

NUMBER AND VARIETIES OF TREES PLANTED IN THE SOUTH ISLAND.

Name of Tree.	Common Name.	Number in Plantations.	Uses to which Timber may be put.
<i>Acer pseudo-platanus</i>	Sycamore	280,400	Furniture, reels, blocks, &c.
„ <i>saccharum</i>	Sugar-maple	3,425	„ „ „
<i>Aesculus hippocastanum</i>	Horse-chestnut	2,025	Turnery, rollers, furniture.
<i>Alnus glutinosa</i>	Alder	82,730	Cigar-boxes, brooms, charcoal.
<i>Betula alba</i>	English birch	210,945	Bobbins, elogs, staves, &c.
<i>Castanea sativa</i>	Spanish chestnut	2,150	Fencing, furniture.
<i>Catalpa speciosa</i>	Hardy catalpa	50	Sleepers, fencing-poles.
<i>Corylus avellana</i>	Filbert	650	Carving, inlaying.
<i>Cytisus laburnum</i>	Laburnum	16,875	„ „ „
<i>Eucalypti</i> (vars.)	Gums	4,250	Poles, building construction.
<i>Fagus sylvatica</i>	English beech	4,250	Piano-making, tools, furniture.
<i>Fraxinus excelsior</i>	„ ash	432,560	Coach-building, tool-handles.
„ <i>americana</i>	American ash	12,850	„ „ „
<i>Griselinia littoralis</i>	Broadleaf	2,350	Fencing material, building-piles.
<i>Juglans regia</i>	Walnut	37,130	Gunstocks, furniture, &c.
<i>Larix europaea</i>	European larch	4,773,361	Fencing, pit-props, gates, &c.
„ <i>leptolepis</i>	Japanese larch	2,850	„ „ „
<i>Picea excelsa</i>	Spruce fir	1,187,225	Moulding-poles, flooring, paper-pulp.
„ <i>sitchensis</i>	Tideland spruce	166,505	„ „ „
„ <i>canadensis</i>	White spruce	1,400	„ „ „
<i>Pinus austriaca</i>	Austrian pine	1,634,524	Building construction, poles, scaffolding, joinery, &c.
„ <i>Benthamiana</i>	Bentham's pine	140,400	Ditto.
„ <i>contorta</i>	Twisted pine	1,325	„
„ <i>halapensis</i>	Aleppo pine	1,325	„
„ <i>Jeffreyi</i>	Jeffrey pine	250	„
„ <i>Laricio</i>	Corsican pine	2,343,605	„
„ <i>maritima</i>	Cluster pine	7,000	„
„ <i>muricata</i>	Bishop's pine	45,440	„
„ <i>ponderosa</i>	Bull pine	602,986	„
„ <i>radiata</i>	Monterey pine	17,150	„
„ <i>rigida</i>	Pitch-pine	2,312	„
„ <i>strobus</i>	Weymouth pine	10,705	„
„ <i>Torreyana</i>	Torrey's pine	440	„
<i>Pseudo-tsuga taxifolia</i>	Oregon pine	207,205	Ship-masts, building material.
<i>Populus</i> (vars.)	Poplars	17,875	Packing-cases, brake-blocks.
<i>Pyrus aucuparia</i>	Rowan tree	5,195	Turnery, carving.
<i>Quercus pedunculata</i>	English oak	370,550	Furniture, ship-building, &c.
<i>Robinia pseudo-acacia</i>	Black locust	85,025	Fencing, cabinetmaking, &c.
<i>Salix</i> (vars.)	Willows	2,000	Crickets-bats, charcoal.
<i>Sequoia sempervirens</i>	Redwood	200	Cabinetmaking, joinery, &c.
<i>Sophora tetraptera</i>	Kowhai	1,875	Fencing, dowels, joinery.
<i>Thuja plicata</i>	Pacific red cedar	25	Shingles, fencing, weatherboards.
<i>Ulmus campestris</i>	English elm	775	Pulley-blocks, wheelbarrows, &c.
Ornamental trees and shrubs	4,747	
*Total	12,732,915	

* Also 50,000 trees in the Raincliff Plantation, not enumerated above.

APPENDIX D.

FOREST DISEASES AND THEIR RELATION TO AFFORESTATION.

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INTRODUCTION.

“The welfare of the human race is closely connected with that of our trees, and any work looking to their better protection makes for the advancement of mankind.”—FELT.

The adequate conservation of trees from their insect and fungoid enemies constitutes one of the most important branches of modern forestry. This science of forest pathology is of quite recent origin, and each year its importance in the economy of timber-production is being more clearly recognized.

At the present time many European countries, India, and the United States—in fact, all countries with efficient forest services—pay special attention to the diseases of forests. Clearly do they recognize that the keeping of the trees healthy is one of the most important of all the problems of forest-management, nor do they hesitate to expend large sums annually to this end. So far, no attention has been paid in New Zealand to forest pathology, but the study of the diseases that are liable to become serious is a matter to which, sooner or later, earnest consideration must be given. The two most potent factors that are apt to cause the wholesale destruction of the forest are fires and diseases. The terrible significance of the former is clearly appreciated even by the layman. The destructive effects of fire are so rapid and so apparent, as they are naturally regarded as the most serious of all menaces to successful extensive tree-culture. On the other hand, the effects of disease are, in general, rather slow in action, and their insidious effects are often passed over unnoticed until it becomes too late to apply remedial methods. Nevertheless, the cumulative effect of diseases in the forest is admitted by experts to be even more disastrous than fire. In the national forests of the United States the loss due to insects