

the farmers know the result of some of these inquiries, in order to guide them in the sowing of Fall wheat, and enable them to judge of the propriety of leaving part of the land for Spring wheat. Twenty-seven returns from thirty-six counties have been received and analysed. In eighteen of these counties the wheat midge and rust have been very prevalent, in Waterloo, Oxford, Grey, Norfolk, Durham, South Simcoe, York, Kent, Welland, Victoria, Perth, Essex, Wentworth, Elgin, and Ontario, in Canada West, and Vercheres, Broome and Dorchester in Canada East. In three the rust and mildew, without the midge, were very destructive—namely, Waterloo, Peel and Pontiac. The wheat crops in Stormont, Carleton, Grenville, Lanark, and Russell, in Canada West, and Huntington in Canada East, are said to be free from disease of any kind, except a slight rust in Russell.

The average produce of the whole twenty-six counties is $12\frac{1}{2}$ bushels per acre of winter wheat, and $14\frac{1}{2}$ bushels of spring wheat,—showing a deficiency of about 40 per cent. in winter wheat, and 10 per cent. in spring wheat. A fact worth knowing is, that the spring wheat called Fife or Glasgow wheat, has entirely escaped injury from rust; and also that all spring wheat sown after the 26th of May, has escaped injury from the midge (or wheat fly,) being too late for the fly, which deposits its ova from the 20th June to the middle of July. Wheat thus late sown is not forward enough to receive the deposit. A species of wheat, called the Mediterranean wheat, is also said to be free from the ravages of the midge, but does not appear to be highly approved in other respects. The spring wheat called club-wheat is universally condemned, as being subject to rust.

Never before in the history of Canada, has so much injury been done by rust as this year. Many of these reports show that it arises generally, if not always, from want of proper drainage, and of early sowing of early kinds of wheat on well shaped ridges, well water-furrowed, which are a great aid in the way of drainage. It may be, that the influences of hot, damp, close, muggy weather after a drought, are *less sudden* on well drained, deeply ploughed, well cultivated land; and these sudden influences are what cause rust, by the greatly increased sap bursting the straw and flowing downwards, instead of rising to nourish the ear. This is more probably the cause of rust than fungi, or insects, to which many attribute this most destructive disease; the straw of rusted wheat will, on examination, be found to be cracked longitudinally. With regard to the midge, all reports seem to concur that early sowing of early seed on early land, made by good drainage and well shaped ridges, is the best preventive; but,—under present circumstances, I think a cautious farmer would do well to sow one half of his land in winter wheat, and the other half in spring wheat, using the above precaution of good draining, &c.

A Mr. Alexander McKenzie, a practical farmer, has written a valuable little pamphlet, showing from repeated experiments that a dressing of lime spread on the land soon after the grub of the midge has fallen from the wheat ear, and whilst in a soft state, is a complete remedy, destroying the grub entirely. This little pamphlet is well deserving the attention of farmers, as lime can be easily procured throughout almost all of Upper Canada and can be burned without any very great expense, and in addition to killing the grub, will add much to the fertility of the soil. A Mr. Swan, the owner of the farm to which was awarded the first prize in Cayuga County, New-York, as being the best managed farm, stated that he lessened the destructiveness of the midge very materially by sowing a barrel of salt to the acre after the wheat had braided.

With regard to other green crops, the reports show an average yield about the same as in other years: rye, $19\frac{1}{2}$ bushels per acre; barley, 19; oats, $31\frac{1}{2}$; Indian corn, $36\frac{1}{2}$; peas, $21\frac{1}{2}$; potatoes, $124\frac{1}{2}$. Of these last there are fifteen re-