

are among the best varieties. Where a fair area is being put down it is advisable to sow two or more varieties so that the stock will have a change; there are also slight variations in the ripening-period.

For small areas mangolds may be sown in drills 14 in. to 21 in. apart and hand-hoed, but for anything over $\frac{1}{2}$ acre the drills should be from 22 in. to 28 in. apart, so as to permit the intercultivation being done by means of the horse-hoe. Mangolds require a good free soil, and may either be drilled on the flat or put in with the ridger. The latter method allows a better distribution of manure, and the crop is easier to clean. The seeding should be at from 4 lb. to 6 lb. per acre.

Manuring should be generous, not less than 3 cwt., but generally from 4 cwt. to 6 cwt. will be found profitable. Mangolds like a complete manure, and for this reason special mangold-manures are very suitable—mixtures of half super and half Ephos, bonemeal, or Nauru; or three parts super and two parts bone, Ephos, or Nauru. Sulphate of potash, at $\frac{1}{2}$ cwt. per acre, added to these is an advantage. Salt is also very beneficial, especially in situations a fair distance from the sea. This should be broadcasted at the rate of 3 cwt. per acre, and harrowed a day or two before the crop is sown. In place of the sulphate of potash and salt, kainit may be used at from 2 cwt. to 3 cwt. per acre; it supplies both salt and potash.

CARROTS.

Carrots make a valuable forage crop for milking-cows in the late autumn and early winter; while for hard-fed horses a few each day when the grass is scarce are an excellent dietetic. Their suitability for sheep-feeding is dealt with in a special note elsewhere in this issue. The crop does best in a deep, sandy loam, with a free subsoil. Matchless White, Sinclair Champion, and White Belgian are good varieties for field purposes, being heavy yielders and easily lifted.

Where the area grown is not large the seed may be sown in drills 14 in. apart, and the rows hand-cultivated; this system generally gives the heaviest crop per acre. On the other hand, if the area is fairly large the sowing should be in drills 21 in. to 28 in. apart, with subsequent horse-cultivation. If properly worked, nearly as heavy a crop can be grown this way, and the labour is greatly reduced. For the wider drills sow at the rate of 1 lb. per acre, and for the 14 in. rows $1\frac{1}{2}$ lb.

Where great difficulty is experienced in growing swedes, owing to club-root and dry-rot, carrots should certainly be given a trial.

MAIZE-GROWING.

In districts where maize is grown for cob-production preparation of the land should now be well in hand. Maize is expected to make abundant growth during a comparatively short period, and the initial cultivation should be both deep and thorough. Under suitable climatic conditions the crop will thrive on a wide range of soils, but land that is cold or badly drained should never be selected.

Seed should have been chosen last autumn from the standing crop just before harvest, and careful selection is amply repaid by the increased yield resulting. About sixteen average cobs, or 15 lb. to 20 lb. of seed, are sufficient to sow an acre, the plants being about 10 in. apart in 3 ft. 6 in. rows. This will give the crop sun and air—all-important factors. October and November are generally the favoured months for planting. The seed should be set about $1\frac{1}{2}$ in. deep, and manure used according to the fertility of the land. Generally speaking, $1\frac{1}{4}$ cwt. to 3 cwt. of a mixture of super and blood-and-bone will give profitable results.

Thorough cultivation during the growing season is of prime importance, in order that weeds may be kept down and a good soil-mulch maintained, thus ensuring the steady growth of the crop. Constant use of the horse-hoe will be well repaid, however clean the land may appear to be.

CEREALS.

The fine weather experienced this month (September) has enabled farmers to sow wheat where spring sowing can safely be practised. Oats should not be sown later than October, and barley-sowing should also be completed then. Autumn-sown wheat should now be rolled and harrowed.