

## AGRICULTURAL REPORT FOR CANADA EAST.

From the date of our last Report to the end of July, and for the first week of August, rain fell frequently, though not in large quantity; and as that happened to be the period of the hay harvest, a very considerable portion of the hay received some degree of injury in curing. A slight shower in the twenty-four hours may cause injury to hay that is in process of curing, though it might have a beneficial influence upon every other crop of the farmer. Unsettled weather, during the hay harvest, causes also a great loss of labour to farmers; and this has been the case this season. Rain has come on when hay was ready for the barn or stack, and unless in well made cocks, secure from the effects of wind, it has been rendered unfit to cart until again spread out and dried. Those who are unacquainted with agriculture, often charge farmers with being a complaining and unthankful class, but if those who make these charges were to be farmers only for one season, that the weather was broken and showery during the harvest, we are almost convinced they would complain more than any practical farmer ever did or ever will. A practical farmer is generally prepared to expect these occurrences, and endeavours to guard against them as much as possible; but the farmer of one season, would not have either experience to direct him, or patience to submit to the injury to the crop, and the loss of wages and of labour that would be the consequence of broken weather. From the 10th of August to the present, the weather has been very favourable for the hay and grain harvest, and most of the hay and barley in the District of Montreal is secured. We are sorry to report that wheat is almost a total failure, we believe generally throughout Canada East. Between the fly and rust, or mildew, the crop is not of much value. We were induced to sow a small quantity, both of fall and spring wheat, in consequence of the reported success of others in growing wheat last year, but both are nearly a failure; the fall wheat from rust principally.—From the date of our last Report up to this time, the weather was exactly such as would be sure to produce rust in wheat crops that were late, and the straw soft and green. We had rain frequently, fogs occasionally, copious dews, and calm warm weather generally, and under such circumstances, the growing wheat, cultivated as it usually is with us—sown broadcast—and having much grass and clover, if not weeds, growing with it, we could not expect that it would escape rust or mildew. We are of opinion that rust may be prevented in a considerable degree—Thorough draining—the application of lime—sowing in drills—hoeing the crop—and preventing the growth of all grass and weeds—we conceive would greatly check, if not entirely prevent, the disease of rust or mildew in ordinary seasons. The application of lime would make the straw of wheat more firm and strong to resist disease.—Drilling would allow a more free circulation of air, and hoeing would prevent the growth of every plant but that cultivated, and hence remove all that would have a tendency to retain moisture too long about the stalk of the growing crop, which we believe to be one chief cause of rust—though not the only one. There are in most

soils, salts that are known to have a tendency to produce rust in wheat; until their influence is overcome by the application of lime. Sowing wheat in drills, and hoeing the crop would have a beneficial influence in depriving the wheat fly of its hiding place, and perhaps the place of its production; but unless this system was to be generally adopted, it would not have much effect in checking the fly, because the farmer who would not adopt the system, would still continue to keep the insect in existence to destroy his neighbour's crops as well as his own. Farmers have boasted of raising crops of wheat when others have failed to do so. It was not by any superior cultivation or management that they have done so, but merely from accidental circumstances of the wheat not coming into ear, at the particular period that the fly was present to deposit its eggs or larvæ in the ear. If the fly is in existence (and it generally appears about the 25th of June) when the wheat is coming into ear, no mode of cultivation that we are acquainted with can save the crop from their ravages. We state now, as we often did before, that if wheat was sown early in the fall, on land prepared by summer-fallowing, and dressed with lime, the seed deposited in drills, and the crop once hoed in the first week of June, it might escape the fly as it would be early in ear, and be also free from the disease of rust. It is useless to sow wheat, unless cultivated in this way. Indeed it is only wasting land and labour, to produce food to support the most destructive insect that ever afflicted mankind. This matter is of so much importance that we beg to offer a few more observations.—Last fall we purchased some seed wheat imported from Canada West. We perceived at the time that the sample was mixed, but we had no remedy as we could not procure better seed in time to sow, as we were anxious to sow early in September. When the wheat came into ear, it proved that there were five or six varieties, and also some rye. It came into ear the first week of July, and the fly was very numerous at the time. We now find that of these varieties, there are two that have scarcely suffered any damage from the fly, while all the other varieties are nearly destroyed. The varieties that are safe, have a strong rough ear and very thick glums,—one is bearded, and the other not. The varieties that are damaged on the contrary, have a smooth ear, and to these circumstances we attribute the safety of the one, and the damage of the other. The fly is a very delicate one, and is not, perhaps, able to pierce with its ovipositor, the glums of the wheat that is rough and thick, to deposit its eggs or larvæ within side of these glums.—We have heard that the variety of wheat, known in England as the Cone Revit, or German Thick-set, is proof against the ravages of the fly. We have never seen this wheat unless it be one of the varieties referred to above, and we think it probable. The Cone Revit is a coarse inferior wheat, of about one fifth less value than the best English wheats. We have seen, however, the report of an experiment made in England with several varieties of wheat, and the Cone Revit was one of them; and from its large produce in straw and grain, it was nearly of as much value as any other variety tried in the experiment—and of more value than some of them. We did propose to make seed of the two varieties that we

found safe from the fly, but the sample was so injured by the crop becoming rusty and mildewed that we fear it would scarcely vegetate. We have repeatedly reminded our importing merchants, that a variety of wheat might be imported from England that would resist the ravages of the fly, but not one bushel has ever been imported to our knowledge. If we could even grow an inferior wheat that would be safe from damage, we should be well satisfied. Though this season has been such as to produce rust, other seasons may not be so. It is another proof, if any were wanted, how much our agriculture and our interests are neglected, that no new variety of wheat has been imported to make experiments. Our Governors and Legislators have for the last eight years, been perfectly aware of the misfortune and loss the country sustained by the failure of the wheat crop; and yet not one has moved *one step* to remedy the evil, though they have been made acquainted with the circumstance, that there were varieties of wheat that might be successfully grown here. It may be replied that these matters should be left in the hands of private individuals who are most interested. We beg leave to deny this, considering the situation and circumstances of the agricultural population of this country. We humbly conceive that under such a calamity, as deprived nine-tenths of the population of their principal means of subsistence, the Government and Legislature were bound to inquire into the subject, and do all that was possible to provide a remedy. There are no private individuals here that possess sufficient wealth, and feel sufficient interest in the prosperity of agriculture to undertake the trouble of inquiry, and the expense to remedy a calamity of this nature and magnitude. If a remedy was practicable, any expense that would be incurred by the Government would be soon repaid. A poor population cannot contribute much towards a revenue. If they have nothing to sell they cannot purchase articles that pay a revenue. We may be blamed for speaking thus plainly, but we do so from a sincere conviction that if any remedy was possible for the calamity we have so much cause to deplore, every class of this community would be greatly benefited by it, and therefore we conceive it to have been a subject well deserving the attention of the Government and Legislature. If the country was naturally unfit to produce wheat we should make no complaint; but the country has produced good wheat, and we believe would do so again if proper and judicious measures were adopted, by introducing new seed, and a more suitable method of cultivation and management. Whatever may have been possible, the agricultural class owe no gratitude to any quarter for having taken any measures for their relief. They have been left to themselves to sink into poverty, or rise above it in the best way they could. Had such a calamity occurred in England, every class of the community would have united to inquire into the matter, and endeavour to seek a remedy if it were possible to be. We are still of opinion that a remedy is possible here by adopting the proper means. For the present we shall say no more on this subject.

Oats have greatly improved since our last Report, and where any justice have been done to the soil they will be a good crop. The wild mustard that prevailed so much in July is now in