

likely to improve overseas marketing and to assist in maintaining the high position held by New Zealand honey on the English market.

The total number of apiaries registered is 7,621, comprising 116,050 colonies of bees, and despite the difficulties which have been associated with the industry a number of apiaries are being extended or established.

In general, disease is being controlled satisfactorily, this being due partly to the valuable services rendered by private beekeepers serving as honorary apiary inspectors.

TOBACCO.

The total area planted in tobacco in the Dominion during the 1934-35 season was approximately 1,800 acres: in the previous year the area in tobacco for commercial purposes was 2,500 acres, and this represented a reduction relative to the year before it. An experimental shipment of this season's tobacco-leaf is to be made to the United States.

The small-farm settlement at Pongakawa in the Bay of Plenty grew 40 acres, in comparison with 100 acres of tobacco in the previous season, and produced a good yellow flue-cured leaf. There is renewed interest in the growing of hops, which have been increased in area because of the improved prices obtained. Considerable planting in regard to tung oil has taken place in North Auckland, the total area in tung-oil trees now being estimated at 3,500 acres.

HEMP (PHORMIUM).

The condition of the hemp industry is indicated by the fact that the number of bales submitted for grading—18,814—was 3,343 less than in the previous year. It appears that some of the initial difficulties relative to the manufacture of wool-packs and sacking are being overcome, and if so this augurs expansion of the activities of the factory opened at Foxton last year with consequent benefit to producers of flax (Phormium) in that territory.

SEED-GROWING.

The official certification of seed was extended to embrace Italian rye-grass during the year under review. A pioneering step of potential importance was the sowing of considerable areas of pasture seed originally produced at the Plant Research Station, the objective being the production of pedigree seed of strains superior to the strains commercially available. An assured result of the free use that is being made in New Zealand of certified seeds is better pastures and arable crops. A further possible result is that official certification may lay the foundation of a valuable subsidiary primary industry dependent partly perhaps on an export trade in seeds, but also on the use of locally grown seeds replacing the use of seeds now being imported.

THE USE OF ARTIFICIAL FERTILIZERS AND LIME.

The results of fertilizer trials carried out by the Fields Division over a period are being translated into practice rapidly.

Wheat-manuring trials carried out in the South Island showed that the use of 1 cwt. of superphosphate an acre with wheat gave an average increase of 4 bushels an acre. Many wheat-growers at once applied this knowledge and the number doing so continues to increase: in 1928-29 fertilizer, chiefly superphosphate, was used on 66 per cent. and in 1934-35 on 82 per cent. of the acreage sown. Similarly the results of fertilizer field trials have brought about increased use of fertilizers in potato-growing.

Kindred experiments have been, and are being, conducted in connection with pastures and other crops for the purpose of obtaining more comprehensive and exact knowledge. Though outstanding future results are not altogether likely the information already obtained points to the advisability of continuing the work as a means to greater detailed knowledge specially applicable to definite districts and conditions. The survey of the response of New Zealand grassland to various classes of fertilizers and to lime is a task of major importance which has already provided practical guidance of considerable moment. For instance, it throws useful light, possibly unexpected by many, on the variations in the response of grassland to lime from district to district. It would seem that some farmers err by spending money on lime and others by not spending enough money on lime. The position is broadly the same in respect to potash.

The artificial fertilizers carried by rail for the twelve months ended 31st March, 1934, were 74,450 tons more than in the previous twelve months. The Dominion figures in tons for the years