



Surface Sowings

Surface sowings by runholders during the last year or two have shown that cocksfoot and white and red clovers will establish and survive, at least in the valley floors and on shady faces. Experimental evidence shows that lucerne will also grow on this country.

All the evidence available indicates that the introduction of cocksfoot, lucerne, and, on valley floors and shady faces, white and red clovers is likely to give satisfactory results.

Several other species of grass such as *Bromus inermis*, *Bromus marginatus*, and tall oat grass look promising, but cannot be evaluated until grazing trials lasting a year or two have been conducted. Grazing trials are essen-

tial to ensure not only that the grasses will grow but that they will be grazed readily by sheep. For example, love grass (*Eragrostis curvula*) established and grew well in plant nurseries, but was completely neglected when an area of it was opened for grazing by sheep.

Numerous trials carried out by the Department of Agriculture have shown that pasture species can be introduced most satisfactorily by burying the seed in the ground. Several makes of machine are now available which either disturb the soil or make grooves into which the seed can fall. Wherever it is possible to take wheeled machinery this method is advocated.

Where machinery cannot be taken the only method of introduction is surface sowing. This can now be done

For many years the vegetation of the depleted country of Central Otago has been dominated by the mat-forming, grey scabweed. Tussock and matagouri have survived in moist places. The trees in the middle distance are in a fenced-off plot which was sown in 1922.

rapidly by the use of aeroplanes and with this method the cost is a great deal less than that for hand sowing. However, the strike of seed resulting from aerial sowing on the ground is not nearly as good as that from mechanical sowing of the seed in the ground.

So far the ingress of the annual plants and the introduction of perennial grasses and clovers have been considered. It is necessary to realise that native grasses, too, are recovering,