

## Oversowing Clovers in Southern Hawkes Bay

TRIALS carried out in the southern Hawkes Bay district over a number of years have shown that clovers can be established successfully on hill country pastures by oversowing. Though there is admittedly an element of luck in securing a good strike from oversowing, a proper appreciation of the principles involved and a determination to put them into practice will go a long way toward success and L. W. Blackmore, Instructor in Agriculture, Department of Agriculture, Dannevirke, here advises on application of these principles.

THE factors of importance are: Selection of species suitable for the country to be oversown; sowing when the chances of success are greatest; proper preparation of the country to receive the seed; use of sufficient phosphatic fertiliser, especially in the initial stages of development; careful management during initial establishment, and full utilisation of the extra feed grown.

There must be a proper balance of expenditure on seed, manure, and fencing on the one hand, and numbers and kind of stock on the other.

## Suitable Species

Because of variations in rainfall, soil, slope, aspect, and wind intensity in different parts of southern Hawkes Bay, the mixtures most suitable for oversowing will vary a good deal from one locality to another. White clover is by far the most important single species for oversowing and should be included in all mixtures, except, per-

HEADING PHOTOGRAPH: It is of little use oversawing high-producing species of clovers if the phosphorus status of the soil is too low to allow them to thrive. Aerial topdressing with phosphatic fertilisers has enabled the more valuable clovers to be introduced into many previously poor hill country pastures.

haps, on the driest soils. Though it may not contribute a great deal of feed on the drier country in seasons of lower-than-average rainfall, it will show up again in wetter years, and with the build-up in fertility over the seasons will gradually become more predominant in the sward. White

clover is a perennial and has a remarkable capacity to spread by overground runners. The amount of this clover in a mixture should never be reduced in favour of any other species without very good reason.

Where rainfall is low and where soils do not hold moisture well, particularly over summer, subterranean clover, which is an annual, should be the main constituent in the mixture. This species does particularly well on open-textured soils. It is a prolific seeder and had a remarkable capacity to re-establish from seed each year with the autumn rains, thus ensuring



White clover is a perennial which has a remarkable capacity for spreading by overground runners. It is the most valuable of all pasture clovers and should always be included in mixtures for surface sowing on hill country, except perhaps on very dry soils.