

# In our Contemporaries

Judy Griffith and Mariane Dobie

## What's new in Forest Research

No. 209 Native meets exotic – kokako and pine forest

No. 210 Quality control of structural timber for the Australian market.

## New Zealand Journal of Forestry Science

Strangulation pre-treatment effect on the development and rooting of fascicle cuttings of *Pinus radiata*

Koh D.S., Menzies M.I., Hong S.O. Vol. 20(2): 129-37 (1990)

Strangulation of the stems of two-year-old trees may be beneficial in terms of subsequent development of shoots from needle fascicles, and speed and percentage of rooting. With seven-year-old trees, fascicle bud development was better in the upper part of the crown but strangulation had no significant effect.

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Internode length of hoop pine: Genetic parameters and prospects for developing a long-internode breed

Dieters M.J.J., Woolaston R.R., Nikles D.G. Vol. 20(2): 138-47 (1990)

Internode length of hoop pine is moderately to strongly inherited, but shows no strong genetic correlations with vigour or stem straightness traits. Although it is feasible to develop a long-internode breed, the addition of an extra selection criterion to those of the main breed may result in some loss of gain in growth rate and stem straightness.

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Early growth of *Eucalyptus delegatensis* provenances in four field trials in south-eastern Australia

Moran G.F., Forrester R.L., Rout A.F. Vol. 20(2): 148-61 (1990)

Growth and survival of 64 provenances from the whole natural range of the species in south-eastern Australia were assessed in four field trials in Tasmania and New South Wales. The better provenances across all sites came from the mainland, and in particular from Victoria.

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Diameter growth of *Eucalyptus grandis* under conditions of extreme suppression

Bredenkamp B.V., Burkhart H.E. Vol. 20(2): 162-67 (1990)

Diameter growth of dominant individuals continues even when that of suppressed individuals ceases altogether and mean diameter growth of the stand is minimal. An increase in the mean diameter of the suppressed stand is due to a real increase in the size of the mean tree and is not merely an artifact of mortality amongst the lower size classes.

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Herbicides increase growth responses to fertiliser in a five-year-old *Eucalyptus regnans* plantation

Messina M. Vol. 20(2): 168-75 (1990)

Reduction of herbaceous/shrubby competition significantly increased 20-month diameter and volume increments but did not affect height increment. Fertilisers significantly influenced height increment, but did not affect diameter and volume increment over the 20-month study period. The study showed that weed control can be as important as fertiliser in enhancing eucalypt growth.

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Growth of pampas grass (*Cortaderia* spp.) in New Zealand *Pinus radiata* plantations

Gadgil R.L., Barton P.G., Allen P.J., Sandberg A.M. Vol. 20(2): 176-83 (1990)

Rate of pampas growth in five forests was only slightly less than in managed agricultural pampas plantations. Number of plants per unit area tended to be higher on phosphate-amended clay soils than on pumice or coastal sands. The highest dry matter accumulation recorded in a tree stand was 46 t/ha on a pumice soil.

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Spring needle-cast of *Pinus radiata* in Tasmania: I. Symptoms, distribution, and association with *Cyclaneusma minus*

Podger F.D., Wardlaw T.J. Vol. 20(2): 184-205 (1990)

"Spring needle-cast" causes rapid browning and collapse of mesophyll tissues of one-year-old needles in spring and is followed by premature and heavy casting of needles. It affects between 40% and 80% of trees in closed stands in areas which receive 1200-2000 mm rainfall annually. It is postulated that spring needle-cast is due to the secondary pathogenic activity of endophytic fungi following as yet unidentified seasonal stress.

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Spring needle-cast of *Pinus radiata* in Tasmania: II, Effects of fertilisers and thinning on disease severity, and the impact of disease on growth.

Podger F.D., Wardlaw T.J. Vol. 20(2): 206-19 (1990)

Applications of nitrogen, phosphorus, sulphur, and a comprehensive fertiliser formulation gave no support for hypotheses that chronic nutrient deficiencies contribute to the disease. Between nine and 13 years after planting, the diameter growth of affected trees in an unthinned stand was reduced by 14% for each 10% increase in defoliation. In stands thinned prior to the onset of the disease the development of significant levels of disease was delayed by two to five years.

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Provenance variation in wood properties of *Pinus caribaea* var. *hondurensis*

Wright J.A. Vol. 20(2): 220-32 (1990)

Analysis of variance revealed significant differences between sites and provenances in various countries for densitometric traits of wood density and within-sample density variation for 11 provenances at 11 sites. Coastal provenances had generally lower values for these traits than inland ones, but the differences were not significant.

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Changes in transverse wood permeability during drying of *Dacrydium cupressinum* and *Pinus radiata*

Booker R.E. Vol. 20(2): 231-44 (1990)

When softwoods are dried and subsequently impregnated with waterborne preservatives two problems frequently occur – preservative screening of multi-salt preservatives and difficult re-drying. It is believed that the absence of preservative screening in *P. radiata* sapwood during impregnation is due to rapid dispersal of preservative solution along the resin canals, followed by movement into the tracheids where the preservative fixes to the cell walls. This mechanism cannot operate in *D. cupressinum*, as it does not have resin canals.

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## FRI Bulletins

**No. 50 (revised)** Radiata pine wood properties survey

**Cown D.J., McConchie D.L., Young G.D. (1991)** \$30+GST

Core samples were taken from 7500 trees growing on 250 sites throughout the country for determination of basic wood density, tracheid length, and heartwood characteristics at breast height. Wood discs cut from >1000 felled trees were used to derive regression equations relating wood density of the outerwood at breast height to the densities of the whole tree and the various utilisable components. By combining this information and the core survey data, tree component densities were predicted for stands of different ages growing on the three site density classes.

**No. 124** Introduced forest trees in New Zealand: Recognition, role and seed source

**Pt 10** Ponderosa and Jeffrey pines

**Burdon R.D. Miller J.T., Knowles F.B. (1991)** \$15.00+GST

This booklet, the tenth in the Bulletin No. 124 series, provides an account of ponderosa and Jeffrey pines in New Zealand. It discusses their introduction, history, and role as exotic forest species, their recognition in the field, and the location and quality of current local seed sources.

**No. 161** Long-term field trials to assess environmental impacts of harvesting

**Dyck W.J., Mees C.A. (1991)**

\$50.00+GST

These proceedings are from the first International Energy Agency/Bioenergy Agreement (IEA/BE) workshop of the project T6/A6. Twelve papers and poster presentations cover the following: Long-term field trials designed to determine the impact of harvesting and associated practices on site productivity; key processes that should be monitored in long-term field trials; a protocol for the establishment of field trials and associated process studies.

**No. 167** Pruned stand certification:

A manual of procedures

**Somerville A. (1991)**

**Manual \$18.00, Tape \$12.00+GST**

The certification service provides a document that defines the quality of a pruning operation in terms of measures of maximum diameter over branch stubs, sweep, and the number of trees pruned per hectare. The assessment procedures are easy to apply and may be undertaken by anyone, but must be authenticated by an independent authority.

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## Forest and Bird

**Fletcher Challenge: spanning Canada's old growth forests**

**Hutching, Gerard. Vol. 22(3): 12-21 (1991)**

This article documents Canadian conservationists' reaction to the activities of Fletcher Challenge in that country from 1987, when the company bought a majority interest in Columbia Forest Products. The article closes with a response from Ian Donald, President and Chief Executive Officer, Fletcher Challenge Canada.

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## New Zealand Tree Grower

**The New Zealand Forest Accord**

**Treeby, Bruce: Vol. 12(3): 4-5 (1991)**

This accord, signed on August 14, 1991 is between forest industry groups and environmental/recreational organisations. The main objectives include: defining areas where it is inappropriate to establish plantation forestry; recognising the importance of protecting and conserving remaining indigenous forests; recognising that plantation forests are an alternative to natural forests.

## New Zealand Forest Industries

**Macrocarpa and lusitanica: will cypresses rival radiata monoculture?**

**Edwards, Vivien. Vol. 22 (7): 36, 30-39 (1991)**

This article records the views of the

Macrocarpa Action Group, which believes that this species and also *lusitanica* have great potential in New Zealand. However, the macrocarpa resource is scattered and as yet there is no continuous supply on which to base an industry. The article presents work being conducted on tree improvement.

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## Forestry Bulletin

**Forest products distribution costs a 'disgrace' to industry**

**Vol. 4 (3): 1-2 (1991)**

This article reports on a speech by Dennis Neilson, Tasman Forestry Director of Marketing and Supply. He believes that transport and wharfage costs must be radically restructured if the forest industry is to be internationally competitive.

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## Growing Today

**Keep the home fires burning**

**Atkinson, Gordon. Vol. 4 (6): 10-13 (1991)**

This article describes how to establish your own permanent firewood supply. The increasing cost of power is one reason why more people are returning to wood as a basic fuel.

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## New Zealand Forestry Statistics 1991

**Ministry of Forestry 1991. 110 p.**

This is the first in a new series of statistical publications on New Zealand Forestry. It has its genesis in a former series, Statistics of the Forests and Forest Industries of New Zealand, produced by The New Zealand Forest Service. The main sections of this publication are: resource tables, sawmilling production tables, pulp and paper production and panel products production, apparent consumption of forestry products, New Zealand's trade in forestry products, and miscellaneous statistical series.

Available from Ministry of Forestry, P.O. Box 1610, Wellington. \$30.00