

RUAKURA FARM TRAINING COLLEGE.

This institution continues to fill a long-felt want, and about thirty-five students are at present in residence. The course, which was formerly a two-year one, has been cut down to a one-year course, and as much practical instruction as possible imparted to the students.

BOYS' AND GIRLS' AGRICULTURAL CLUBS.

These clubs are still continued in various districts in the Dominion, particularly in Taranaki, Wellington-West Coast, and Wairarapa districts. They are doing good work. Unfortunately, the running of the clubs takes up a considerable amount of the time of the Instructors in Agriculture in the districts mentioned, and I propose to go into the whole matter very shortly with a view to ascertaining whether some other satisfactory means whereby less time of the senior Instructors in Agriculture would be taken up cannot be devised.

During the year a handsome challenge shield for competition in connection with boys' and girls' agricultural clubs was kindly donated by Messrs. Henry A. Lane and Co., Ltd., London, through their New Zealand agent, Mr. G. H. Buckeridge, of Hawera. The thanks of the Department are due to the donors for their kindly action. In addition to this shield, a challenge cup, presented some years ago by Mr. Stuart Wilson, Wellington, is annually competed for.

FARMERS' FIELD COMPETITIONS.

These competitions continue to be carried out, and in certain districts, particularly in Taranaki and in Wellington-West Coast, they take the place of co-operative demonstration plots. Interest in the competitions is well maintained and their value to the farming community is undoubted. It has been arranged that in future, in addition to judging these competitions, the Department will definitely associate itself with the movement by giving certificates of merit to the first-, second-, and third-prize winners.

CERTIFICATION OF FIELD CROPS.

During the year the Department arranged for work in connection with the certification of seed potatoes and seed wheat to be put in hand in Canterbury. The object of certification is to supply information that will enable merchants and growers to obtain seed that is true to name and reasonably free from seed-borne diseases. In the case of seed-wheat certification, the Department has co-operated with the Department of Scientific and Industrial Research through the recently formed Wheat Research Committee. There is no doubt that certification will have a far-reaching effect, and the practice will extend to other crops in the near future. The experience gained in the certification of wheat and potatoes during the 1927-28 season will be invaluable so far as extending the scheme to include other crops is concerned.

THE HEMP INDUSTRY.

The principal phormium areas are reported as healthy in regard to the condition of the plant but, unfortunately, the industry is not in a flourishing condition, mainly on account of the fall in prices combined with the high cost of production. Several companies are at present operating in the Dominion in the growing of *Phormium tenax* under cultivation; but it will be some few years yet before any considerable area of cultivated *Phormium tenax* is available for milling. During the year Mr. W. H. Ferris, Hemp-grader, was detailed to carry on instructional duties among the numerous flax-mills, and many millers have expressed their appreciation of the Department's action in placing the services of Mr. Ferris as an instructor at their disposal. It is anticipated that as a result of the work of Mr. Ferris as an instructor a considerable improvement in the quality of hemp coming forward for grading will be noticeable.

The production of fibre during the year has shown an increase when compared with the previous year. The amount of hemp graded for the year ended 31st March, 1928, was 89,130 bales, as compared with 87,871 for the previous year, an increase of 1,259 bales. The quantity of tow graded was 26,557 bales, as against 25,445, an increase of 1,112 bales. Of stripper tow 1,548 bales were graded, as compared with 2,079 for the previous year, a decrease of 531 bales. The number of bales of stripper-slips graded was 2,373, as against 2,629, an increase of 256 bales.

Of the hemp graded, 6.56 per cent. was good-fair, 33.26 per cent. high-fair, and 45.01 per cent. low-fair grade; 12.18 per cent. of the tow was first grade, 56.93 per cent. second grade, and 27.63 per cent. third grade; stripper-tow was 12.27 per cent. first grade, 70.93 per cent. second grade, and 14.4 per cent. third grade; of stripper-slips 5.89 per cent. was first grade, 30.55 per cent. second grade, while 59.96 per cent. (which was below first and second grade) was allowed to be exported for use mainly in the manufacture of cheap lashings, for which it has been found useful.

BIOLOGICAL LABORATORY.

A prominent feature of the year's work has been the discussion of various means of reorganizing, locating, and accommodating the Laboratory, so that greater facilities might be given for its increasing activities and that it might be advantageously co-ordinated with allied institutions that have recently been established. The first fruits of this work are to be seen in the removal of a section of the Laboratory to Palmerston North, here to form the nucleus of a new organization, the Plant Research Station. This first step was precipitated largely on account of an urgent need for land for experimental purposes. Later it is intended to associate with this new organization the scientific staffs and functions both of the Biological Laboratory and of the remainder of the Fields Division.