

EXHIBIT  
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## PROVINCE OF BRITISH COLUMBIA.

## DEPARTMENT OF AGRICULTURE (LIVE STOCK BRANCH).

## ROOT-SEED GROWING.

BY WM. NEWTON, SOIL AND CROP INSTRUCTOR.



THE Province of British Columbia is dependent upon outside sources for root-seed at the present time. At no time is it wise for any province or country to depend upon outside sources for any commodity that can be profitably produced at home. This has been forcibly brought to our attention by the danger of our European supply being entirely or partially cut off. We need not be dependent upon Europe for our supply of root-seed, for all indications would suggest that there are numerous districts in British Columbia where root-seed production bids fair to become a profitable agricultural industry.

Our present standard of commercial root-seed is too low, both from the standpoint of the vitality of the seed and from the standpoint of type or variety. Our seedsmen are only partially to blame, for they have had to depend too largely on a foreign market for their supply. The favourable conditions for seed production in many parts of this Province would indicate that seed of excellent quality will be obtained if proper methods are followed.

## SELECTION OF SOIL.

For the successful production of root-seed, deep, well-managed soils are recommended, rich in humus and high in fertility. Draining is also very essential, for seed-roots must not have wet feet. Richness is absolutely essential. For this reason heavy applications of farmyard manure are necessary. Liquid manure for seed-roots is particularly desirable. Too often this valuable fertilizer is allowed to run away in the gullies instead of it being applied to the land. If farmyard manure is not available and commercial fertilizers have to be used, the nitrogen should be applied as sulphate of ammonia, rather than nitrate of soda, for the latter tends to cause too rapid a growth, with the result that the stalks are weak and are liable to be broken off or injured by the wind.

## WIND-BREAKS.

Better results are obtained when the seed plants are protected from the full force of the wind. Where some protection is given, either by trees, buildings, or even a few rows of corn grown alongside, not only will the danger of branches breaking off be lessened, but the vitality of the seed will be greater if some protection is given.

## CHOICE OF KIND.

It is usually advisable to grow the seed of that kind of root, whether it be mangolds, swedes, carrots, or turnips, that you are growing and find most suitable to your particular conditions. However, it must be remembered that the young mangel-shoots are more susceptible to frosts in the spring than swedes, and as the mangel-