

Arataki Experimental Farm.

On the 9th September, 1911, fourteen rows of apples were treated with agricultural salt at the rate of 3 lb. per tree, each row having a check row of same variety untreated to determine results, which were as follows: The treatment had no effect on the few trees that were slightly attacked with woolly aphid, but the trees treated showed a better development of growth than those untreated. The soil round the treated trees also held the moisture up to the surface all through dry summer, and no doubt this accounted for the extra growth. Another point worthy of notice in this experiment is that the treated rows only had to be hoed round once at later end of season, the salt keeping the weeds in check, while those untreated had to be hoed round every two or three weeks.

Moumahaki Experimental Farm.

On the 19th September, 1912, a line of cordons, sixty-two in number, were selected, and of these fifty were sprayed with a solution of salt, the balance, twelve trees, being unsprayed. The solution used was 2 lb. salt to 3 gallons of water. The fifty trees were also treated to a mulching of salt at the rate of 5 lb. to twelve trees. There is no apparent difference between the condition of those treated and the untreated ones.

Weraroa Experimental Farm.

Experiments were duly carried out in accordance with instructions. The spray was found to be more effective against the aphid than any other spray used, but the same difficulty of reaching all the affection exists, and, though the work was carefully carried out, aphid soon showed on the trees. Further, this spray had not the slightest effect on scale, and would therefore be impracticable where both pests existed. The ground-dressing had no effect on the aphid whatever, although the application was repeated at a later date, about two months after the first.

AMERICAN DEPARTMENT OF AGRICULTURE.

IN concluding his sixteen years' work of directing the United States Department of Agriculture, Secretary Wilson reviews the progress of American agriculture during that period, and in particular the development of the Department of Agriculture, more particularly its great publication work. When Mr. Wilson (a native of Ayrshire) took charge, says a bulletin of the International Institute of Agriculture, in the year 1897 the farm production of the United States was worth £800,000,000; it ended in 1912, with a production valued at £1,906,400,000. The number of persons employed by the Department of Agriculture grew from 2,444 in 1897 to 13,858 on the 1st July, 1912, and the appropriations for the Department increased from £654,580 for the fiscal year ending 30th June, 1898, to £4,948,609 for 1913. In 1897 the mail requests for publications of the Department barely exceeded 500 letters per week. During the past year the weekly mail has exceeded 52,000 letters. With a printing fund of £23,377 the different publications printed in 1897 were 424, and the editions aggregated 6,541,210 copies; in 1912, with an appropriation of £941,000 the different publications were 2,110, aggregating 36,678,557 copies. In 1897 the number of employees on the Publications Division was 61; in 1912 they aggregated 197, an increase of nearly 225 per cent.

The 13,858 persons employed by the Department do not by any means represent the expert and administrative officers placed at the service of the American farmer, for each State has its own Department and experiment station, the whole vast network being under the controlling influence of the Federal Service, which has been developed on such progressive principles by the late Scots-American Secretary and Administrator.