31 H.-29.

EXPERIMENTAL AREAS.

Puwera.—In the past the main object of the work on this area has been to determine the best and at the same time most economic method of converting gum-land into permanently productive grassland suitable for milk-production. The investigation showed that excellent grass-land, estimated to carry, with only a moderate extra winter-feed provision, one milking-cow to about 2½ acres, can be produced at a cost of £15 per acre, including full payment for all labour involved, provided £1 per acre is spent on annual top-dressing with phosphatic manure. With this point elucidated the next point was to discover by careful study the actual butter-fat-producing capacity of the pastures established, and with this object in view the area was converted into a dairy farm in 1925. As the season has not yet closed the results are not available, but so soon as the season has finished a detailed report will be submitted. The present indications are that a carrying-capacity of one cow to $2\frac{1}{2}$ acres can easily be secured on gum-land that has been well laid down in grass and is properly managed. This means that gum-land represents, so far as dairying is concerned, the cheapest land in New Zealand, and its rapid development in this direction in the future should be

assured provided the work of bringing it into profitable use can be financed.

Albany.—This area, originally established to ascertain what useful plants were suitable for gum-land soils, has now but little value, and steps are being taken for this Division to cease work

Marton.—The work at Marton has been much on the same lines as last year, and comprised cereal variety testing, wild-white-clover-seed production, and an elaborate series of top-dressing trials testing the comparative efficiency of very finely ground Nauru rock phosphate and the ordinary grade of fineness respectively. Various clover-seeds were sown at Marton during the year for comparative purposes. The white clover varieties are imported wild white, imported ordinary white, colonial white, and New Zealand once-grown imported wild white; while the red clovers sown are imported genuine late-flowering red, ordinary imported red, New-Zealand-grown red, and Vale of Clywd red (from Wales).

Ashburton.—Wheat variety trials have been continued, as have also the soil-fertility-increase trials. Work in the selection of pure lines of seed potatoes is also carried out. The lucerne fields, comprising about 34 acres, have provided an excellent object-lesson, and its influence is reflected in the largely increased acreage of lucerne being sown on suitable land in the Ashburton district.

Gore.—Variety testing of roots and potatoes represents the main work of the year—in the case

of roots particularly from the aspects of dry-rot and club-root.

Winton.—The main work is the comparative economics of temporary, short-rotation, and permanent grass-land under varying systems, and these trials continue to have a great effect upon the grass-land management in Southland.

Galloway.—Dairying has been carried on at Galloway during the year to demonstrate the butterfat capacity of irrigated soil in Central Otago. So soon as the season closes a detailed report will be

furnished.

Waimaunga.—A dairy herd was established during the year, and a full report on the operations will be furnished at the close of the season.

Subsidized Farms.—The subsidized farms at Stratford and Manaia have continued to do useful demonstration work. A third subsidized farm has been established at Dargaville, and good results so far as farming in the Dargaville portion of North Auckland is concerned are confidently looked for.

CO-OPERATIVE EXPERIMENTS.

Co-operative experimental work has, as in the previous year, been mainly confined to manurial trials. In general these are of a demonstrational character, but in some localities they are conducted on the most modern lines of field experimentation where the results can be accurately interpreted on statistical lines. This latter method means greatly increased work, but the results are much more satisfactory from an instructional standpoint. It is hoped to have this form of experimentation more generally used as fresh experiments are put in hand.

WINTER FARM-SCHOOLS.

During the year farmers' classes were held in 22 centres, as compared with 10 centres in 1924, and the number of farmers who attended was almost three times as great as in 1924. This was accomplished by holding in two or three districts travelling schools and limiting the time devoted to lectures to two or three days instead of spreading them over a week. The gathering together of groups of farmers, with the natural interchange of views which takes place, is, apart from the instruction given, of the greatest value.

RUAKURA FARM TRAINING COLLEGE.

This institution, established in 1923 at the Ruakura Farm of Instruction, continues to fill a longfelt want, and about forty students, carrying out a two-year course of directed study and practical farm-work, are in residence.

Boys' and Girls' Agricultural Clubs.

These clubs are still conducted in the Auckland, Taranaki, Wellington - West Coast, Wairarapa, and Otago districts, and on the west coast of the South Island. A considerable increase in the number of clubs, especially in the Taranaki, Wellington - West Coast, and Wairarapa districts, has taken place.