large and easily seen—often over two inches long and three-quarters of an inch in diameter—covered with short prickles and of the same color as the bark of the cane. They may be readily recognized from Fig. 71.