GENETIC IMPROVEMENT OF Pinus radiata COMBINED WITH INTEGRATED

NURSERY AND OUTPLANTING SYSTEMS LOWER

PLANTATION ESTABLISHMENT COSTS.

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Abstract. Significant genetic improvement in <u>Pinus radiata</u> for tree form and for the consequent proportion of trees acceptable as crop elements has been achieved over the past decade in New Zealand. Concurrent' improvement has occurred in bare-root seedling outplanting systems. Together, genetic and outplanting improvements have enabled initial operational stocking levels to be reduced to as low 800 trees per hectare. Short term commercial benefits of the combined improvements include 20 % reduction in establishment costs per hectare, despite higher planting and stock costs per tree. Long term benefits identified include final crop volume gains.

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