

Research Work.—A great deal of research work on beekeeping problems has been carried out in conjunction with the Plant Diseases Division, Auckland, and at the Animal Research Station at Wallaceville. This work included the use of pollen substitutes, humidity in relation to low specific gravity and fermentation of honey, and the effect on hive bees of D.D.T. when used extensively for the control of orchard pests. Other experimental work commenced during the year is being continued.

Employment of Beekeepers.—To maintain the production of honey and commercial beeswax at as high a level as possible, a number of competent beekeepers were employed in the various apiary inspection districts to assist the Department's permanent officers in the detection and control of bee diseases. Working under this seasonal arrangement, 18,563 hives were inspected, and reports indicate that the disease situation generally in the areas inspected is well in hand.

Expansion of Beekeeping in New Zealand.—A survey by counties was completed during the year to ascertain the scope for additional apiaries in the Dominion. This shows that the overall spread of commercial apiaries in partly stocked and understocked districts suitable for the production of good-quality marketable honey could be increased at present by at least 20,000 hives. Expansion beyond these limits will be possible as new country is cultivated and sown in permanent pastures.

While present apiary inspection districts are very large and the calls for extended services in various directions tend to increase, the beekeeping industry as a whole was serviced very effectively by departmental officers during the year.

EXPERIMENTAL WORK

Hazel Nuts.—Experiments in hazel-nut culture were continued in Tauranga and Gisborne districts. The trees are growing well, and this year a few nuts were gathered. New varieties have now been planted alongside the older trees for pollination purposes, and future results are awaited with interest.

Sunflowers.—Trials are being conducted with three new imported varieties of sunflowers. They were grown in Tauranga, Blenheim, and Motueka districts. The seed has been harvested and appears to be of good quality. Samples are being submitted to the Dominion Analyst for analysis of oil content, while specially selected seed has been saved for future sowing as required.

There is no doubt that this crop can be grown successfully in the Dominion and that these new varieties are more satisfactory than those previously grown here. It is, however, too early to say whether or not the crop will prove to be a commercial proposition, due to labour costs in harvesting and separating the seed from the heads.

Raspberries.—A study of the physiological trouble in raspberries is being made in the Tadmor district, Nelson, where cultural and spraying trials are being carried out in conjunction with the Plant Diseases Division.

It is also proposed to institute co-operative trials in the Wairarapa district at Greytown for the purpose of investigating the causes of the recent decline in the vigour and cropping capacity of certain raspberry plantations.
