

seed ripens comparatively late, it is more liable to become frost-bitten in the fall. For this reason, in districts where early and late frosts are liable to occur, the growing of this kind of root-seed may prove too hazardous. Carrot-seed ripens very unevenly and has to be picked by hand over a period of several weeks. This means that the production of carrot-seed is liable to prove expensive except for home use unless cheap labour is available.

SELECTION OF ROOTS.

In the selection of roots to be used in seed production the grower must have a clear conception of the type he intends to breed. Having satisfied himself on an ideal type, it naturally follows that the roots selected will be free from disease and as close to perfection as can be obtained. Smooth healthy roots with neat crowns and free from prongs or irregularities are desirable.

LARGE OR MEDIUM-SIZED ROOTS.

Many people believe that the largest roots should be selected. They are of the opinion that the large amount of nourishment contained in the bigger roots will mean more seed and seed of a better quality. This, however, is a misconception.



A sunflower ridge to prevent cross-fertilization in a mangrove field.

Practical growers and experimenters agree that medium-sized roots produce seed equal both in quality and quantity with seed from large roots. This being true, there are many reasons why the smaller roots should be used. Smaller roots keep better. When the roots have to be stored for a long period, and where storing facilities are not the best, the importance of this character in smaller roots is outstanding. Again, smaller roots require less storage and are more easily handled. This is especially true when you come to planting, for all roots have to be covered well, whether large or medium-sized roots are used.

USE OF IMMATURE ROOTS (STECKLINGS).

Root-seed is sometimes grown from small, not quite developed roots, rather than mature medium-sized roots. If such a practice is followed, it must be borne in mind that the medium-sized roots are more easily judged for type, uniformity, and other general characters than the immature small roots known as "stecklings." Small roots usually appear smooth and of good quality to the eye of an inexperienced man. Therefore, until a grower has had a little experience it will be wise