

or *Pinus Laricio*, is extremely small. *Pinus austriaca* is being used only on small patches of poor dry land, on exposed hill-tops chiefly, where it would not be advisable to plant a more valuable tree ; hence very few are planted.

Larch and *Pinus Laricio* are considered by competent authorities to be the best of the European conifers. Simpson, in "The New Forestry," says of larch, "Under ordinary favourable conditions a crop of larch is sure to pay" ; and then he goes on to give a comprehensive list of the uses of the timber, which is perhaps superseded only by that of the oak.

The same authority also says of the *Pinus Laricio*, "If the Scotch fir is ever superseded, we venture to think that it will be by this species." And, again, "It thrives in almost any soil, and were it desired to plant fir extensively anywhere we should certainly plant Scotch and Corsican firs, and expect the latter to take the lead from the beginning."

Scotch fir does not thrive in New Zealand, but it is evident that with larch and *Pinus Laricio*—our chief crops—we are planting the best European species. *Pinus austriaca*, then, occupies only a very small place in our operations.

Judging from the rapid growth made by the various species of trees in New Zealand, it might be considered almost certain that the results obtainable in seventy years in Germany and elsewhere on the Continent could be obtained in sixty years in this Dominion. I am therefore of opinion that in from seven to ten years from date some return will be obtained from some of the State plantations, particularly at Whakarewarewa and Waiotapu, and an approximation of such return is given in table below.

NUMBERS OF TREES THINNED FROM AN ACRE OF PLANTATION FROM TIME TO TIME, AND THEIR PROBABLE MARKET VALUE.

	Estimated Thinnings from Larch, or <i>Pinus Laricio</i> .			Thinnings from Eucalypti.		
	Number of Trees.	Estimated Value.	Total Value.	Number of Trees.	Value.	Total Value.
		s. d.	£ s. d.		s. d.	£ s. d.
At 15 years .. ..	1,950	2 0 each	195 0 0	600	2 6 each	75 0 0
" 20 " .. ..	250	2 6 each	31 5 0	..	..	..
" 25 " .. ..	200	4 0 "	40 0 0	..	..	..
" 30 " .. ..	100	6 0 each	30 0 0	300	3 0 each	45 0 0
" 35 " .. ..	..	..	..	300	†	250 0 0
" 40 " .. ..	30	10 0 each	15 0 0	..	..	..
" 45 " .. ..	170	*	187 10 0	..	..	..
" 50 " .. ..						
" 60 " .. ..						
Total .. ..	2,700	..	498 15 0	1,200	..	370 0 0

\* 30,000 sup. ft. at 12s. 6d. per hundred.      † 40,000 sup. ft. at 12s. 6d. per thousand.

H. A. GOULDIE,  
Superintending Nurseryman, North Island.

(C.) NOTES ON THE GROWTH OF FOREST-TREES IN CANTERBURY.

By way of introduction, I may be allowed to state that for more than forty years I have annually planted a considerable number of forest-trees, and made the planting of trees my especial hobby, never losing sight of the utilitarian side of the subject, so that now I have growing probably about a thousand species or varieties of trees and shrubs, some of the earlier-planted trees being over 100 ft. in height and 3 ft. in diameter. There are also growing here hundreds of trees over 50 ft. in height, and thousands of trees from 20 ft. to 50 ft. high. Besides the experience gained at Greendale I have travelled much in New Zealand and watched the growth of trees from the far south to the extreme north, and think that, after over fifty years of planting, sufficient evidence could be gained of the value of the different species to avoid the planting of so many worthless species of trees which one sees planted every year.

For myself, were I planting for profit alone, or a future national timber-supply, I should confine myself probably to not more than twelve species of trees for the whole of New Zealand ; but, as "man does not live by bread alone," it is very desirable that the landscape should be beautified by hundreds of different species of native and introduced trees and shrubs, the wood of many of which would be useful for special purposes.