17 A.—3.

" Packing-sheds and Fruit-inspection.

Rarotonga.—The scheme of district packing-sheds (seven) instituted last year has so far worked smoothly, the Native growers co-operating with the Fruit Department in making the task of centralizing the work of packing and inspection a success. All sheds have been fitted with engines, graders, weighing-machines, bins, and tables, and the telephone has been installed.

Besides attending to the inspection of fruit, the Administration will this year supervise the

grading and packing of oranges for export, thus ensuring a standard grade and pack.

The Copra Regulations are being enforced, and buyers are co-operating with the Department. "Aitutaki.—Two of the buying firms at this island have installed engines and graders, and have also made packing-tables to handle their output. The consignments last year were well packed and the appearance of the fruit was good. Aitutaki is fortunate in having an orange which is a good carrier. A colony of the Chalcid Wasp parasite of the Mytilaspis and Lecanium scale was taken from Rarotonga and liberated in Aitutaki to cope with an outbreak of scale there.

"Atiu.—Mr. Bouchier, Fruit Inspector, spent some weeks at Atiu, giving demonstrations in orange-packing, and much improvement was noticeable in the consignments. With only three or four visits from the Auckland steamer the tendency is to try and handle too much fruit in the limited time at disposal for picking and packing; consequently the handling and packing is not given sufficient

attention, and loose packing and inferior fruit is evident.

"Mauke.—The same remarks as stated for Atiu apply to Mauke—if anything, to a greater extent. Mauke has not the population to handle a large shipment in the limited time, and, moreover, this period cannot be extended by picking the crop earlier, as the island oranges are not good keepers. "Mangaia.—As stated in previous reports, the Mangaian oranges, bananas, and tomatoes are of

excellent quality, and worthy of more notice by buyers. No doubt the arrival of consignments in bad condition during past seasons has prejudiced New Zealand buyers. Last season a marked improvement was noticeable, and if the handling and packing is carried out in the approved manner I see no reason why Mangaian fruit should not become the best in the Group.

"Experimental Nursery.

"All sections of the nursery have been kept in a good state of tilth by continual ploughing, harrowing, and cultivation, and the citrus and other ornamental trees have been frequently hand-

"Pruning has been carried out on all the citrus-trees, and many of the young trees have been

sprayed for scale insects.
"Cow-peas were sown between rows in the sections. The yield of seed was particularly good, and over 600 lb. have been distributed to growers. Part of the crop has been ploughed under to act as a green manure.

Over two hundred mango seedlings have been grafted with scions from approved varietiesnamely, Tahitian No. 1, Haden, and Indian Tomato Mango—and these are being distributed free to

planters.

"Experiments have been carried out in tobacco-cultivation.

The value of Three varieties of seed were obtained from New Zealand, and sown in a prepared seed-bed. The varieties were Adcock and Warne (cigarette and pipe tobaccos), and Havana (cigar tobacco). Two months after sowing the seed the young seedlings were planted out on land that had been well cultivated and manured. Constant attention was given to the plants, and part of the crop was reaped two months after planting out. From an experimental point of view, and also taking into consideration the question of expense, the drying and curing were carried out most economically. The plants were cut off near the base, and the drying and curing were carried out in one of the existing nursery sheds. The method employed is known as the air-curing process, but on several occasions during heavy rain fires had to be used to prevent the leaf from going mouldy. A consignment of cured leaf of the three varieties has been forwarded to New Zealand for a report on the quality, value, and commercial prospects.

"A number of rough lemon seedlings have been budded to approved varieties of citrus, and many

of the young trees have been permanently planted out on the nursery.

"Varieties of tomato-seed—namely, Norton and Marglobe—were imported from America. These were specially selected for their wilt- and rust-resistant qualities. Over four hundred packets were distributed to growers, and reports seem to favour Norton. Seeds of these varieties have been saved, and will be tested out again this year.
"Good crops of Hickory King maize and Kaffir corn have been grown, and the seed freely distributed

to all the islands of the Lower Group, also to local planters.

"Samples of ginger and tumeric grown on the nursery were sent to New Zealand for report, but the cost of preparing the spices does not appear to warrant the growing on a commercial scale, owing

to New Zealand obtaining supplies from China.

"The West African oil-palms (Elais guineenis) are now firmly established on the nursery.

They were planted out permanently over four years ago, but have not made the same amount of growth as the ordinary coconut would have made in that time.

"In the schoolboys' section, in which young citrus-trees are now growing, fifty seedling cocoatrees have been planted between the citrus. This has been done solely for experimental purposes.

"Balsa-wood seed (Ochroma lagopus) was received from Tahiti, and, after germinating on the nursery, young seedlings were distributed to the islands of the Lower Group. Seedlings planted on the nursery have already attained a height of 3 ft.