

in such a variety of climates that it is impossible without actually testing them to say which will succeed here. Specimens of each variety will be planted out during next spring, and a selection made for future guidance, while the remainder will be sent to the Ruatangata Plantation, near Whangarei, in order to test their suitability to that climate.

Following is a brief description of the varieties which have already been tested here:—*Amygdalina* (peppermint gum): Hardy; thrives in a hot or cold climate, but prefers rich soil, in which it sometimes attains a height of 400 ft.; timber adapted for fencing-posts, shingles, and rough building purposes. *Rostrata* (Victorian red-gum): Not hardy here. *Teretecornis* (forest red-gum): Very hardy; timber valuable for posts, piles, street-paving, railway-sleepers, and general building purposes. *Stuartiana* (apple-scented gum): Extremely hardy; timber very hard, and useful for fencing-posts and fuel. *Coriacea* (syn. *pauciflora*—white-gum): One of the hardiest of fast-growing gums; does well at almost any elevation, but thrives best in moist soil; the timber is adapted for ordinary building and fencing purposes. *Melliodora* (yellow box): Not hardy here. *Obliqua* (stringy bark): Very hardy, does well in poor dry soil; timber extensively used for fencing-rails, palings, and shingles. *Globulus* (blue-gum): Quite hardy, but discarded for extensive planting here on account of its liability to attacks of the leaf-fly. *Viminalis* (manna gum): A swamp gum; will grow on almost any soil, and stands frost well; very fast grower; timber inferior in contact with the ground.

Of the preceding varieties, *E. teretecornis*, *E. coriacea*, *E. Stuartiana*, and *E. amygdalina* have been selected for the extensive planting here, and about one hundred thousand of each of these varieties will be transferred to the plantation during the spring. With a view to minimising the loss usually attending the transplanting of gums, preparations are being made to tie the young plants separately in sphagnum moss, and line them in closely under seed-frames covered with manuka scrub until about October, when they will be transferred to their permanent positions in the plantation.

It is intended to increase the annual output of this nursery to four million trees of all classes, and preparations are being made to enlarge the present stable and workshop, prepare more seed-sowing land, and make extra seed-protecting frames.

Expenditure for the year amounted to £1,739 19s. 9d., and the average number of persons employed was thirteen.

The following is the record of rainfall and temperature for the year:—

Record of Rainfall and Temperature at Rotorua Nursery.

Month.	Rainfall.	Number of Days Rain fell.	Highest Reading of Thermometer.	Date.	Lowest Reading of Thermometer.	Date.
1902.	Inches.		Degrees.		Degrees.	
April	7.55	11	72	5th, 6th	29	20th
May	3.60	10	67	10th	29	24th
June	5.65	12	61	6th	25	2nd
July	0.58	3	57	31st	24	18th
August	3.88	7	57	5th	25	12th and 31st
September	4.88	16	61	7th	25	10th
October	4.61	10	70	8th	30	20th
November	0.97	6	74	22nd	32	5th and 21st
December	1.28	8	84	13th	38	3rd
1903.						
January	9.23	15	76	13th	39	12th
February	3.36	6	81	17th	35	3rd
March	1.15	4	78	11th	32	22nd
Totals	46.74	108	...	...	...	...

H. A. Goudie,
Nurseryman in Charge.

WHAKAREWAREWA PLANTATION. (Area, 817 acres; established 1899.)

DURING the year the area planted was increased from 229 acres to 317½ acres, representing trees to the number of 159,933, which were planted during July and August. In addition to this, blanks in former planting, amounting to 31,860, were replaced, and a hedge of *Berberis Nepaulensis*, using 2,000 plants, was planted. The loss in transplanting does not amount to more than 4 per cent., and all the newly transplanted trees have a good healthy appearance.

As a rule in this district very little height-growth results during the first year, but on the approach of the second spring the trees show wonderful vigour. Some of the larch which were planted here in September, 1901, have made during the season 3 ft. of height growth, while the *Pinus Austriaca* (which are slower growing than the larch) have made fully 15 in. Both these