

PEASE.

The Pea crop is of great importance to the Canadian farmer—the climate of the country being remarkably well adapted for the growth of pease.

The soil to which pease are the most appropriate, are sandy loam mixed with calcareous particles, these soils are abundant throughout all British North America. It is a subject worthy of remark, that some variety of pease require one description of soil, and others require a soil of a very different character,—for instance, the grey species are best adapted to the strong soils, and the white to the drier and lighter ones. Wherever calcareous earths abound, large crops of the best qualities of pease are grown. A light dressing of shell marl or limo, is ever found to forward a crop. The best preparation for land for this crop, on those soils suitable for their culture, is thorough deep ploughing in autumn, and without any further labour, the seed should be sown the latter part of April, or first of May, at the rate of three bushels per acre, then harrowed in and rolled. No seed is more difficult to cover than pease; in all cases where it is doubtful that the seed could not be completely covered with the harrow and roller alone, we would recommend that they should be ploughed in lightly, and afterwards harrowed singly, and rolled. In most cases, where the land has been ploughed in the autumn, to a much greater depth than usual, that is to say, when two or three inches of the subsoil have been brought up to the surface and exposed to the action of the winter frosts and snows, the ploughing in of the seed will be found to pay 100 per cent. for the labour expended in the operation. On the land we cultivate, we would expect, in an average of cases, from the foregoing management, not less than 40 bushels of pease per acre.

If barn yard manure be applied to the soil in the spring of the year, it will occasion the crop to run to haulm, and proportionably lessen the product of grain.

We have much confidence in recommending the cultivation of pease on an extensive scale, it is the best possible seed for stock, and is likely to be an extensive article for export. It is almost needless for us to state to our intelligent readers, that pease, like clover, draw their sustenance very largely from the atmosphere, and comparatively, even to a much greater extent, than from the soil.

In preparing ground for fall wheat, a much less objectionable plan than making naked summer-fallows, would be found to consist of sowing wheat after pease. This system has been practised from time immemorial, but the manner in which it has been generally performed, is equally as objectionable as the naked fallows. When wheat is intended to be sown after pease, the manure which is usually applied to naked summer-fallows, should be reserved for the pea crop, and should be spread on the ground in autumn, at the rate of about ten tons per acre, and should be ploughed in to the depth of, at least, nine inches,—the land should be made into six yard ridges, and completely cross-furrowed, so that the ground would be dry in the spring, at the earliest possible period.

The seed of some short-vined variety should be sown at the rate of *three bushels per acre*, ploughed in very lightly, harrowed and rolled, as recommended in the foregoing remarks. If the crop be large, say to the extent that the cultivator had

beer, in the habit of making his naked summer-fallow, it might be harvested with a horse and rake, similar to the plan usually practised in collecting hay with a horse. One man will pull four acres per day with all ease, although a portion of the crop might be thus left on the ground, still a provident cultivator would suffer no loss by this means, as his stock of fattening and store swine would gather them off the ground in time for sowing wheat.

In ploughing the ground for wheat, it should be done to the full depth that it was previously ploughed in the autumn, and the manure which had been ploughed to such a great depth, will be in a proper state for imparting strength and vigour to the young wheat plants, without entailing the disease of rust, which is generally brought about by the plan generally practised in this country, of heavily dressing naked fallows with unfermented barn-yard manure. If the furrow for wheat be ploughed to the full depth recommended, say nine inches, and the ground immediately harrowed and ribbed, and the seed of an approved variety be sown broadcast, at the rate of *two bushels per acre*, and harrowed in lengthwise singly, and the furrows and cross-furrows be cleaned out with a plough to the full depth,—we would expect from such management a much greater crop, than from a naked fallow. Those of our readers who desire to grow an average crop of *forty bushels per acre*, throughout their entire wheat crop, would do well to try the plan we have recommended, or some other equally as good, and in the spring of the year, top-dress the young plants with fresh house ashes, at the rate of eight or ten bushels per acre, and which should be harrowed in with a pair of light seed harrows. If the harrow teeth be very long, or are likely to injure the plants, fine branches of trees, or brush may be interwoven in the harrow. The object to be gained by harrowing is, the pulverization of the crust that is formed on the surface, and this crust may be as readily broken by harrowing the ground to the depth of two inches as four.

We do not wish it to be understood that we would prefer the culture of pease to that of clover, as a preparative crop for wheat, but at the same time we are persuaded, that it requires less care than the latter in the management, and may be on strong clay lands much more efficacious, especially as the clover ley system requires the greatest nicety in the laying down the land with seeds, and also, in the ploughing of the sward, and depositing the seed wheat. It might, however, be observed, that so soon as the ridiculous notion of naked fallows can be exploded, both the sowing of wheat after pease, and on clover ley, may be introduced on the same farm, without interfering with a judicious system of rotation, or a well grounded method of farm management. For fear that it might be thought by some, that we were opposed to the plan of making naked summer-fallows in every instance, we would observe, that there are cases when the practice is absolutely necessary,—those cases, however, are rare. We shall endeavour at an early period, to point out the instances where naked fallows could be made with advantage, and the character and manner of the substitutes, which we would recommend in its stead.

To relieve the minds of our readers from any unnecessary suspense on this subject, we would at this time merely advert to the outlines of the system to be pursued. Without at all entering into detail,

we would, however, observe, that circumstances may be such as will enable us to make a few remarks on portions of this important subject in another column.

A more extensive culture of potatoes, turnips, mangol wurtzel, carrots, parsnips, and other roots as field crops, will follow as soon as the plan of making naked fallows give way to the improved system, which we hope soon to see generally established. Those roots will, of course, require both a heavy dressing of manure and extra attention in cultivation, and both of which the farmer will be able to apply to these crops under the new system. A farmer who cultivates 100 acres of land, should have, at least, ten acres planted with roots, to be followed in rotation through the farm with spring wheat and the cultivated grasses. On such a farm, ten acres of wheat might be sown upon a clover ley, and ten upon a pea stubble, prepared in the style recommended. As it is desirable that as much spring wheat should be sown as autumn, five acres of vetches, and a like quantity of rape should be sown each and every year for summer soiling and for fattening sheep. The ground after these crops will only be required to be ploughed once in the autumn to fit it for spring wheat, as they thoroughly cleanse the ground from weeds if the seed be sown thick, as though it had been subjected to a fallowing operation.

A farmer cultivating 100 acres of arable land, might, each and every year, harvest 20 acres of fall, and a like quantity of spring wheat, without making a naked fallow once in 20 years; and, at the same time his soil would grow *richer and deeper*, until at length it would become in appearance to a rich garden mould.

To arrive at this supposed zenith in agriculture, the cultivator must possess a sound intellect, and must so happily combine the hand and head labour system of pursuing the various departments of his complicated and dignified profession, that his farming operations will advance at all seasons of the year, in a methodical and business-like manner. There are so many influences at work, that in order to carry out experiments successfully, and in order to carry into operation a system of farm management, such as would keep up the virgin qualities of our soil, and, at the same time, remunerate liberally for the expenditure, a vast amount of information is required, and such a farmer must be a close thinking, or far-seeing and sensible man. We occasionally meet with men of this character, and if we spend one moment of our time more happily or agreeably than another, it is when conversing on agricultural topics in such company. The sole object of our ambition is to foster a spirit for improvement among our agricultural friends, so that they may be enabled to successfully compete with foreigners in their own market, and also those in the markets of the Mother Country. By study and close application to business, the Canadian farmers may compete with the farmers of more genial climes in the raising of breadstuffs, and we fancy that if they study their own interests, they will make it a point to carry into practice, as far as practicable, the directions which we may give them monthly. Although we may have taken a wider latitude than legitimately belongs to the cultivation of the variety of grain which stands at the head of these hurried remarks, still we hope they will prove acceptable and profitable to the generality of our readers. Before we close, we would remark that there are cases when it would pay the farmer to sow pease as a green crop to be ploughed under for wheat, and there are other times, when it might be advisable to convert them into dried hay for the winter feeding of cattle; and there are other times when it might answer a very excellent purpose to sow a bushel of gypsum per acre on the pease, to give strength and luxuriance to the haulm, and at other times it might answer a profitable end to feed them on the ground to swine; but as each of these points would require a separate article of itself, we would for the present draw our remarks to a close, simply by requesting the sensible portion of our subscribers, to test the plans recommended on a scale sufficiently extensive to satisfy their own minds on the subject.