

middle of June to the 1st of July, according to the season, as it is late or early, and remains some weeks; it deposits its eggs in the ears of wheat as they emerge from the sheath—that is, as it is shooting out—calm moist weather being favourable to them; they mostly deposit their eggs in the evening and during the night; windy weather in a great measure prevents their ravages. From a knowledge of their habits and the time of their appearance, we have been led to sow spring wheat late, so that flies may have passed away before it heads; for this purpose the Fife wheat answers admirably, as it is not subject to rust even when sown very late. The last season our wheat has been attacked by two other enemies—the Army worm, and what may be called, an *army of flies*. The army worm made its appearance about the first of August, and remained for a fortnight, destroying the wheat and other crops; it was worse in spots of lodged and green wheat, and very partial, in some fields causing serious damage, and in others but a short green off, doing little or no damage at all—in some not one to be seen. They caused great damage at the time, but did not do near the damage we anticipated. The worm was from an inch and a half long, striped with yellow stripes along the body, with eight or ten legs, and had altogether a formidable appearance; it could travel easily from one plant to another, taking the grass clean off on its way. We secured some specimens in a glass, they soon passed into the *pupæ*; in this they remained fifteen days, when they emerged into an ordinary looking moth of a tawny yellow or drab colour, inclined to russet, with a small white dot near the centre of its wings, and a dusky oblique stripe at their base. A full scientific description of it may be found in most of the agricultural journals of the last year from the pen of Asa Fitch, New

York. Another destroyer of our wheat alluded to quite a different look; it appeared about the same time as the army worm, at least we did not observe it until examining our wheat for the army worm; it was an aphid, or plant louse, and in cases hid the ears of wheat and oats; it was small, of a dull red colour, with two long jointed antennæ, which it had the power of moving along its back, giving it the appearance of a line along each side, with these it kept feeling forward; close behind the antennæ were two dark spots or eyes; it had six pairs of legs, the hind pair much longer than the others; it had dark protuberances on its joints, and a short tail-like appearance at the end of the body was smallest before, and became larger till past the last pair of legs, when it tapered off rapidly; they were very active, and could run from one part of a grain to another. Our magnifier was used to enable us to say what its mouth-

was, but we judged it was adapted for sucking, and not for cutting or tearing; they were always in clusters, and appear to multiply rapidly. On putting some in a glass they became, in a few days, a small clear-winged fly. We are inclined to think they did considerable damage to spring wheat.

The grasshopper has occasionally attacked our crops; the greatest damage done by them was in 1858, when they seriously injured late spring wheat, oats, root crops, clover seed, and pastures. In 1859 they were numerous, but the damage done was not so extensive, as they were that year destroyed in great numbers by a parasite. From their great importance we have dwelt thus particularly on the wheat crop and their enemies; we will now pass over our other crops more rapidly.

Barley.—This crop is not grown extensively in the township. It appears from the last census that only 300 acres were in this crop; its cultivation has fallen off, and spring wheat taken its place; on the heavy clay land the two-rowed variety is mostly sown, and the six-rowed on the lighter soils; it is mostly sown on wheat stubble; often one or two ploughings. The best crops are raised when sown after a root crop. It is a favourable crop to seed down with. It is sometimes attacked by the wheat-fly or one very similar. The first prize for Barley has come twice, and the second twice to this township, at the Provincial Show.

Oats.—This crop is only grown in sufficient quantities for home use, little or none for export. They are mostly sown on wheat or barley stubble, but sometimes on green-sod and clover lea; they are, on the whole, a pretty certain crop, not much subject to blight or the ravages of insects, though they were attacked by the grasshopper, (as stated above) some years ago, and to some extent by the Army Worm and aphid last year. The white varieties are mostly grown, though the black ones are to some extent; the Potato, Hopetown, Berlin, and other heavy kinds have been tried, and though they yield very superior samples, yet we believe they are found not more profitable than the common kinds. At the Provincial Shows, the first prize twice, and the second prize three times, have been awarded to this township.

Peas.—This is an important crop, not only for feeding purposes, and for export, but also as a preparatory crop for wheat. They are sown after all kinds of crops, but mostly on land that has been in hay or pasture the previous year. Generally the land for peas is ploughed in the spring; they are often the first crop sown. They are sometimes damaged by mildew, never much by insects, though some years they are a little *buggy*. Of this crop there are many varieties, the Whit's Creeper being most common. Some of the early varieties are sown by some farmers for the United States market. The large Marrowfat peas were grown largely at