

INSECTS AFFECTING THE WHEAT CROPS

BY THE REV. C. J. S. BETHUNE, M.A.

- | | |
|---|---|
| 1. The Wheat Midge (<i>Cecidomyia tritici</i> , Kirby). | 5. The Joint Worm (<i>Isosoma hordei</i> , Harris). |
| 2. The Hessian Fly (<i>Cecidomyia destructor</i> , Say). | 6. The Angoumois Moth (<i>Butalis cerealella</i> , Oliv.). |
| 3. The Chinch Bug (<i>Micropus leucopterus</i> , Say). | 7. The Army-Worm (<i>Leucania unipuncta</i> , Haworth). |
| 4. The Grain Aphis (<i>Aphis avenæ</i> , Fabr.). | 8. The Wheat Wire-Worm (<i>Agriotes mancus</i> , Say). |

During the past two years, thanks to a merciful Providence, the wheat-crops of this Province—the great staple of the country's wealth—have been almost entirely free from the ravages of insects. In some localities, it is true, there have been complaints of loss occasioned by the depredations of the midge, or the Hessian fly; but these have been few in number, and limited in extent, and, regarding the country as a whole, have hardly affected the general harvest returns to any appreciable extent. This immunity, however, that we now congratulate ourselves upon, and which has no doubt been one great subject of the expressions of gratitude and thankfulness that were poured forth by the inhabitants of the land upon the recent day of General Thanksgiving,—this freedom from the attacks of insects has been of no long duration, though we earnestly hope and pray that it may not soon be brought to a termination. It requires but a very slight effort of memory to recall the days when the name of Midge was a word of horror and execration throughout the length and breadth of the land, and when the Hessian fly was regarded as one of the greatest obstacles to the country's prosperity. During a long series of years, hundreds of thousands—nay, millions—of dollars' worth of grain were annually destroyed in this Province by the armies of these insects that, in countless myriads, invaded our fair fields. Year by year, however, as their nature and habits became better understood,—as improved modes of cultivation were adopted,—as a more scientific rotation of crops became the rule instead of the exception among farmers,—as superior varieties of wheat, adapted to withstand their insect foes, were more widely distributed,—and as parasites and other destroyers of insects increased, our crops became more and more free from attack, until we this year hear of hardly a county or township where any serious damage has been inflicted.

Such being the state of things, it may be thought too late in the day for us to bring before the public any detailed account of these creatures, as they no longer attract the universal attention of the community, and that our time and labour might be more usefully spent in the description of other and more immediately pressing foes. This objection would undoubtedly be of much force had this series of Reports been issued in previous years during the height of the ravages of wheat insects, but as this is only our second year of publication, we have not hitherto had an opportunity of affording the public a condensed and available account of these creatures, and it does not appear to us advisable to wait for fresh invasions before suggesting some modes of defence. The reader will, moreover find elsewhere reports on the great scourges of the day—the Colorado beetle, the Currant saw-fly, the Cabbage butterfly, and other insects that have been special subjects of anxiety of late. Without further apology, then, we shall pass on to the consideration of some of the worst and most notable pests of the wheat grower in this Province.