

Under good cultivation, following a legume and given favourable weather conditions, it is quite possible to get 30 tons of potatoes per acre. To set about it, space the rows 26 in. apart, equivalent to thirty rows in a chain. Space the sets in the row 12 in. apart. There will then be required 19,800 sets to plant an acre. If the sets weight 2 oz. each it will take 1 ton 2 cwt. 11 lb. of seed to plant an acre. Estimating the average yield per plant to be 3.4 lb., 19,800 plants \times 3.4 lb. gives 30 tons per acre. Some of my seedlings at Weraroa this year have yielded more than 3.4 lb. per foot of row.

PUWERA GUM-LAND EXPERIMENTAL AREA.

THE following note on recent operations at the Department's gum-land experimental area at Puwera, near Whangarei, North Auckland, is supplied by Mr. R. Rowan, Fields Supervisor:—

Varieties of swedes, mangolds, carrots, maize, sorghum, soya beans, field-peas, kale, and millet were sown this season on the plots. Although late in being planted, and to a certain extent kept back by a wet spring and succeeding dry period, the plants made good growth and proved an interesting test. The results so far have satisfactorily demonstrated to farmers that these lands are capable of producing both pasture and f \ddot{o} rage crops if the land be properly cultivated.

All varieties of clovers and grasses came on well. Lodino, strawberry, red, and white clovers, Wakeman's fescue and meadow-fescue, Western Wolths rye-grass, crested dogstail, prairie-grass, and several others particularly evidenced the possibilities of gum-lands and their suitability for producing feed for stock. Nine varieties of lucerne were sown, Hunter River, Patagonian, Marlborough, Arabian, and Peruvian prominently indicating their ability to thrive on these lands.

The main factors which caused the excellent growth on the plots were drainage and subsoiling, the latter being specially necessary to permit of the surface water finding its way through the underlying hardpan.

The growing of oats—Algerian and Ruakura varieties—was a success. After they were about 5 in. high the land was tine-harrowed to break the hard crust on the surface. The crop is intended for chaffing. A splendid crop of hay was taken off one acre, equal in weight and quality to that produced on much richer land.

The pasture area, which had been limed, produced a fine sole, the rye-grasses and red clover making a heavy growth, which checked the growth of sorrel.

Pig-foods.—Buttermilk free from salt is fully equal to separated milk for the feeding of pigs, and is specially valuable for the young growing pig. Comparing other feeding-values, approximately 430 lb. of skim-milk is equal to 100 lb. of grain; 744 lb. of whey is equivalent to 100 lb. of meal; 100 lb. of meal equals 500 lb. to 650 lb. of roots. The presence of soda in pig-food, unless in small quantities, is injurious.