

The control of rabbits and noxious weeds has been rendered unusually difficult by a number of factors, such as the absence of the heavy rains which usually check the rearing of rabbits, the high prices and scarcity of carbon disulphide, the scarcity of labour, and the enlistment of a number of the Department's officers in the Expeditionary Forces. Special exertions will therefore be necessary to prevent these pests increasing their hold. Nevertheless much good work in this way has been done during the year, and several of the officers are entitled to great credit for their part in bringing this about.

The grading of hemp (phormium) has been continued, the quantity dealt with showing a large increase for the year. The high prices for the lower grades, and the prevalence of pests in one of the chief hemp districts, has resulted in the production of a large amount of fibre of comparatively low quality.

The continued substantial increase in the area of commercial orchards in the Dominion and the favourable season for certain pests has kept the work of the orchard instruction service at high pressure, and a great deal has been accomplished by personal visits, public addresses and demonstrations, and correspondence, towards the advancement of the industry. This is evidenced by the general adoption of better methods in the orchard and packing-shed and the consequent improvement of the fruit received for local sale or export.

As the work of three of the Department's experimental farms—Tauranga, Te Kauwhata (formerly called "Waerenga" or "Wairangi"), and Arataki—was mainly in connection with horticulture, the control of these properties was transferred during the year from the Fields Division to the Horticulture Division, and they will in future be known as horticultural stations. At Tauranga the operations were interfered with by the ill health and subsequent retirement of the Manager, Mr. W. C. Berridge, after being honourably connected with the institution since its inception. The main work at Te Kauwhata was in regard to the preparation of fruit-farms for subsequent occupation by settlers. In addition the usual operations were carried on, including the stripping and sale of a quantity of wattle-bark, and the growing of a considerable area of grapes, from which sound wines were produced. The sales of these wines are increasing satisfactorily. A plant for the making of unfermented wine on modern lines has lately been installed. The Arataki Horticultural Station is being greatly improved, as indicated by the exhibits contributed to the Department's displays at several of the agricultural and pastoral shows. In a few years this station will, it is hoped, be of high value to the horticulturists of Hawke's Bay.

There are now in the Dominion over sixty fruit-testing plots worked by growers in co-operation with the Department. These are beginning to yield a large amount of information regarding the varieties of fruit best suited for growing in their localities. They also provide suitable places for the Orchard Instructors' demonstrations of approved methods.

The grading—*i.e.*, classification of lines—of export fruit by departmental officers was continued on an optional basis, but lack of shipping facilities prevented an extension of the quantity sent out of the Dominion.

The supervision of the work of controlling orchard pests was actively continued, and owing to dry weather much spraying was needed to keep certain diseases in check, although the same causes assisted in combating fungus troubles.

To prevent the introduction of disease the inspection of all fruit, plants, &c., imported into New Zealand has been systematically and successfully carried out at the ports of entry.

The inspection of vineyards and vinehouses has been continued, and instruction in wine-making has been provided where required. The table-grape production of the Dominion is now estimated to be worth over £25,000 per annum.

Beekeeping is steadily improving its position as one of the Dominion's established industries, and the four Apiary Instructors had more work than they could contend with in meeting the requirements in regard to inspection, instruction, and export grading. Their efforts are, however, resulting in better work by many beekeepers, and the output has been greatly improved in quality. Some experimental work for the guidance of those engaged in the industry is being initiated at the apiary at the Ruakura Farm of Instruction. The new regulations for the compulsory Government grading of honey for export are working smoothly.

The ordinary work carried out by the Dairy Division with great efficiency has included the grading of all dairy-produce intended for export; the check-weighing and moisture-testing of a large portion of the export produce; the inspection of dairy factories and, where required, the instruction of those working them; the inspection, as far as the limited number of officers would allow, of the premises of farmers supplying inferior milk to the factories; assistance to those contemplating the formation of co-operative dairy companies; advice to those building or altering factory premises or equipment; check-testing of milk or cream for factory-managers or suppliers; instruction in the making of fancy cheeses; supervision of herd-testing; and semi-official testing of purebred cows.

Special duties have comprised work in connection with the large purchase of cheese for the military requirements of the Imperial Government, and the buying of butter and cheese for the camps and transports of the New Zealand Expeditionary Forces. The officers of the Dairy Division who have so willingly carried out this work are deserving of special thanks.

A large number of additional cheese-factories were registered during the year, many of them being in new localities.

A difficulty having arisen regarding the interference of the war-conditions with the future supply of rennet for cheesemaking, much information was obtained from the High Commissioner and the Dairy-produce Inspector on his staff, and has been submitted to those interested.

Much good work has been done by the Dairy Instructors by assisting in extending to a further number of factories the system of pasteurizing milk for cheesemaking. A great improvement in the flavour of the product should result.

The Department has now found it advisable to require that all butter made from whey cream shall be branded with the words "whey butter."

The prospects of the export of casein being favourable, one of the Dairy Instructors has carried out some successful experiments in the extraction of casein from buttermilk.

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