

## LUCERNE IN THE WELLINGTON, TARANAKI, AND EAST COAST DISTRICTS.

C. J. HAMBLYN, Fields Superintendent, Department of Agriculture,  
Palmerston North.

IN two papers read by officers of the Department of Agriculture at the 1936 conference of the New Zealand Grassland Association, the growing of lucerne as a forage crop in districts of relatively high rainfall was dealt with. The area covered by the papers included the Manawatu and west coast from Paraparaumu to the Patea River(1) and Taranaki(2). During the subsequent discussion on these and other papers the present position and general trend in regard to lucerne-growing in the Wairarapa, Hawke's Bay, and Poverty Bay districts were also touched on. It is the intention here to review briefly some of the more important points in regard to the cultivation of lucerne in the southern portion of the North Island as discussed at the conference.

In general, while none of the area can claim to have climatic and soil conditions comparable with those of the great lucerne-growing countries of the world, there are in many of these districts conditions under which lucerne thrives and where the crop is of considerable value in providing an abundance of green, nutritious food during dry summers, and excellent material for hay for use in the winter months. Evidence was forthcoming to show that lucerne has during the past twenty to thirty years been tried out under practically all kinds of conditions of soil and climate in this portion of the Island, and that there has been a sorting of the localities in which lucerne can be established and maintained successfully, and where the crop fills a definite need in the farm.

Two outstanding features appear to be common to those areas where lucerne can be said to be an important feature of the farms, first, a freely draining subsoil, and second, dry summers, if not annually, then at least once in a while and frequently enough at any rate to bring out the value of lucerne as a green forage crop as compared with the pastures with which it has to compete for its place on the farm. Another feature which is common to lucerne-stands throughout the area under review, and which is a limiting factor in the life of the stands, is the favourable conditions during the autumn, winter, and spring for the growth of weeds and grasses which can seldom be dealt with at this period of the year by cultivation, owing to the moist soil conditions.

The general trend throughout the area is for lucerne to be concentrated in those localities where favourable conditions of soil and climate, as described already, occur together. Because sheep are less dependent on green fodder in dry summers than are the dairy cows, the largest area in the aggregate is to be found on the dairy-farms, though the stands are individually smaller than is the case on sheep-farms. There has been a definite and continued increase in the acreage of lucerne throughout the southern provinces, and there is still scope for extension. The problems in connection with the further utilization of lucerne can best be discussed by reviewing the position district by district.