

TURNIPS.

The turnip culture, it has been remarked, effected as great and beneficial a revolution in British husbandry, as the introduction of the steam engine and spinning jenny effected in British manufactures. This crop has there proved a great source of wealth and fertility. It constitutes by far the greatest material for making beef and mutton, as well as for enriching, or keeping up, the fertility of the soil. From an experience of twenty years, in the culture and use of this root, we are persuaded it is destined to become the means of great improvement in American husbandry, when our farmers become more familiar with its culture and mode of preservation and feeding.

In the fourth number of our third volume, we gave particular directions for the cultivations of this root, with several illustrative cuts, and for preserving and feeding them to farm stock; and in our March number of the present volume, we have given an estimate of the product and value of the Swede, compared with other crops which we cultivate for feeding and fattening cattle. It would be superfluous to repeat these details here, inasmuch as they may readily be referred to. Yet as we have many patrons who may not possess our third volume, we will give some brief directions.

The Swedish turnip, or ruta бага, has a manifest advantage over all other varieties of turnip, as cattle food, being the most nutritive in their properties, and retaining their soundness and richness much the longest. The common varieties, if drawn, as all turnips must be with us, become pithy, and spongy, before mid winter, and lose much of their value; while the Swede rather improves, by keeping, till February; and may be fed in a perfectly sound state till June. And it possesses one quality not known, that we recollect, in any other root—that of increasing in nutritious matter with increase of size—the largest roots being specifically heaviest and richest.

The reverse of this happens with other roots, particularly with beets, those of medium, or diminutive size, being found to contain a much larger proportion of saccharine matter, than very large ones. For table use, the early rock turnip may be sown in the garden, the common flat or green top for autumn and early winter, while the yellow Aberdeen should be chosen for late winter and spring use, being the best keeping variety, when the ruta бага is either not liked, or not to be had.

All kinds of the turnip like a sandy and a dry soil; and the ruta бага in particular, requires a rich one. We have been accustomed to raise the common varieties as a second crop, i. e., of sowing upon a grain stubble, with a single plowing and harrowing, after the grain is harvested, from the 25th of July till the first of August, brushing or lightly harrowing in the seed. The plants must be thinned and cleared with a hoe. They should not be left to stand nearer than six or eight inches. If sown broadcast, they will yield more, and are of a more suitable size for the table, than if raised in drills.

A grass ley is best for the Swede. If an old sod, it should be plowed in autumn, or early in the spring; and it should be dunged and completely pulverised on the eve of being planted. If a young clover ley, the dung may be spread, plowed under, the ground harrowed, and the seed immediately put in. We usually select the latter. We cut the clover by the 25th of June, and manure, plow, and sow the crop within the ensuing seven days. The seed is generally sown with the drill-harrow, at the rate of a pound or two pounds an

acre. It is preferable to sow thick, on account of the fly, and as the crop may be readily thinned when the plants are out of danger.

The turnip fly often commits great depredations upon the crop. This was particularly the case the last season. We cannot recommend any certain preventive. It has been however stated, that mixing the seed with sulphur several days before it is to be sown, and then sowing the sulphur with the seed, has preserved the crop from the fly. If this is so, it is owing to the juices of the young plant becoming impregnated with the subtile properties of the sulphur, which is obnoxious to every species of insect. Another mode which has been successfully tried, is that of collecting the weeds in piles around the field, when the seed is sown, and when the plants are coming up, to put brimstone and fire upon the piles on the windward border, which will continue burning, ordinarily, for some days, and the smoke of which expels or destroys the fly.

In the after culture of the Swede, there is great economy in taking time by the forelock—in destroying the weeds while they are small. The cultivator or hoe should be passed through as soon as the rows can be well discerned, and as high to the plants as possible. One day's work is worth more in destroying small weeds than four days work is in destroying large ones, which overtop and choke the plant. The objects which should be aimed at, are to keep the crop clean, to thin the plants to eight or ten inches, and to keep the surface of the soil mellow. With a timely use of the cultivator, and repeated once or twice, these objects may be effected without great aid from the hand hoe.

The labor of harvesting the ruta бага, is less than that of any root, except perhaps, the mangel wurtzel; and indeed the remark will apply to the labor of culture without any qualification. Other root crops require attention nearly two months longer than this does, and at a season too when their growth is slow, and the labor consequently tedious and expensive.

The turnip should be the last crop gathered, because it grows the longest, is least liable to suffer from frost, and is most apt to be injured by fermentation, when collected in heaps for winter. If buried in pits, the roots should be raised above the surface of the ground, and laid up to terminate in a ridge—so that when they are covered with straw and earth, the heated or impure air of the pit will concentrate at the ridge on the top, where it should be suffered to pass off freely, through holes made for this purpose.

The cost of raising the ruta бага is less than that of raising corn, or any of the other roots. The average product may be stated at 600 bushels, and it is often double this quantity. The root is an excellent food for every species of farm stock, and is very extensively used for fattening both beef and mutton. Milch cows fed with ruta бага, should have daily access to salt; and should the milk retain any flavor of the turnip, it may be got rid of by turning a pint of hot water into a pail full when it is drawn from the cow. Tops that are undergoing fermentation, and roots that have partly decayed or are unsound, should be given only to hogs.

POTATO CULTIVATION.—Last spring Mr. Whitney broke up a greensward, harrowed it thoroughly, carted upon it manure from the yard, at the rate of 32 loads to the acre, cross ploughed it, and harrowed it again, and planted it in the usual manner in hills. At the proper season, after ploughing between the rows, the piece was well hoed, which