

of land, at the usual distance of 27 inches by 12 inches - 1387 seeds of Swedes weigh one drachm; therefore the waste of seed is as 27 to one. We must consider, however, that many grains die, some are already dead, insects and birds devour others, and abundance of plants, we know, will always encourage growth, and bring the crop quickly to the hoe.

As to the distance between the rows, the question is easily settled by another: what is the narrowest space the horse-hoe can work comfortably in without clogging up, or choking itself with weeds? In England, with our great Garrett's, or Smith's, hoes, covering 3 or 4 rows at a time, we have no trouble in managing carrots and parsnips at 15 inches apart. But here, where we must be content with a drill-grubber, and take only one row, 24 inches is the nearest interval that will be found convenient; if, in practice, this be found sufficient, it would be wise to adhere to it, as all the later weightings of roots in Britain tend to show that moderate size and great numbers produce the greatest weight per acre.

Formerly 12 inches was the distance in the rows between plant and plant of swedes, now 10 inches are considered enough.

Need I say that, whatever implement is used to cultivate the rows, it should be kept going as long as the leaves are not smashed?

I should make only two rules as to the time of sowing swedes; sow whenever, after the 15th of May, the land is ready; and don't sow after the 1st of July, except the soil is very rich, and in fine order, when another week may be granted. Many a time have I seen the hateful "fly" devour the early sown, and leave the late untouched; many a time have I seen it neglect the early sown, and devour the late. It is a pleasing little animal, this *Haltica nemorum*, but I wish it had always remain in its original *habitat*, the *groves*, though I don't believe it ever could have been happy there, it is so fond of destruction; its name, literally translated, means "The active one of the woods"; and its activity is indisputable: e. g. Saturday, August 7th 1871, sowed white stone-turnips. Tuesday evening, turnips coming up. Thursday evening, turnips all gone! It was the quickest work I ever saw. The turnips were well out of the ground 78 hours after sowing, and the fly had destroyed every one 48 hours afterwards.

Is there no cure for this constant loss? Wood ashes and sulphur mixed will stop them, but the first shower washes the powder off, and the mischief begins again. Plenty of seed and artificial manure to start the plant, and run it rapidly through its first stages of growth, are the best safeguards. It is ten times as bad here as in England; for there, when once the plant is in its second leaf, the *beetle*, (for it is a beetle, not a fly) leaves it; but here, it is never safe until the bulb begins to form. I have an idea that is very likely a wrong one: can there be in this country another, and a rather larger beetle, that follows the *Haltica*, and puts a finishing stroke to his work?

It is possible that the steeping the seed in *carbolic acid*, diluted of course, might have the effect of driving off the little abomination; or, perhaps, watering the plants when up with it might have some effect.

It is a remarkable fact that all *turnips* are lighter than water; *Swedes* are heavier; and this would go to show that the former contain a large proportion of air. In the very valuable table, contributed by Mr. McEachran to the February number of the Journal, we find that the value of swedes is to that of Mangolds as 7.5 is to 7; in other words that a ton of swedes is worth \$30, when a ton of mangolds is worth \$28. Of course they never fetch such prices, but it will serve for a comparison. I find however in a more extended table, by the same analyst, made one year later, that

the relative values of swedes, mangolds and white turnips, are respectively, 15, 12, 11; and this, I take it, is very much nearer the truth. A great deal will depend upon the season when the analysis was made, mangolds are much more valuable in June and July than in November; but in May, swedes are puffy, and begin to lose their nutriment. The tables are worth studying, as they afford a good idea as to the *relative* value of the different sorts of feeding stuffs, and give a good notion to the farmer as to which of his crops he should sell, and which he should consume on the premises. For instance:

Oats equal in feeding value, per cental.	\$0.98
Barley " " " " "	0.95

But the brewer will give me 75c. a bushel for my barley, or \$1.50 a cental, therefore I should be an idiot to sell my oats. Again; Linseed is worth, per cental \$2.47, Linseed cake, \$1.72, the question is, at what price will it pay me to sell my linseed and buy cake, always remembering carriage, and the expense of crushing and boiling the former. The value of Brewer's grains, malt-dust &c., may be easily arrived at in this way by any one who can do a simple sum in proportion.

To return. I think a few white turnips should be sown to begin the season with; as there is no doubt that they are of better quality in October than is generally supposed. The tops may be given to the older cattle, if they have plenty of dry food, never to calves, as they always caused scouring, and, in the autumn, that is a dangerous business with growing stock. The best sort is the old *Green-round*; the modern kinds, though quicker growers, are not so firm. The *Orange jelly* a small yellow turnip of intensely rapid habits, promising to be a favourite some 25 years ago; but I have never seen it here. For storing, white turnips are valueless, as they become spongy and hollow in no time.

Kohl-rabi: This valuable plant used to be called the "turnip-rooted cabbage." It has many peculiarities; it likes heat and drought, it prefers a clay soil, it bears storing better than swedes; but it has one drawback: it must be transplanted. Not but what it will grow from seed; of course it will; but so will the cabbage: the crop however, is inferior in both cases. I propose to treat of these two plants under the same head, as they are of the same sort, and require just the same treatment up to the time of harvesting.

There is not the least necessity for a hot bed. Prepare a nicely dug spot, in a sheltered corner of the garden; make it rich with well-rotted dung; rake it, and having got it as fine as possible, sow the seed, in rows about a foot apart, burying it not more than half an inch deep, dropping the seed thinly, and rolling down the soil firmly when finished. The thicker the sowing, the stubbier the plants. As this can generally be completed by the first week in May, at the latest, there will be plenty of time for the plants to grow before the 10th to the 15th of June, which is the best time for transplanting. We will suppose the field where you intend to have your *Kohl-rabi* and *Cabbages* dunged, ploughed, harrowed, artificial-manured, and rolled: in fact, ready to receive the plants.

The first step is to mark out the rows, and as I decidedly prefer the flat culture for these crops, this may be done with the garden seed-drill to a great nicety; 24 inches apart will be quite enough. Now, about an hour before beginning to transplant, water your seed-bed copiously. Lift, with a sharp spade, its breadth of one of the rows, taking care that the soil goes lower than the roots of the plants. Place this gently in a wheel-barrow, and go on until you have as many plants as you are likely to want. Take them to the field, and, separating them as carefully as possible, place them, one