

year 1837, the grain was then being partially destroyed, and the inhabitants looked upon their loss as temporary, supposing their enemy would soon pass away, as does the Hessian fly and others; in this however they were mistaken, for the evil rapidly increased, and is in full force there to the present day.

In the island of Montreal are to be found some of the best farmers that Canada can boast of—these gentlemen and others, more than twenty years ago, went through a series of experiments in order to find the vulnerable point, if any such existed, of their apparently insignificant enemy. They tried the effect of top dressing and manuring the soil with substances thought to be destructive to insect life; they steeped their seed in poisonous solutions; they avoided seeding down with clover; they sowed lime broadcast over the standing grain, till the heads sometimes presented the appearance of having been whitewashed, and Mr. Evans, late of the Cote St. Paul, applied in the same way a mixture of scotch snuff and wood ashes, sown when the dew was heavy, but all to no purpose. By means of various paragraphs in the newspapers, is revealed the fact that our farmers here are enacting over again the expedients above detailed, and long ago exploded as worthless. They, in the end, will probably arrive at the same conclusion that the others did, viz: that nature has so protected from outward attacks the life of the fly and its young, that nothing is likely to exterminate them but an entire cessation in the production of wheat throughout the land. The researches made, as above mentioned, however, did not cease upon finding the midge effectually resisted all attempts to destroy it, and it was found that very early or very late wheat could be grown quite uninjured by its ravages. In so far as Lower Canada was concerned, early wheat was out of the question, and the result of long and bitter experience shows, that a late sown hardy variety of spring wheat, one not liable to rust, is all that our sister Province can venture to cultivate.

In our more favoured portion of Canada, we have every reason to believe that our staple crop, the winter wheat—on the preservation of which would seem almost to hang our destiny as a country—may yet be saved, and we may be spared the tremendous loss that would fall upon us, had we to go through years of banishment to the wheat plant, such as have been the lot of our friends in the neighbouring state.

The fly makes its appearance above ground from the 1st to the 5th of July, two or three days after which time it rises to the level of the wheat ears, and deposits its egg; this, to come to maturity, must, on being hatched, find the grain in what is known as the milk state; for should the wheat be late, the young worm will soon perish from want of sustenance, or should the plant be sufficiently early for the grain to be formed, the worm can at its then age make no impression and fails to convert it into food. Most of these facts are well known where the fly has established its sway, but we are writing also for the information of those who inhabit a number of townships where it has not been seen, that they may from the first bend their energies to the right direction to counteract the mischievous operations of an enemy that seems determined, sooner or later, to have a look at every part of Canada.

The deductions we make from the foregoing are, that wheat, to escape the fly, must either be made to ripen late, and thereby incur a great risk of being rusted or grown, or some such culture must be adopted as will cause it to come into ear earlier than is usual with us. Early sowing, thorough draining, and good preparation in other ways, will sometimes effect this object, but they can not be depended on alone for the purpose of avoiding the fly,—an early variety of winter wheat used for seed, is, we believe, a sure means of making the crop perfectly safe from its ravages, and from the effects of rust.

We have for a long time past had this subject brought forcibly before us. The writer farmed till 1848 in Lower Canada, where the fly systematically devoured all but the late sown spring wheat; he has watched with anxiety its gradual progress from east to west, and has visited the state of New York at harvest time for the last four years, where he has seen, with alarm for Canada, the gradual discontinuance of attempts to raise winter wheat, and at last its final abandonment in the once famed valley of the Genesee. This year however, a circumstance came to our knowledge bearing very materially upon the subject under consideration, and seemed, if borne out by fact, to point out the antidote required. A man, it was said, had sown southern wheat in a northern latitude, and had been entirely successful in reaping a good crop therefrom. The writer proceeded to his farm in the northern part of the State of New York, where he found the crop, then being harvested, was as it had been described; he found that this was the third year of his having grown southern wheat, escaping each time both fly and rust, while his neigh-