

## AGRICULTURAL.

## TURNIPS.

The benefits derived from turnip husbandry are of great magnitude; light soils are cultivated with profit and facility; abundance of food is provided for man and beast; the earth is turned to the uses for which it is physically calculated; and by being suitably cleaned by this preparatory crop, a bed is provided for grass seeds, in which they flourish with greater vigour than after any other preparation.

*To prepare the Ground.*

The first ploughing is given immediately after harvest, or as soon as the wheat seed is finished, either in length or across the field, as circumstances may seem to require. In this state the ground remains till the oat seed is finished, when a second ploughing is given to it, usually in a contrary direction to the first. It is then repeatedly narrowed, often rolled between the harrowings, and every particle of root-weeds carefully picked off with the hand; a third ploughing is then bestowed, in this stage, if the ground has not been very foul, the seed process generally commences; but often a fourth ploughing, sometimes a fifth, is necessary, before the ground is sufficiently clean. Less labour, however, is necessary now than in former times, when a more regular mode of cropping was commonly followed.

*To Sow the Seed.*

The next part of the process is the sowing of the seed; this, almost in every case since turnips were introduced into this country, has been performed by drilling machines, of different sizes and construction, though all acting on the same principle. At this time, the machine is drawn by a horse in a pair of shafts, sows two drills at a time, and answers extremely well, where the ground is flat, and the drills properly made up. The weight of the machine insures a regularity of sowing hardly to be gained by those of a different size and construction. From two to three pounds of seed are sown upon the acre, though the smallest of these quantities will give many more plants, in ordinary seasons than are necessary, but as the seed is not an expensive article, the greater part of farmers incline to sow thick, which both provides against the danger of part of the seed perishing, and gives the young plants an advantage at the outset.

Turnips are sown from the beginning to the end of June; but the second and third weeks of the month are, by judicious farmers, accounted the most proper time. Some people have sown as early as May, and with advantage; but these early fields are apt to run to seed before winter, especially if the autumn be favourable to vegetation. As a general rule, it may be laid down, that the earliest sowings should be on the latest soils; plants on such soils are often long before they make any great progress; and, in the end, may be far behind those, in other situations which were much later sown. The turnip plant, indeed, does not thrive rapidly till its roots reach the dung; and the previous nourishment afforded them is often so scanty, as to stunt them altogether before they get so far.

*Cleaning Process.*

The first thing to be done in this process is to run a horse-hoe, provincially termed a scraper, along the intervals, keeping at such a distance from the young plants that they shall not be injured; this operation destroys all the annual weeds which have sprung up, and leaves the plants standing in regular stripes or rows. The hand-hoeing then commences, by which the turnips are all singled out at a distance of from eight to twelve inches, and the redundant ones drawn into the spaces between the rows.

The singling out of the young plants is an operation of great importance, for an error committed in this process can hardly be afterwards rectified. Boys and girls are always employed as hoers, but a steady and trusty man-servant is usually set over them, to see that the work be properly executed.

In eight or ten days, or such a length of time as circumstances may require, a horse-shoe of a different construction from the scraper is used. This, in fact, is generally a small plough, of the same kind with that commonly wrought, but of smaller dimensions. By this implement, the earth is pared away from the sides of the drills, and a sort of new ridge formed in the middle of the former interval. The hand-hoers are again set to work, and every weed and superfluous turnip is cut up; afterwards the horse-shoe is employed to separate the earth, which it formerly threw into the furrows, and lay it back to the sides of the drills. On dry lands this is done by the scraper; but where the least tendency to moisture prevails, the small plough is used, in order that the furrows may be perfectly cleaned. This latter mode, indeed, is very generally practised.

## TO CULTIVATE THE YELLOW TURNIP.

This variety, as now cultivated in the field, is quite different from the yellow garden turnip, being larger in size, containing more juice, or nutritive substance, much easier cultivated, and preserving its powers till the middle of May, when the grass-season may be expected. Upon ordinary soils it is superior to *ruta baga*, because it will grow to a considerable weight, where the other would be stunted or starved; and it stands the frost equally well. No farmer who keeps stock to any extent should be without it. The mode of culture required is in every respect similar to what is stated concerning common turnips, with these exceptions, that earlier sowing is necessary, and that the plants need not be set out so wide; as they do not swell to such a size.

## RUTA BAGA, OR SWEDISH TURNIP.

The process of management is precisely the same with that of turnips, with this addition, that more dung is required, and that seed-time ought to be three or four weeks earlier. Rich soil, however, is required for this article: for it will not grow to any size worth while, on soils of middling quality, whatever quantity of dung may be applied.

*Ruta Baga* is of great advantage in the feeding of horses, either when raw or boiled, or with broken corn. If a sufficient quantity were cultivated, a great deal of grain might be saved, while the health and condition of the working stock would be greatly invigorated and augmented. An evening feed of this nutritious article would be of incalculable benefit; even most horses are fond of the common turnip in a raw state; and it is a subject well worthy of every farmer's attention, whether it would not be for his interest to raise these esculents in such a quantity as to serve them during the long period when grass cannot be obtained. That the health of the animals would thereby be benefitted is unquestionable; and the saving of grain would greatly exceed the trouble occasioned by furnishing a daily supply of these roots.

## TO DESTROY THE FLY ON TURNIPS.

Lime sown by the hand, or distributed by a machine, is an infallible protection to turnips against the ravages of the fly. It should be applied as soon as the turnips come up, and in the same daily rotation in which they were sown. The lime should be slacked immediately before it is used, if the air be not sufficiently moist to render that operation unnecessary.

*Another Method.*

Let the farmer carefully watch his turnips

as they come up, and whenever the fly makes its appearance, take a certain quantity of brimstone, about 2-12 or 3 pounds to an acre; put this into a kettle, and melt it in the turnip field, in a situation the most eligible for the wind to carry the fume over the ground, then take any combustible matter calculated to make a considerable smoke, which being dipped in the liquid brimstone must be strewed all over the field in a state of ignition, and so close together that the fumes of the burning matter may completely cover every part of the ground.

*Remedy against the bite of the Turnip-Fly.*

It is upon the principle of creating an offensive smell that turnip seed is recommended to be steeped in train oil before it is sown. This has been found to be a perfect security against the bite of the turnip fly.

*Another.*

Take up some flower of sulphur in a piece of muslin or fine linen, and with this the leaves of young shoots of plants should be dusted, or it may be thrown on them by means of a common swansdown puff, or even by a dredging box.

Fresh assurances have repeatedly been received of the powerful influence of sulphur against the whole tribe of insects and worms which infest and prey on vegetables. Sulphur has also been found to promote the health of plants, on which it was sprinkled; and peach-trees, in particular, were remarkably improved by it, and seemed to absorb it. It has likewise been observed, that the verdure, and other healthful appearances, were perceptibly increased; for the quantity of new shoots and leaves formed subsequently to the operation, and having no sulphur on their surfaces, served as a kind of comparative index, and pointed out distinctly the accumulation of health.

*To prevent the fly in Turnips.*

Sow good and fresh seed in well-matured and well-prepared ground.—*Universal Receipt Book.*

[To prevent Turnips from being destroyed by flies and other insects, the following method has proved successful in Pictou: Soak the seed in water, and when thoroughly wet, pour the water off, and mix the seed with as much flowers of sulphur as will adhere to it; sow the seed in this state, and no insects will come near the young plants; the sulphur will also fertilize the soil.]—ED.

TO MAKE HAY TEA FOR CALVES.—Take about one pound of red clover hay, well got in, and six quarts of clear spring water; boil them together till the water is reduced to four quarts; then take out the hay, and mix a pound of barley, oat, or bean meal, amongst a little water; pour it into the pot or caldron, while it is boiling, and keep it constantly stirring until it is thickened. Let it cool, then give it to the calf, adding as much whey as will make a sufficient meal. This is a cheap way of rearing calves, and the valuable article of milk may be saved for other purposes.

TO PRESERVE CARROTS, PARSNIPS, AND BEETS IN THE WINTER.—A little before the frost sets in draw your beets or parsnips out of the ground, and lay them in the house, burying their roots in sand to the neck of the plant, and ranging them one by another in a shelving position, then another bed of sand, and another of beets, and continue this order to the last. By pursuing this method, they will keep very fresh. When they are wanted for use, draw them as they stand, without disturbing those that remain.