

TEACHING.

The enrolment of students was most satisfactory, and far exceeded expectations. The numbers were as follows: Degree course, 9; diploma course, 32; dairy-farming short course, 11; herd-testing course, 33; total, 85. This number of students taxed the available accommodation to its fullest extent. Fortunately further accommodation will be available for next year, and in some cases the increased staff will permit the division of the larger classes into two sections, thus lessening some of the congestion.

As a result of the experience gained of the weaknesses of the class of students coming forward, certain amendments will be made to the non-degree courses which, it is hoped, will improve them for their respective purposes.

The Students' Association which has been formed is endeavouring to work up social and athletic activities among the student body, but for the time being there are obvious limits to the organization of this aspect of the College.

RESEARCH.

The last year has seen a considerable expansion in the programme of research. In conjunction with the Department of Scientific and Industrial Research, the College is now undertaking work on problems connected with dairying and dairy manufactures, the breeding and feeding of pigs, wool-improvement, and the production of improved varieties of *Phormium tenax* and the causes and control of "yellow-leaf" in the flax. Independently, research is being carried out on the improvement of dogstail-grass by breeding and selection, the relative values of our more common varieties of mangolds based on dry-matter contents, the soft-heart rot of mangolds, the top-dressing of pastures with various phosphatic manures and also with complete fertilizers containing nitrogen, the cultural treatment and the improvement by plant-breeding of lucerne, and a systematic study of the *Lotus* species in use as pasture plants.

Dairy Research.—The Dairy Research has been organized as the Dairy Research Institute (N.Z.) with headquarters at this College. The general direction of the work is carried out by the Dairy Research Management Committee of the Department of Scientific and Industrial Research, on which body the College has two representatives, while Professor Riddet of the College has been appointed Director. The Management Committee has appointed Dr. McDowall and an assistant as Dairy Chemists, and Mr. Whitehead and an assistant as Dairy Bacteriologists, to aid Professor Riddet in this work. The College has agreed to the utilization of the services of Mr. Valentine, the Factory Superintendent, and the factory staff, and to the use of the dairy factory and milking-sheds and herds for the purposes of this research. Further, the College has agreed to provide the necessary laboratory accommodation. The results obtained by the Institute will be published in bulletin form by the Department of Scientific and Industrial Research.

Pig Research.—The work in connection with pigs is also being carried on under the Dairy Research Management Committee, and the results obtained will be published in the same form as those from dairying. The College has agreed to provide the stock and accommodation required, and the Management Committee has appointed Mr. Brown as Pig Recording Officer to gather statistics on pig breeding and management in this province and to assist Professor Riddet with the experimental work.

Wool Research.—The research in the improvement of wool has been but recently commenced, and its organization is not yet complete. Discussions have taken place between representatives of the College and the Wool Research Committee of the Department of Scientific and Industrial Research, and while no definite arrangement had been made before the close of the period covered by this report, it would seem that the Department is prepared to provide assistance to enable a considerable programme of work to be carried out. In the meantime Dr. Dry and myself have been busily engaged on a preliminary survey of the wool of the more important stud flocks, in company with Mr. Scrivener, who has been studying the various soil and climatic conditions involved in the production of the different wool types.

Flax Research.—The work on *Phormium tenax* is being carried out by the Field Husbandry Department of the College under the general direction of the Flax Research Committee of the Department of Scientific and Industrial Research. Dr. Yeates has been entrusted with the present work, which takes the form of a systematic search of the country for strains of flax possessing one or more characters of outstanding value, and the crossing of such strains with the object of producing improved varieties for commercial purposes. A nursery for the comparison of parent plants under similar conditions and for the growth of seedlings has been established, and a further and larger area for field trials has been prepared. In view of the fact that plans have been formulated by the various companies in the field for the planting of areas of this crop, this work is of considerable importance.

The positions of the various problems being investigated independently by the Field Husbandry Department are as follows:—

Dogstail-grass (Mr. Jacques).—The work on dogstail has already produced results, a number of distinct types having been isolated. Careful notes are being made by Mr. Jacques of the habits of these types from the pasture point of view, there being gradations from an early, heavy-seeding, and poor-leaf-bearing type to a very late, light-seeding, and very leafy type. This material will be multiplied this autumn to enable trials to be carried out on a larger scale during next summer. Seed has also been collected from a further number of promising locations, since it is far from likely that the material so far studied contained representatives of the full range of normal variants.

Lucerne.—Manures (Mr. Scrivener); inoculation (Mr. Waters); cultural (Mr. Jacques). In the case of lucerne, experiments have been laid down in connection with manurial, inoculation, and