

On very light soils deficient in humus it may be advisable to precede lucerne by a crop such as lupins, red clover, tares, or oats, which, used for green manuring, builds up the soil-fertility.

Because of its better surface drainage, land which is slightly undulating is at times preferable to that which is quite level. It is also of value to have a lucerne field sheltered from the prevailing wind.

PREPARATION OF THE SEED-BED.

Lucerne-seed being relatively small the preparation of the seed-bed becomes of prime importance. To enable the seed to be sown at a uniform depth and not too deeply, a fine, firm seed-bed is necessary.



FIG. 2. LUCERNE AREA IN CENTRAL OTAGO, SHOWING CROP MOWN FOR HAY.

To obtain this a liberal amount of preparatory cultivation, commenced well ahead of the time of seed-sowing, must be carried out. Fortunately the cultivation which will most readily produce a suitable soil-tillth will also tend to destroy weed seedlings that develop in the surface layer of the soil during the period of preparation.

If lucerne is to follow old pasture it is usually advisable to skim plough the land in the autumn or early winter, and whether or not skimming has been carried out it is desirable to plough the land in the late winter or early spring to a depth of 5 in. or 6 in. For this ploughing it is as a rule advantageous to use a skimming attachment designed to remove the surface slice and place it in the open furrow. This not only buries surface weed-seeds, but also assists in the production of the desirable firmness in the seed-bed. Subsequent preparatory cultivation should be fitted to produce a fine, firm seed-bed without disturbing the original surface layer.