

*The Clover Seed Midge—Cecidomyia leguminicola.*

This new insect pest to which we referred at some length in the Report for last year, seems to be rapidly spreading. It has destroyed a considerable portion of the seed grown in the neighbourhood of London, an injury felt this year more than it would usually be on account of the light crop, resulting from an unfavourable season.

As stated last year, this insect is no doubt being spread by the dissemination of infested clover seed. The larva is very small, not more than one-hundredth of an inch long, and of a reddish or orange-red colour. When the seed is threshed these larvae are mixed with it, and they remain in the larval condition all winter with the seed, and are sown with the seed in the spring. Once in the ground the insect finds all the conditions necessary for its full development, and before long it issues as a fly and enters on its work of destruction, producing two broods during a year. Farmers should exercise caution in the selection of their seed; and seedmen should carefully examine the seed they sell, otherwise they may seriously injure the prospects of their customers by introducing and disseminating this pest in districts hitherto free from it.

*The Hessian Fly—Cecidomyia destructor Say.*

On 26th of July last, my attention was called to the wheat growing in the neighbourhood of London by one of our most intelligent and successful farmers, Mr. John Wallis, of lot 32, con. 4, London township, who had found evidences in his own fields of injury caused by an insect, which, on examination, proved to be the Hessian Fly. I at once called general attention to the subject by addressing the farmers of Ontario through the London and Toronto newspapers under date of July 28th, and soon became involved in an extensive correspondence on this subject. My impression as stated at the time with regard to the extent of injury to the crop on Mr. Wallis's farm, was, that it would prove to be a loss of about 20 per cent., an estimate which results have since shown to be rather under than over the mark. There were many other wheat fields about London worse than those of Mr. Wallis, and if with his careful farming—involving proper rotation of crops and thorough manuring—his loss was so large, it must have been much larger in proportion on many farms less judiciously managed.

As indicating the area over which the insect prevailed, the following extracts from correspondence are submitted: Mr. John Morrison jr., of Oban, Lambton Co., says, "In reply to your letter in the *Weekly Globe*, I would say, that our own fields are badly infested with the Hessian Fly, more than half the crop, I should judge, being injured; other fields I have seen about here are not quite so bad but still injured apparently to the extent of from 20 to 40 per cent."

Dr. C. P. Pitcher, of Jerseyville, sent me samples of wheat containing the larva of the Hessian Fly from his district, and writes, "the enclosed samples of the work of the Hessian Fly I cut from a field of wheat on the farm of Mr. Zenus Weaver, in the Township of Ancaster, Co. Wentworth. Had my attention not been drawn to the subject by your letter in the *Globe*, I should not have investigated the matter. There is a considerable proportion of the wheat in this district crinkled down from this cause."

Mr. Roland W. Gregory, of St. Catharines says, "I herewith send you statement of my experience with the Hessian Fly in my present crop. About the middle of September last, I sowed a field of about seven acres of wheat, which I had fallowed and covered with manure, the field as I thought being in an excellent condition for a crop of wheat. The season being very dry and the soil not uniform in its character, varying from light sand to sandy loam, clay loam, and clay, the wheat did not come up evenly. On that part of the field where the wheat came up first and looked well in the fall, the Hessian Fly commenced working, and in the latter part of November I found one plant on which I counted nineteen of the small maggots, while in that portion of the field where the soil was poor the wheat came up later and escaped the fly, and the crop is now very heavy. In that part of the field so badly infested with it, nearly every stem had the insect in it in the flax-seed state."

Mr. James

August as follows: damage among neighbours, tell appeared to be about it until I some stalks, and herewith sample rectness of my flax seed state.

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HOMOPTERA

The Cicada o under the name of

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The whole of the do this their mouth