

CALIFORNIAN-THISTLE SEED.

THE QUESTION OF GERMINATION.

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QUITE a general impression exists among farmers, more particularly in the South Island, that the seed of Californian thistle will not germinate, especially that found in imported lines of agricultural seeds, notably alsyke. Recently . Degegen, of the Buda-Pesth Seed-control Station, sent me Californian thistle seed taken from a European grass-seed sample, to ascertain if they would germinate on arrival in New Zealand. The seed was put to germinate, and 25 per cent. sprouted within twenty-one days. This definitely shows that the presence of Californian thistle in imported seed is a distinct menace. With regard to the seed of the New Zealand Californian thistle, this germinates quite freely under the ordinary methods employed for the determination of the vitality of seeds. It is significant that the impression that Californian-thistle seed will not germinate in New Zealand invariably prevails in districts where the weed is most prevalent. Is it that the wish is father to the thought?

MANURING : THE IMPORTANCE OF APPLYING ARTIFICIALS BELOW THE SEEDS.

THE obvious fact that artificial manures are more effective when placed below the seed than when applied on the surface of the soil is being demonstrated at Ruakura Farm of Instruction at the present time in connection with several forage-crop experiments. The effect is most striking with a crop of peas and millet where the manure was applied by means of an ordinary grain-drill below the seed and at the same time, the growth (dense and vigorous) is excellent, being fully three times the weight of the crop grown where the manure was broadcasted on the surface and the seed afterwards drilled in. Not only this, but only half the manure was used where it was drilled in below the seed. In an experimental mangel crop the great advantage of drilling in the manure is also strikingly demonstrated.

Splendid crops of red clover are to be seen throughout the pumice country this season—in the Lichfield, Putaruru, Okoroire, and Rotorua districts. Large well-saved stacks of the valuable red-clover hay are to be seen in many places.