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Fallow Crops.

Commonly called *root-crops*, are now so generally cultivated here, that it is unnecessary to expatiate on their utility. Every one knows how desirable a possession, at the beginning of winter, a root house full of mangolds, swede &c is; and although many a one is deterred from growing them by the trouble incurred in singling the crop, yet it is clear to any attentive observer that the extent of land under this culture is increasing every year.

Upon the whole I do not think that it is advisable to sow carrots or parsnips as a regular part of the fallow shift. They are expensive to hoe, troublesome to thin, and do not, as a rule, yield largely. Neither do I think that their feeding qualities are so very superior to a good, sound swede, whether for butter or meat producing, as to warrant the extra labour they demand. I believe that potatoes, mangolds, sugar beets, and swedes, are sufficient for our purpose, and, with care, forethought and industry, there is not a farm in this Province on which these crops cannot be grown successfully.

And first of potatoes. What is a crop of this tuber? Ask the gardener, and he will tell you, a square red ought to give four bushels! Ask the farmer, and he will say that 80 to 100 bushels per acre is a fair yield! Is there any reason for this discrepancy, a discrepancy so monstrous (640 to 100) that it could not exist for twelve months in any other trade? I think there are several reasons, and I will try and point out some of them.

In the first place it is generally acknowledged that, since we have become addicted to the modern plan of growing all the root crops on our farms on drills, we have allowed too much space between the plants. It is no uncommon thing to see potatoes set at 3 feet between the drills, and 20 inches between the plants in the drill, whereas in gardens the usual distance is 20 inches to 24 inches, by 10 inches. This alone would show that one or the other plan must be wrong. I admit that, if the land is, as it ought not to be, very foul, a considerable distance should be preserved between the sets, but only such a distance as shall admit of the easy passage of the horse-hoe, in one direction, and of the hand-hoe in the other, i. e. 24 inches and 9 inches, for it should be borne in mind that a large growth of tubers is seldom the product of a luxuriant growth of haulm, and the nearness of the plants checks the growth of the latter, just as a thickly sown crop of pease never runs to bine, as a thinly sown one almost always does in a damp season. (1)

Again, the gardener seldom manures directly previous to the setting of the potato. On the contrary, the heavy

(1) Our experience shows conclusively that many varieties of potatoes would be too close in drills only 24 inches apart. As a rule, gardeners sow early varieties exclusively, it is well known that these run less to bine and, therefore can be planted closer every way. However, the practice recommended here of manuring one year in advance, or at least in the previous fall, with rotten manure ploughed under, would check the tendency to over production of bine and increase greatly the yield of sound potatoes. E. A. B.

dressing of dung given to cabbages or cauliflowers is expected to furnish the succeeding crop of potatoes with all the food it requires; and it does so with all the more ease because, owing to the frequent stirring the land has received, the manure has become thoroughly mixed with the soil, its disintegration is perfected, and the roots find their provender ready for absorption.

The gardener, again, has dug his ground over at least ten inches deep, while the farmer is satisfied with six inches. Shallow cultivation and raw dung can hardly compete with deep cultivation and well mixed dung and soil; for, be it remembered, in many cases the manure is perfectly visible to the naked eye when we open the drills in the potato harvest.

I think, from all accounts, that it is clear that comparative immunity from disease is the reward of the early planting of this crop. I have taken great pains, at different times, to collect opinions on this subject, and I find that the latest crop is almost invariably the greatest sufferer. It would therefore seem to be an axiom that land should be prepared for potatoes as far as possible in the autumn. There is no reason on earth why, on our heavier soils, the cleaning should not be completed and the drills drawn out before the beginning of winter. In this case, the first work in spring would be harrowing down the drills with the drill harrow; they should then be reshaped with the double mould board plough, the dung spread, the potatoes set, and the drills split. It would be better to run the risk of the plants being cut down by a late frost than to lose a week in planting: the land being in good heart there is no fear of the recovery of the potatoes. How often does a heavy rain delay the setting till the end of May or the beginning of June, causing the yield to be small and the quality inferior, to say nothing of the almost positive certainty of losing half the crop by disease?

On lighter soils the ordinary way of planting will be probably always followed: cross-ploughing the autumn furrow, drilling up the land with the double mould board plough, spreading the dung, planting the sets on the dung, and splitting the drills to cover all up. The manure should not be exposed to the action of the sun and air longer than is absolutely necessary. Not that any valuable quality will escape from it, but because, when thus dried, it will not mix so well with the soil. It is worth while to see the perfect manner in which this is understood and acted upon in Scotland. They beat us Englishmen into fits here, if in nothing else. Of course in Canada, where the number of horses kept on each farm is small, we cannot follow out the system to perfection, but after having done, say 3 hours work with the dung-cart, we might plant and split the drills we have just got ready; and, although time must necessarily be lost in yoking and unyoking the good effects of the proceeding would, most assuredly, repay us in the end.

There is a deal of good argument expended every spring as to whether the whole potato, or the out set gives the