In undressed seeds there is likely to be a whole host of impurities. Danish cocksfoot as it lands in New Zealand is frequently infested with ox-eye daisy; imported timothy and alsike may contain Californian thistle; while imported red and white clover frequently contain dodder.

This recommendation to sow only machine-dressed seed may seem unsound to many farmers on old arable land, where undoubtedly the weed-seed content of the soil is often enormous—so much so that a few more added by way of the grass-seed mixture seems to be insignificant. In the *Journal* for January last, page 20, the writer records that in one single strike over fifteen million weed-seeds germinated per acre, representing a seeding of about 100 lb. The really great danger of sowing impure seeds, however, lies in the fact that new extremely troublesome weeds may be introduced. Here, again, the merchant often gets blamed for supplying clients with impure seeds, when the root of the trouble lies in the seed or plants already in the farmer's field. A very common complaint in many districts is the rapid appearance of Californian thistle in fields that have been ploughed out of grass and then resown. The merchant almost invariably gets blamed for the thistles, whereas really in 99 cases out of 100 they are young shoots from old worn-out plants regenerated by the cultivation.

From another aspect, however, the machine-dressed seeds are the ones to use, for, apart from any misgivings one who takes a pride in his farming might have in knowingly applying weed-seeds to the land, there is that one important attribute usually associated with machine-dressed seeds—namely, their capacity to grow. With machine-dressed seed one is more certain of getting seeds that will grow than when buying undressed seeds. Nevertheless because seed is machine-dressed it does not necessarily mean that it is of high germination.

PLACE OF ORIGIN AND STRAIN OR TRUENESS TO TYPE.

As far as our grasslands are concerned there has been virtually no selection work on the ordinary pasture plants, so that no definite strains have been worked up into marketable products. There is, however, a general consensus of opinion that the nationality or place of origin of our pasture seeds is very important, although not many definite tests made in New Zealand are available. A short consideration of some of the leading plants may serve to demonstrate this factor.

Perennial Rye-grass.—In those districts where perennial rye-grass remains permanent in the pasture over a long period the seed from crops grown there is looked upon as being superior to that grown in districts where, owing to the unsuitable soil conditions, rye-grass does not last for more than two or three years. Hawke's Bay and Sandon rye-grass, for instance, commands a price much in excess of that commanded by Canterbury or Southern rye-grass. In a price-list before me Hawke's Bay rye-grass is quoted at 7¾d., Sandon 6½d., Southern 4½d., and Canterbury 4¾d. per pound respectively. Whether or not the persistence of the Hawke's Bay and the Sandon rye-grass is due to some inherent quality of these strains, or whether the soil conditions alone are responsible, it is extremely difficult to say. If the plants of those soils have some inherent quality by which they can persist,