

THE INSTITUTE OF HORTICULTURE.

The Institute has become definitely established, and it should prove an organization of great value in bringing about a continued advance in New Zealand horticulture. Legislation designed to give the Institute a definite status has been drafted, and it is hoped that it may be brought down during the coming session.

TOBACCO-CULTURE.

Tobacco-culture has been stimulated by the giving of a guarantee on the export of tobacco-leaf of a sufficiently high standard of quality. An Instructor has been appointed, and a considerably increased area planted in the Nelson District. The prospects of this becoming a useful and productive industry are good, and very recent developments suggest that there is no likelihood of any call being made upon the guarantee by growers.

IMPORTATION OF FRUIT.

The necessity for taking all possible precautions for preventing the introduction of further disease into the Dominion renders it necessary to keep a careful watch and maintain an efficient inspection of all fruit introduced from overseas. This is, perhaps, especially necessary in the case of citrus fruits, the growing of which has extended considerably of late in the northern districts of the Dominion. Inspectors at the ports are doing good work, and, if found necessary, recommendations will be made for increasing their powers.

BEEKEEPING.

This very useful industry continues to expand, but it is a matter for regret that unfavourable weather conditions last spring caused some trouble.

The members of the instructional staff were kept fully occupied in carrying out their duties, and the requests for their services are increasing, both as regards direct advice and the giving of lectures and demonstrations. The quantity of honey exported was considerably less than in the previous year, but well up to that of preceding years, the value being £34,695.

It is satisfactory to note that New Zealand honey has attained a high reputation in the Home market, the prices secured being well in advance of those for honey imported into the United Kingdom from other countries. An important factor in this connection, no doubt, is the care exercised in maintaining a high standard of quality, while judicious and extensive advertising has also been of marked assistance.

No less than 7,500 apiaries are now established in the Dominion.

INVESTIGATION INTO BUSH SICKNESS AND INTO THE MINERAL CONTENT OF PASTURES GENERALLY.

This important research work, under the direction of Mr. B. C. Aston, F.I.C., F.N.Z.Inst., Chemist to the Department, has made steady progress during the year, and expansion in the volume of work already in hand will be enabled as a result of the generous grant lately made by the Empire Marketing Board for the purpose of furthering this research.

Mr. Aston, in his report, gives details of the work done. A good deal of misconception appears to exist regarding what has already been accomplished and what is already known regarding bush sickness. The cause, well designated "iron-starvation," has been established, and accepted as correct by the scientific authorities in the United Kingdom. "Sick" animals can be brought back to normal health, while still upon affected country, by being medicinally treated with an iron compound, either citrate of iron and ammonia, or syrup of phosphate of iron. In like manner they can be kept healthy by periodic medicinal treatment by the same preparations.

On the Department's farm at Mamaku by good farming methods, including the laying down of good pastures, suitable top-dressings, frequent changes of stock from paddock to paddock, and the growing of root crops and saving of hay for winter feed, also a certain amount of molasses feeding, dairy cattle are kept healthy over long periods and are milking well. Last season twenty cows were milked, and they did well throughout the season. Admittedly, it has taken some years to bring the pastures into this condition, but it does demonstrate that the trouble is capable of being overcome. A further point worth mentioning is that cows fattened on the Mamaku farm on more than one occasion last year topped the fat-stock market at Westfield, and these cows had no medicinal treatment. There are cows being milked on the farm which were bred there and which have never been off it.