ever, in prairie lands, and wherever there is an abundance of rich vegetable mould, this imparts to the beets some acids and salts which are found exceedingly troublesome in the manufacture of sugar, reducing the quantity and the quality of the product. Carefully made experiments are therefore necessary in Manitoba before launching into unwarrantable expenditure.

However, it has been found in Russia that sugar beets do remarkably well on newly

cleared farms. Large crops of excellent sugar beets were produced without manure,

Soils containing much lime are generally preferred, as the beets they produce work better into sugar and contain a larger proportion than that obtained in other soils.

Sandy soils are not liked; whilst mostly all rich, well drained loams, containing less than 60 per cent of pure clay, are considered excellent for the production of the sugar beet.

However, as this industry requires a large capital, and as the returns will depend, to a very great extent, on the quality of the beets produced in the vicinity, it is therefore advisable to grow the beets and to test carefully their value with what is called the "Polarization Instrument" before establishing a factory in any district.

7. Sugar beets should be sown as soon as the soil is sufficiently dried, in early spring, to work without clogging. As a rule, the land should be thoroughly cleaned and prepared in the previous fall and sown as early as possible, to secure the moisture necessary

to the starting of the young plant.

They are best cultivated on the flat, rather than in drills, as it is important to grow them as much as possible under ground. The part which grows above ground, contains much less sugar in proportion to weight than that part which is kept under ground.

As small beets contain a much larger proportion of sugar, it is important to sow in rows from 18 to 20 inches apart, and to thin out the beets at from 7 to 10 inches in the

rows.

- 8. On the continent about 20 lbs. of seed are sown per acre, whilst in England 8 lbs. only are sown. However it is no economy to save seed at the risk of having many blanks in the rows.
- 9. Sugar beets, like all root crops, require deep and thoroughly clean cultivation, and the thinning of the crop should not be delayed; artificial manures such as guano, superphosphate, ashes, plaster, lime, &c., are very useful in giving the young plant a good start; but coarse barn yard manure should not be applied directly to this crop as they impart to the beets acids and salts, which spoil the juices for sugar making.

All coarse manures are best applied to the crop which precedes the beets.

9. Dry manures are more advantageous to the production of sugar in the plant, although the weight of crop is decreased thereby.

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