

the end of four years fertilizer response on Te Kopuru sand show an outstanding response for basic slag plus lime, whilst basic slag alone was equal to superphosphate plus lime. Superphosphate alone gave a disappointing response, while no response was given for potash.

Superphosphate on the Red Hill sand and basic slag on the Te Kopuru sand appear to be the best types of phosphate, while a good establishment of white clover is necessary to supply the nitrogen. The experiments show that there is a general lack of response to lime alone, but lime gives an increased response when used in addition to superphosphate and basic slag.

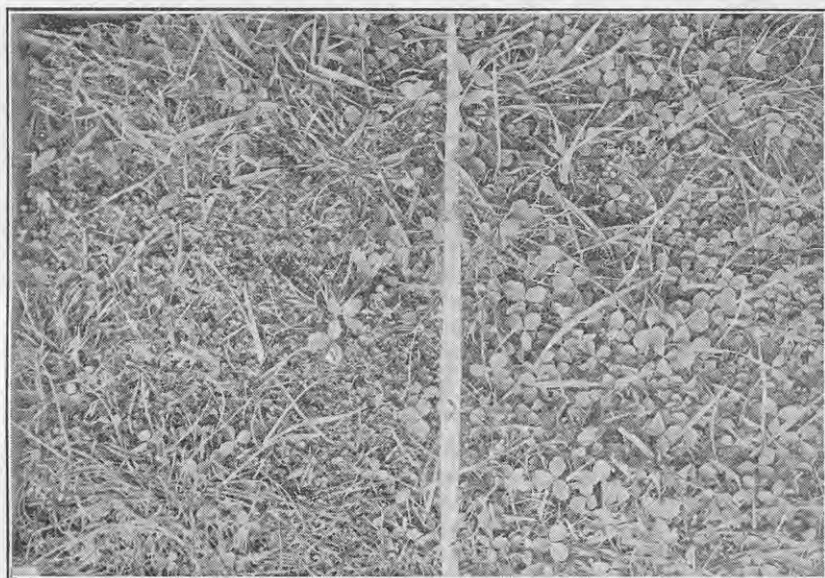


FIG. 9. SUPERPHOSPHATE MAINTAINS AN EXCELLENT PASTURE SWARD ON RED HILL SAND.

Pasture was sown autumn, 1932, both plots received same treatment at laying-down. Right-hand portion of picture has been top-dressed annually with superphosphate at 3 cwt. per acre; left-hand portion shows rapid deterioration taken place after discontinuing annual applications of superphosphate for two years—white clover is being replaced by suckling clover, rye-grass is becoming open and lacking vitality.

GRASSING.

The areas of Red Hill sand, being younger, have not been leached to the same extent as the Te Kopuru sand. They make good dairying land and are being fairly rapidly developed for this purpose. The soil is light, not very well supplied with humus, and the development into high-class dairying pastures requires