

SCHEDULE 4.—Trees, &c., transferred from Rotorua Nursery to Forest Plantations—*continued*.

Where sent.	Description.	Number.	Value.
			£ s. d.
Whakarewarewa Plantation .. ..	Details above .. ..	2,078,250	4,352 2 5
Waioapu Plantation .. ..	" .. ..	2,410,573	5,086 5 1
Native School, Oruanui .. ..	Shelter-trees .. ..	250	0 13 6
James Dunning, Waitomo .. ..	Larch .. ..	200	0 2 6
Hunua Scenic Reserve .. ..	Pinus ponderosa .. ..	2,000	4 10 0
Public School, Putaruru .. ..	Shelter and ornamental .. ..	100	1 9 6
Tourist Department, Rotorua .. ..	Liriodendron tulipiferum .. ..	100	5 0 0
Native School, Rotoiti .. ..	Shelter and ornamental .. ..	37	0 18 3
		4,491,510	9,451 1 3

H. A. GOUDIE,  
Nurseryman in Charge.

## RUATANGATA NURSERY.

(Area, 65 acres; altitude, 320 ft.)

Rain fell on 181 days during the year, with a total fall of 59·33 in., the maximum fall being in July, when 6·81 in. fell, on 26 days. Maximum temperature, 82°; minimum temperature, 28°. There were 13 frosts recorded, the maximum being 4°, on 1st and 8th August. It will be noticed that the rainfall for the year is much lower than that of the previous year, which was 95·66 in.; but, although there has been 36·33 in. less rain fallen, there has been no scarcity of water, as the rainfall was more evenly distributed throughout the year, as will be seen per record of rainfall attached.

The average temperature was also lower, being 54·16, against 55·33 last year; the prevailing winds being north and south-west.

In consequence of the cooler weather, the lined-out trees have not made the usual strong growth; but, at the same time, they are a good hardy looking lot, and quite large enough for transplanting.

There were 156,250 trees lined out, at an average cost of 3s. 5½d. per thousand. The lining-out season this year was a fairly good one, the work taking exactly two months, commencing on the 24th June. *Podocarpus totara* and juniper have done very well, and Californian redwood have made excellent growth, but tideland spruce have only made medium growth.

During the first week in September 80 lb. of *Podocarpus totara* seed, gathered locally, was sown; this germinated splendidly, and produced a fine crop of about 300,000 seedlings. 8 lb. of seed of *Sequoia sempervirens* was sown in November, with no results, the seed evidently being infertile.

The eucalypti-seed was sown at two different periods, to insure a good supply of trees at the proper time for the mossing, as this work extends over about five months. The first lot of seed was sown during November and the remainder late in December. 2 lb. each of the following species were sown: *Eucalyptus resinifera*, *E. rostrata*, *E. Stuartiana*, and 3 lb. of *E. amygdalina*: the whole of these have done well with the exception of the latter, which germinated rather thinly.

Owing to the scarcity of sphagnum moss, and the expense of procuring this, it has been decided to discontinue the mossing of the eucalypti in large numbers. A small planting of the different species unmossed was experimented with last season, and was a decided success, and it is intended to try a much larger quantity this season. It has also been decided to discontinue growing *Podocarpus totara*. Although these trees do well in the nursery, they are a complete failure when planted out permanently.

During the winter months 276,400 eucalypti and 5,600 *Acacia melanoxylon* were mossed by day-labour, costing 14s. 9d. per thousand; this includes all labour and expenses connected with the work. The total number of trees of all ages in the nursery at 31st March, 1909, was 832,500, valued at £1,601 7s. 6d.

The number of trees sent out to Puhipuhi Plantation during the season was 536,450, valued at £1,456 12s. 6d.

The approximate number of trees available for the plantation this season is 420,000; the total number of trees raised at the nursery since May, 1903, is 2,317,868, valued at £5,013 13s. 9d.

The total number of trees transferred to Puhipuhi Plantation since the inception of this nursery is 1,488,245, valued at £4,019 10s. 10d.

As reported last year, the various species of trees planted in the experimental plantation adjoining the nursery are doing well, with the exception of the break of *Eucalyptus pilularis*, consisting of about 250 trees, from 10 ft. to 20 ft. in height. These were attacked by the canker-worm, which was completely defoliating them; and it was decided to fell and burn these, in order to protect the remainder of the plantation from the pest, and, so far, this has proved effectual.

*Quercus suber* seedlings, reported to be doing well last season, have not made the growth that was anticipated, the majority of them still being about the same height. A few trees planted five years ago are doing well, being thoroughly established.

About 4 acres of very heavy fern land at the back of the nursery was burnt off, and, as time permitted, this was ploughed and cultivated, and is now fairly clean; it is proposed to sow this down in Algerian oats, in order to try and choke the fern.

Two swamps—one in the horse-paddock and another in the centre of the nursery—were drained by forming about 31 chains of stone and tile drains. The seed-bed ground was extended, also the water-service, and land graded for lining-out purposes.