

Land Development on a Northland Problem Soil

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IN 3 years an area of 50 acres on one of the problem soils of Northland has been raised from a unit producing practically nothing to a farm producing 120lb. of butterfat per acre. With casual work which is available in the district the owner is now able to obtain a satisfactory living.

THE farm is 12 miles north of Kaeo, the soil being known as Rangiuuru clay, which is deficient in molybdenum. When the present owner, Mr. J. Peterson, took over shortly after the Second World War he began by regrassing 24 acres, but the pastures deteriorated because of the use of unsuitable fertiliser, inadequate stocking, and lack of finance. During this period Mr. Peterson worked on farms in the district and managed to build his own house.

In late 1952 he obtained a loan of £2970 from the Maori Affairs Department and began development work in earnest. The whole area was disced, fallowed for 12 months, rediscd, harrowed, rolled, and finally sown to pasture in March 1954. One ton of lime and 3cwt. of superphosphate per acre were applied at sowing down, and though the grass and clover struck well, subsequent growth was poor. A new milking shed was built and by September 1954 11 cows were being milked.

As the soil was known to be deficient in molybdenum, it was topdressed with 3cwt. per acre of molybdenised superphosphate in October 1954 and 20 tons of lime were applied at the same time. Results were encouraging, but it was too late in the season to increase the herd, so 6 acres were closed for hay and yielded 104 bales per acre.

Butterfat production figures for 1955-56 and 1956-57 were 6000lb. and 4882lb. respectively. Despite the fall in the last season it is considered that 6250lb., the potential estimated by the Maori Affairs Department in its development plan, will soon be reached.

Upper—The farm early in 1956; 3 → years before pastures were run out and almost no stock could be carried. Middle—Improved portion of farm and undeveloped land. Lower—The district has large areas of undeveloped land which could be developed to give production similar to that obtained on Mr. Peterson's farm.

