#### INOCULATED SOIL FOR LUCERNE.

### Mr. J. Bice, Te Rehunga, near Dannevirke:

1. Kindly inform me where I can get some inoculated soil for lucerne.

2. Would it be possible to buy a small quantity?

3. I sowed lucerne-seed last October—a patch a chain square. It grew splendidly for three months, then withered down and disappeared.

### The Director of Fields and Experimental Farms Division replies,—

I. Inoculated soil may be obtained from the Manager of the Moumahaki Experimental Farm, Waverley, at a cost of 2s. per cwt. f.o.r.

2. Small quantities may be obtained.

3. It is impossible to give any reason for the failure of your lucerne crop, as I am not familiar with the conditions of your soil, &c.

#### ARTICHOKES.

### Mr. A. H. Wheeler, Rotomanu, Westland:

What is the most suitable manure for artichokes; the best time to apply; and in what quantities, to produce tubers for pig-feed, on land consisting of sandy loam that has produced a good crop of artichokes this season, and pigs turned in to root for themselves? Most of the stalks and all the leaves were eaten by calves. Rainfall abundant.

### The Fields and Experimental Farms Division replies,—

Farmyard manure is undoubtedly the best, but if this be not available the land should be well prepared in the autumn and given a good dressing of 4 cwt. of superphosphate on the lighter classes of land or 5 cwt. of basic slag on heavier land. Where the land is sandy or gravelly an application of 2 cwt. of kainit added to the above would be beneficial. Kainit mixed with super., however, is difficult to sow through a drill unless mixed with peat or humus.

#### LINSEED-GROWING.

# Mr. S. C. Harris, Poranui, Banks Peninsula:

The land is heavy loam, on a sandy clay subsoil.

1. The correct depth to sow seed?

2. Should the seed be pickled with bluestone or anything else?

3. Should every coulter run?

4. Is manure—3 cwt. of super. and ½ cwt. of sulphate of potash—necessary on rich land?

5. Is there a danger of fat-hen smothering young plants?

6. Does frost hurt young plants?

7. Are there any diseases to contend with? 8. Can crop be cut with a reaper-and-binder?

9. Does it shake easily when ripe?

10. Is the best time to cut flax when absolutely dead ripe?

Four crops of wheat and three crops of barley have been taken off land previously.

# The Director of Fields and Experimental Farms Division replies,—

I. The depth to plant varies somewhat with the soil and season. On heavy, wet soils the seed should be planted shallower than on the lighter soils. In ordinary soils this should not be deeper than 1 in. to  $1\frac{1}{2}$  in.

2. It may be necessary to pickle, but as the plant is liable to disease, formalin is recommended as the cheapest effectual solution. Mix I pint of formalin with 40 gallons of water. This would treat 100 bushels of seed. Spread the seed on a floor and spray with the solution. Stir the seed rapidly during spraying, and continue the stirring for some time to aid the drying.

3. Seeds should be planted in rows 6 in. to 8 in. apart. By this method the

plants have a better chance to branch and form seed-bolls.