

have no personal knowledge of the soil and climate of Taihape, but I understand it is very cold, with a late spring. If this be the case it cannot be considered an ideal place for growing onions. I know of no practicable way to protect the crops from snow and frost. It would be useless to sow until snow and hard frost is past, as a few degrees of frost would nip the tops and check growth. In the Manawatu district many people do not sow until middle of September, and succeed in ripening crops. Late sowing is not desirable, as there is additional risk from mildew. Sow Australian Brown Globe or Brown Spanish. These varieties mature well, as a rule. Sow as early as you think safe, having in mind the above remarks *re* frost and snow. Thin quickly and cultivate well to encourage rapid growth. Soot and wood-ashes are excellent fertilizers; so are superphosphate and bonemeal—two of superphosphate to one of bonemeal—3 cwt. per acre. To hurry growth, give 1 cwt. nitrate of soda immediately after thinning. Apply the other fertilizers two or three weeks before sowing. The soil should be prepared some weeks before sowing. If the land is in grass it should be ploughed in autumn, and well worked to break down the sods. It is necessary to secure a firm and even seed-bed by means of a levelling-drag and roller, or the drag only will answer both purposes if heavy enough. A rough slab of timber that one horse can pull makes a good drag. This implement will level small hollows and crush lumps. It is usual to sow the fertilizers at the same time as the seed, but I think that in the case of onions it should be broadcasted separately, in advance of the sowing. Three pounds of seed is sufficient for an acre. This Department is this season testing a new variety of onion, which is said to mature quickly. If this characteristic is proven, it will be a boon to growers in such places as Taihape, where the season is short.

CALIFORNIAN THISTLE.

MR. D. R. BARRON, Arrowtown:—

I should be glad if you would kindly answer the following question for me through the columns of your *Journal*: If horses are fed on oaten chaff which contains Californian thistle, is there any likelihood of the seed germinating after it has passed through the animals?

The Fields and Experimental Farms Division replies,—

Numerous instances have been recorded of thistle-seeds germinating after being eaten by stock, and there appears to be a likelihood of Californian thistle being spread in this way.

SWEDE-TURNIP ROT.

MR. ARTHUR E. PEARCE, Konini, Waituna West:—

Can you give any information regarding the cause of swede-turnip rot? I have a crop affected with it this season, and should like to know if there are any preventive measures that may be taken. Are any of the varieties of swede proof against the disease? Is the trouble more prevalent on land that has produced a succession of root crops?

The Biologist replies,—

Swede-turnip rot, which is a bacterial trouble, cannot be controlled in any practical manner. In districts that are liable to the disease great care should be used in selecting land that has not grown a root crop for some years. There are several distinct swede rots, and I would be obliged if some specimens were sent me.

TURNIP-DISEASE.

“DARWINIAN,” Karamea:—

By this mail I am sending you one swede, also 5 lb. of soil for analysis. All my swedes are the same, with dark, hard centres, which renders them unsuitable for table use. The soil I am sending is a sample of the ground in which they were grown. It