TITLE INDEX VOLUMES 1 TO 25 (1971 TO 1995)

Vol-page

A field lysimeter to study water movement and nutrient content in a pumice soil under <i>Pinus radiata</i> forest. I. Site and construction details (G.M.Will)	7—144
A plantation simulation model for Pinus radiata (Abstract) (M.J.Hall)	6–332
"A Re-appraisal of Forestry Development in Developing Countries" (Book Review)	13–239
Abies concolor bark extractive yields as affected by process variables (G.A.Grozdits; P.C.Chang)	14–240
Above-ground biomass, nutrients, and energy content of trees in a second-growth stand of <i>Agathis australis</i> (H.A.I.Madgwick; G.Oliver; P.Holten-Anderson)	12–3
Above-ground dry matter and nutrient content of <i>Pinus radiata</i> as affected by lupin, fertiliser, thinning, and stand age (P.N.Beets; H.A.I.Madgwick)	18-43
Above-ground dry matter, energy, and nutrient content of trees in an age series of <i>Pinus radiata</i> plantations (H.A.I.Madgwick; D.S.Jackson; P.J.Knight)	7–445
Above-ground dry-matter content of a young close-spaced <i>Pinus radiata</i> stand (H.A.I.Madgwick)	11–203
Above-ground weights of forest plots—Comparison of seven methods of estimation (H.A.I.Madgwick)	13–100
Accelerated boron diffusion treatment of timber (A.J.McQuire; K.A.Goudie)	2–165
Accumulation and partitioning of dry matter in <i>Pinus radiata</i> as related to stand age and thinning (P.N.Beets; D.S.Pollock)	17–246
Accumulation of organic matter and mineral nutrients under a <i>Pinus radiata</i> stand (R.Ballard; G.M.Will)	11–145
Advantages of clonal forestry for <i>Pinus radiata</i> —Real or imagined? (M.J.Carson)	16-403
Adventitious Root Formation in Cuttings (Book Review)	20–245
Air-layering of grafts to overcome incompatibility problems in propagating old pine plus trees (R.D.Barnes)	4–120
Airflow reversals in high-temperature kiln drying of <i>Pinus radiata</i> boards. 1: Drying of a single board (P.Shusheng; R.B.Keey; T.A.G.Langrish; J.C.F.Walker)	24-83
Airflow reversals in high-temperature kiln drying of <i>Pinus radiata</i> boards. 2: Drying of a stack of boards (P.Shusheng; R.B.Keey; J.C.F.Walker; T.A.G.Langrish)	24–104

New Zealand Journal of Forestry Science 28(1): 62-104 (1998)

A

	Vol-page
Alkylammonium compounds as above-ground wood preservatives (A.F.Preston; C.M.Chittenden)	12–102
Allozyme analysis in seed and tree identification in New Zealand (H.L.Billington; G.B.Sweet; P.Bolton)	20–16
Alternative silvicultural regimes: Effect of over-all management policy on options (J.H.Sedgley)	12–324
Ammonium uptake from dilute solutions by <i>Pinus radiata</i> seedlings (J.W.Flewelling)	9–10
Amount and distribution of dry matter in a mature beech-podocarp community (P.N.Beets)	10-418
An early progeny trial in <i>Pinus radiata</i> . 4. Wood density (M.H.Bannister; M.H.Vine)	11–221
Analysis and simulation of a logging weighbridge installation (D.C.McNickle; R.C.Woollons)	20–111
Analysis of plant growth substances in relation to seedling and plant growth (J.B.Zaerr; D.P.Lavender)	10–186
Analytical methods to aid interpretation of thinning experiments (R.C.Woollons; P.J.Smale; F.F.Du Burgess)	24–18
Anatomy of stem and root wood of Pinus radiata D.Don (R.N.Patel)	1–37
Annual growth stages for height and diameter in Pinus radiata (R.D.Burdon)	24-11
Apparent phosphorus uptake and change in nitrogen content of <i>Pinus radiata</i> growing on soils of different phosphorus retention, treated with superphosphate and A-grade rock phosphate (I.R.Hunter; J.A.C.Hunter)	21–50
Application of size reduction theories to disc refiner pulp production (S.R.Corson)	1–125
Applications of the SEESAW simulator and Pruned Log Index to pruned resource evaluations—A case study (J.C.Park)	1 9 –68
Appraisal of the Shigometer technique (P.J.Wilson; J.D.Allen; J.C.F.Walker)	12-86
Appropriate age for selection of final-crop Pinus radiata (J.P.Maclaren)	25–91
Area conservation mechanisms associated with forest management (L.R.Broad)	20–120
Arhopalus ferus (Coleoptera : Cerambycidae); Its biology in New Zealand (G.P.Hosking; J.Bain)	7–3
Arhopalus ferus, the influence of subcortical temperature on development and growth (G.P.Hosking)	7–137
Armillaria populations in a Pinus radiata plantation on a former indigenous rainforest site (I.A.Hood; C.J.Sandberg)	23–62
Armillaria root disease in New Zealand forests (I.A.Hood)	19–180
Artificial ripening of green <i>Pinus radiata</i> cones does not reduce seed germination or seedling vigour (M.D.Wilcox; A.Firth)	10–363

·	Vol-page
Artificial ripening of prematurely harvested cones of New Zealand <i>Pinus radiata</i> and its effect on seed quality (A.Rimbawanto; P.Coolbear; A.Firth)	18–149
Ash group of eucalypts (M.D.Wilcox)	9–133
Ash, silica, and lignin in New Zealand beech (A.J.Kerr)	6–108
Aspects of mycorrhizal inoculation in relation to reforestation (J.G.Mexal)	10–208
Assessment of frost damage in radiata pine seedlings using the diffusate electroconductivity technique (L.M.Green; I.J.Warrington)	8–344
Assessment of <i>Platypus subgranosus</i> as a vector of <i>Chalara australis</i> , causal agent of a vascular disease of <i>Nothofagus cunninghamii</i> (G.A.Kile; M.F.Hall)	18–166
Assessment of the self-ignition conditions of forest litter deposit layer (Note) (X.Dong Chen; M.Sleeman)	23–243
Assessment of water status in trees from measurements of stomatal conductance and water potential (D.Whitehead)	10–159
Available nutrients in pumice lapilli of a Kaingaroa Forest soil (P.D.McIntosh)	10–360
B	
Background to thinning practice in Australia (A.G.Brown)	6–133
Beech forest health—Implications for management (G.P.Hosking)	19–290
Bending properties of structural timber from a 28-year-old stand of New Zealand <i>Pinus radiata</i> (H.Bier)	15–233
Bending strength, stiffness, and stress-grade of structural <i>Pinus radiata</i> : Effect of knots and timber density (D.J.Grant; A.Anton; P.Lind)	14–331
Between-tree variation in lignin concentration in <i>Pinus radiata</i> tracheids with growth rate, stem eccentricity, site, and silvicultural treatment (L.A.Donaldson)	16–118
Biochemical basis of adventitious root formation (K.K.Nanda; N.C.Bhattacharya; V.K.Kochhar)	4–347
Biodegradability of wastewaters from a medium-density fibreboard mill (T.I.James; J.R.L.Walker)	23–101
Biological constraints to thinning practice (K.R.Shepherd)	6–152
"Biological Nitrogen Fixation in Forest Ecosystems: Foundations and Applications" (Book Review)	14-409
Biomass and nutrient content of a 29-year-old <i>Pinus radiata</i> stand (B.Webber; H.A.I.Madgwick)	13–222
Biomass equations for <i>Pinus radiata</i> in Gippsland, Victoria (T.G.Baker; P.M.Attiwill; H.T.L.Stewart)	1489
"Biotechnology in New Zealand" (Book Review)	13–366
Bleaching alkaline pulps from Pinus radiata (R.W.Allison)	12–107

	Vol–page
Blight of Lupinus arboreus in New Zealand (M.A.Dick)	24-51
Bole growth patterns of <i>Pinus radiata</i> D. Don in relation to fertilisation, bending stress, and crown growth (J.E.Barker)	10-445
Bonding of radiata pine veneers treated with CCA preservatives by the momentary immersion method (C.I.Hutchinson; S.L.Chong; J.M.McLaughlan)	7–113
Boron, copper, manganese, and zinc in stemwood of <i>Pinus radiata</i> (H.A.I.Madgwick; G.R.Oliver; A.T.Sims)	18–226
Breeding of the clerid <i>Thanasimus formicarius</i> for the control of the bark beetles <i>Hylastes ater</i> and <i>Hylurgus ligniperda</i> in New Zealand (R.Zondag)	9–125
Breeding populations for recurrent selection: Conflicts and possible solutions (R.D.Burdon; C.J.A.Shelbourne)	1–174
Bud morphogenesis of <i>Pinus radiata</i> in New Zealand. 1: The initiation and extension of the leading shoot of one clone at two sites (M.P.Bollmann; G.B.Sweet)	6–376
Bud morphogenesis of <i>Pinus radiata</i> in New Zealand. II. The seasonal shoot growth pattern of seven clones at four sites (M.P.Bollmann; G.B.Sweet)	9–153
C	
Cable logging hoop pine plantations in south-east Queensland (J.P.Ward)	12–238
Can DRIS improve diagnosis of nutrient deficiency in <i>Pinus radiata</i> ? (G.A.Svenson; M.O.Kimberley)	18–33
Carbon and nutrient availability effect on plant nutrient supply for upland forest sites in interior Alaska (J.Yarie; W.Pulliam; K.van Cleve; R.Schlentner)	24–234
Carbon in forest soils-Research needs (D.W.Johnson)	23–354
Carbon reserves, carbon cycling, and harvesting effects in three mature forest types in Canada (I.K.Morrison; N.W.Foster; P.W.Hazlett)	23–403
Carbon sequestration by New Zealand's plantation forests (D.Y.Hollinger; J.P.Maclaren; P.N.Beets; J.Turland)	23–194
Case for improving wood density in radiata pine (J.M.Harris; R.N.James; M.J.Collins)	5–347
Causes of juvenile instability of Pinus radiata in New Zealand (E.G.Mason)	15–263
Changes in nutrient procurement with age and site productivity in jack pine forest (N.W.Foster; I.K.Morrison; P.W.Hazlett; G.D.Hogan; M.I.Salerno)	24–169
Changes in <i>Pinus radiata</i> stem form in response to nitrogen and phosphorus fertiliser (A.Gordon; J.D.Graham)	16-41
Changes in the carbohydrate concentration of pine seedlings after cool storage (I.J.McCracken)	9–34
Changes in transverse wood permeability during drying of <i>Dacrydium cupressinum</i> and <i>Pinus radiata</i> (R.E.Booker)	20–231

Changes in tree dominance and form in a young radiata pine stand (W.R.J.Sutton)	Vo⊢page 3—323
Changes in water potential of <i>Pinus radiata</i> fascicles during temporary storage (B.J.Myers; I.E.Craig)	18–3
Changes within tree crowns following thinning of young Douglas fir infected by <i>Phaeocryptopus gaeumannii</i> (I.A.Hood; C.J.Sandberg)	9 —177
Characteristics, liberation, and dispersal of sika deer (<i>Cervus nippon</i>) in New Zealand (M.M.Davidson)	3–153
Chemical analysis of pine litter: An alternative to foliage analysis? (I.R.Hunter; G.Nicholson; A.J.Thorn)	15–101
Chemistry of weathering and solubilisation of copper fungicide, and the effect of copper on germination, growth, metabolism, and reproduction of <i>Dothistroma pini</i> (R.A.Franich)	18318
Chlorophyll as an indicator of nitrogen status of coniferous seedlings (S.Linder)	10–166
Classing pruned logs and benchmarking sawmill recoveries (J.C.Park)	19-83
Clearwood yields from tended 26-year-old second-crop radiata pine (R.Fenton; W.R.J.Sutton; J.R.Tustin)	1–140
Cleopus japonicus, a potential biocontrol agent for Buddleja davidii in New Zealand (X.Zhang; Y.Xi; W.Zhou; M.Kay)	23–78
Climate change—Implications for <i>Pinus radiata</i> improvement (J.C.Grace; M.J.Carson; S.D.Carson)	21–123
Clonal repeatability of monoterpene composition of cortical oleoresin of <i>Pinus radiata</i> (R.D.Burdon; R.E.Gaskin; C.B.Low; J.A.Zabkiewicz)	22–299
Clonal variation and repeatability of microfibril angle in <i>Pinus radiata</i> (L.A.Donaldson; R.D.Burdon)	25–164
Clonal variation of wood density variables in <i>Pinus radiata</i> (L.A.Donaldson; R.Evans; D.J.Cown; M.J.F.Lausberg)	25–175
Clopyralid herbicide residues in streamwater after aerial spraying of a <i>Pinus</i> radiata plantation (C.Leitch; P.Fagg)	15–195
Colletotrichum acutatum Simmds f.sp. pinea, associated with "terminal crook" disease of Pinus spp. (J.M.Dingley; J.W.Gilmour)	2–192
Combined visual and mechanical grading of Pinus radiata (G.B.Walford)	11–298
Comparative assessment of some National Forest Survey types (G.B.Wilkinson; G.T.Daly)	6–363
Comparative growth rates of several eucalypts in mixed-species stands in southern Tasmania (P.W.West)	11-45
Comparative morpho-histological studies on the sites of shoot initiation in various conifer explants (T.A.Thorpe; K.R.Patel)	16–257
Comparative study of characteristics of seedlings and clonal cuttings (H.Roulund)	4–378

Comparison of alternative silvicultural regimes for radiata pine (W.R.J.Sutton)	<i>Vo⊢page</i> 6–350
Comparison of compatible polynomial taper equations (A.Gordon)	13–146
Comparison of low pruning selection methods in radiata pine (W.R.J.Sutton)	1–231
Comparison of the effects of two thinning regimes on some wood properties of radiata pine (D.J.Cown)	4–540
Comparison of the growth of vegetative propagules and seedlings of <i>Pinus radiata</i> (G.B.Sweet; L.Wells)	4–399
Comparison of the Pilodyn and Torsiometer methods for the rapid assessment of wood density in living trees (D.J.Cown)	8–384
Comparison, via the SEESAW simulator, of three sawing systems for pruned logs (J.C.Park)	19–54
Compatible tree volume and variable-form stem taper models for <i>Pinus radiata</i> in Tasmania (S.G.Candy)	1 9– 97
Competition quotient in young Pinus radiata (R.B.Tennent)	5–230
Competitive positioning strategy for New Zealand <i>Pinus radiata</i> in selected United Kingdom sawn timber markets (R.J.Cooper; S.P.Kalafatis; A.J.McPherson)	25–379
Compression rolling and hot-water soaking: Effects on the drying and treatability of <i>Nothofagus fusca</i> heartwood (H.Günzerodt; J.C.F.Walker; K.Whybrew)	16–223
Compression wood force generation (Letter) (B.A.Meylan)	4-116
Compression wood force generation and functional mechanics (J.D.Boyd)	3–240
Compression wood force generation: A rejoinder (Letter) (J.D.Boyd)	4-117
"Compression Wood in Gymnosperms" (Book Review)	17–133
Compression wood in <i>Pinus radiata</i> clones on four different sites (R.D.Burdon)	5–152
Computer system to assist with management of a tissue culture laboratory (L.J.Wolf; V.J.Hartney)	16–392
Computermatic timber-grading machine—Laboratory evaluation of performance with respect to feed speed and the dynamic/static deflection relationship (D.J.Grant)	16–187
Conditioning radiata pine seedlings to transplanting, by restricted watering (D.A.Rook)	354
Confined and unconfined radial compression perpendicular to the grain of green sapwood from <i>Pinus radiata</i> and <i>Eucalyptus regnans</i> (R.Wingate-Hill; R.B.Cunningham)	16–213
Control of Dothistroma needle blight by low volume aerial application of copper fungicides (J.W.Gilmour; A.Noorderhaven)	3–120
Control of Dothistroma needle blight in the <i>Pinus radiata</i> stands of Kinleith Forest (A.M.P.Dick)	19-171

	Vol-page
Control of feral goats by poisoning with Compound 1080 on natural vegetation baits and by shooting (J.P.Parkes)	13–266
Control of sapstain and decay in unseasoned Douglas fir (J.A.Butcher)	3–355
Control of Sirex noctilio (F.) with Deladenus siricidicola Bedding. Part 1—1967 field trial (R.Zondag)	1—5
Control of Sirex noctilio F. with Deladenus siricidicola. Part II. Introductions and establishment in the South Island 1968–75 (R.Zondag)	9–68
Copper deficiency in Pinus radiata in a seed nursery (P.J.Knight)	5–209
Copper deficiency in radiata pine planted on sands at Mangawhai Forest (G.M.Will)	2–217
Corewood (juvenile wood) in <i>Pinus radiata</i> —Should we be concerned? (D.J.Cown)	22–87
Correlation of resistance to a pulsed current with several wood properties in living eucalypts (J.Wilkes; W.A.Heather)	13–139
Critical assessment of interference microscopy as a technique for measuring lignin distribution in cell walls (L.A.Donaldson)	15–349
Critical soil magnesium levels for radiata pine nutrition (J.A.Adams)	3–390
Cross-grain effect on tensile strength and bending stiffness of <i>Pinus radiata</i> structural lumber (D.J.Cown; B.Walford; M.O.Kimberley)	25–256
Cubic spline curves and calculation of volume of sectionally measured trees (C.J.Goulding)	989
Cultural characteristics and pathogenicity to <i>Pinus radiata</i> of <i>Armillaria novae-</i> <i>zelandiae</i> and <i>A. limonea</i> (C.G.Shaw III; M.MacKenzie; E.H.A.Toes; I.A.Hood)	1165
Culture of <i>Pinus radiata</i> embryos with reference to artificial seed production (R.D.Teasdale; P.A.Buxton)	16–387
Current research into radiata pine thinning operations in New Zealand (J.D.Macintosh; E.H.Bunn)	6–228
Current Scandinavian thinking on thinning practice and yield (C.Carbonnier)	6–357
Cyclaneusma (Naemacyclus) needle-cast of <i>Pinus radiata</i> in New Zealand. 1: Biology of <i>Cyclaneusma minus</i> (P.D.Gadgil)	14–179
Cyclaneusma (Naemacyclus) needle-cast of <i>Pinus radiata</i> in New Zealand. 2: Reduction in growth of the host, and its economic implication (J.B.van der Pas; J.D.Slater-Hayes; P.D.Gadgil; L.Bulman)	14–197
Cyclaneusma (Naemacyclus) needle-cast of <i>Pinus radiata</i> in New Zealand. 3: Incidence and severity of the needle-cast (J.B.van der Pas; L.Bulman; J.D.Slater-Hayes)	14–210
Cyclaneusma (Naemacyclus) needle-cast of <i>Pinus radiata</i> in New Zealand. 4: Chemical control research (I.A.Hood; A.L.Vanner)	14–215
Cypress canker in New Zealand plantations (H.S.van der Werff)	18–101

D

Vol-page

Daily transpiration rates of radiata pine (D.S.Jackson; H.H.Gifford; I.W.Hobbs)	3–70
Decay distribution in relation to pruning and growth stresses in plantation-grown Eucalyptus regnans grown in New Zealand (B.P.Glass; H.McKenzie)	19–210
Density variation within Cocos nucifera stems (B.A.Meylan)	8–369
Design of a new weighing lysimeter for measuring water use by individual trees (H.H.Gifford; D.Whitehead; R.S.Thomas; D.S.Jackson)	12448
Detection of new insects and diseases in indigenous forests in New Zealand (C.Baddeley)	19–250
Determination of the fascicle surface area for Pinus radiata (P.N.Beets)	7–397
Development of a composite taper equation to predict over- and under-bark diameter and volume of <i>Eucalyptus saligna</i> in New Zealand (A.D.Gordon; C.Lundgren; E.Hay)	25–318
Development of a model for the evaluation of silvicultural regimes for <i>Pinus radiata</i> (J.E.Opie)	6–299
Development of grafts of radiata pine made with scions of different origins (C.K.Pawsey)	4-371
Development of internal graft incompatibility symptoms in <i>Pinus radiata</i> D. Don (D.L.Copes)	10–367
Diameter growth of <i>Eucalyptus grandis</i> under conditions of extreme suppression (B.V.Bredenkamp; H.E.Burkhart)	20–162
Dieback in high site quality <i>Pinus radiata</i> stands—The role of sulphur and boron deficiencies (M.J.Lambert; J.Turner)	7–333
Differences in growth and weight of genotypes of pine with special reference to clones of <i>Pinus radiata</i> (H.A.I.Madgwick)	13–115
Differentiated callus nodules in resin pockets of <i>Pinus ponderosa</i> (Laws) (J.M.Harris; J.R.Barnett)	5–226
Differentiation in <i>Pinus radiata</i> callus culture: The effect of nutrients (J.Washer; K.Reilly; J.Barnett)	7–321
Dimensional stability of flakeboards made from acetylated <i>Pinus radiata</i> heartwood or sapwood flakes (R.M.Rowell; D.V.Plackett)	18–124
<i>Diplodia pinea</i> infection of <i>Pinus radiata</i> seedlings: Effect of temperature and shoot wetness duration (C.K.S.Chou)	12-425
Direct consumption of petroleum products in <i>Pinus radiata</i> thinning in Australia (R.J.McCormack; K.F.Wells)	12–354
Discolouration associated with <i>Platypus</i> wounds in living <i>Nothofagus fusca</i> (W.Faulds)	3–331
Disease as a consideration in the thinning of coniferous forests (W.A.Heather)	6–182

	Vo⊢page
Disease control by aerial spraying of <i>Dothistroma pini</i> in tended stands of <i>Pinus radiata</i> in New Zealand (J.B.van der Pas; L.Bulman; G.P.Horgan)	14–23
Dispersal of four strains of red deer in nor thern South Island districts (C.M.H.Clarke)	3–342
Distribution and abundance of browsing mammals in Westland National Park in 1978, and some observations on their impact on the vegetation (C.J.Pekelharing; R.N.Reynolds)	13–247
Distribution and infection period of <i>Phaeocryptopus gaeumannii</i> in New Zealand (I.A.Hood; D.J.Kershaw)	5–201
Distribution of aerially applied fertiliser in New Zealand forests (R.Ballard; G.M.Will)	1–50
Distribution of extractives in Pinus radiata earlywood and latewood (J.A.Lloyd)	8–288
Dothistromin risk assessment for forestry workers (G.S.Elliott; R.W.Mason; D.G.Ferry; I.R.Edwards)	19–163
Douglas fir profitability (R.Fenton)	680
Douglas fir, Japanese larch, and European larch in pure and mixed stands (G.G.West)	21–3
Dry matter accumulation, nutrient and energy content of the above ground portion of 4-year-old stands of <i>Eucalyptus nitens</i> and <i>E. fastigata</i> (H.A.I.Madgwick; P.Beets; S.Gallagher)	11–53
Dry matter and nutrient content of 8-year-old <i>Eucalyptus saligna</i> growing at Taheke Forest (D.J.Frederick; H.A.I.Madgwick; G.R.Oliver; M.F.Jurgensen)	15–251
Dry matter and nutrient relationships in stands of <i>Pinus radiata</i> (H.A.I.Madgwick)	15–324
Dry matter content and nutrient distribution in an age series of <i>Eucalyptus regnans</i> plantations in New Zealand (D.J.Frederick, H.A.I.Madgwick; M.F.Jurgensen; G.R.Oliver)	15–158
Dry matter content and production of close-spaced <i>Pinus radiata</i> (H.A.I.Madgwick; G.R.Oliver)	15–135
Dry matter production of a young stand of <i>Pinus radiata</i> : Some effects of nitrogen fertiliser and thinning (D.J.Mead; D.Draper; H.A.I.Madgwick)	14-97
Dry matter, energy, and nutrient contents of 8-year-old stands of <i>Eucalyptus</i> regnans, Acacia dealbata, and Pinus radiata in New Zealand (D.J.Frederick, H.A.I.Madgwick; M.F.Jurgensen; G.R.Oliver)	15–142
Dry matter, nitrogen, and phosphorus content of litterfall and branchfall in <i>Pinus radiata</i> and <i>Eucalyptus</i> forests (T.G.Baker)	13–205
Drying of major cypress species grown in New Zealand (A.N.Haslett; D.H.Williams; J.A.Kininmonth)	15–370
Drying properties of New Zealand-grown Acacia melanoxylon (A.N.Haslett)	13–130

	Vol-page
Duration of leaf wetness periods and infection of <i>Pinus radiata</i> by <i>Dothistroma pini</i> (P.D.Gadgil)	783
Dynamics of even-aged Nothofagus truncata and N. fusca stands in north Westland, New Zealand (M.C.Smale; H. van Oeveren; C.D.Gleason;	
M.O.Kimberley)	17–12
Dynamics of small mountain beech stands in an exposed environment	
(G.P.Hosking; J.A.Hutcheson; P.J.Walsh)	23–142
E	

Early differential susceptibility of juvenile seedlings and more mature stecklings of <i>Pinus radiata</i> to <i>Dothistroma pini</i> (A.B.Power; R.S.Dodd)	14–223
Early growth and survival of <i>Acacia melanoxylon</i> : Effect of weed control and fertiliser (M.Messina; I.L.Barton)	15–111
Early growth of <i>Eucalyptus delegatensis</i> provenances in four field trials in south- eastern Australia (G.G.Moran; R.I.Forrester; A.F.Rout)	20–148
Early growth of Salix matsudana \times alba hybrids (R.L.Hathaway)	7–207
Early patterns of Armillaria root rot in New Zealand pine plantations converted from indigenous forest—An alternative interpretation (L.F.Roth; C.G.Shaw; M.Mackenzie; F.H.Crockett)	9– 316
Early progeny trial in <i>Pinus radiata</i> . 2. Subjective assessment of crookedness (M.H.Bannister)	9–241
Early progeny trial in <i>Pinus radiata</i> . 3. Characters affecting log quality (M.H.Bannister)	10–325
Early results from a clonal selection and testing programme with radiata pine (C.J.A.Shelbourne; I.J.Thulin)	4–387
Earthworm and enchytraeid populations in a 13-year-old agroforestry system (G.W.Yeates)	18–304
Ecological considerations of dieback in New Zealand's indigenous forests (G.H.Stewart)	19–243
Economic analysis of selected special-purpose species regimes (R.Y.Cavana; B.P.Glass)	15–180
Economic comparison of alternative silvicultural treatments in <i>Pinus radiata</i> (R.V.Wilson; A.J.Watt)	6–318
Economics of radiata pine for sawlog production (R.Fenton)	2–313
Economics of sawlog production which includes production thinning (R.Fenton)	2–348
Economics of thinning (R.Fenton)	6–273
Effect of first rotation phosphorus applications on fertiliser requirements of second rotation radiata pine (R.Ballard)	8–135

	Vo⊢page
Effect of heavy thinning on wood density in radiata pine (W.R.J.Sutton; J.M.Harris)	4–112
Effect of hedging on wood characteristics of <i>Pinus radiata</i> (J.W.P.Nicholls; A.G.Brown)	6–397
Effect of light intensity on infection of <i>Pinus radiata</i> by <i>Dothistroma pini</i> (P.D.Gadgil; G.Holden)	6–67
Effect of maturation on the growth and form of vegetative propagules of radiata pine (G.B.Sweet)	3–191
Effect of moisture content on preservative retention in sawn timber (S.L.Chong)	7–258
Effect of slash and soil removal on the productivity of second rotation radiata pine on a pumice soil (R.Ballard)	8–248
Effect of steaming on the fine structure of Nothofagus fusca (J.A.Kininmonth)	1–129
Effect of temperature and leaf wetness period on infection of <i>Pinus radiata</i> in New Zealand (P.D.Gadgil)	4-495
Effect of thinning on the distribution and biomass of foliage in the crown of radiata pine (G.R.Siemon; W.J.Müller; G.B.Wood; W.G.Forrest)	10-461
Effect of timber drying temperature on subsequent moisture and dimensional changes (J.A.Kininmonth)	6–101
Effect of waterlogging on mycorrhizas of radiata pine and Douglas fir (P.D.Gadgil)	2–222
Effect of wood density on preservative retention in fence posts (A.J.McQuire)	5–105
Effective protection and comparative advantage in New Zealand's forest enterprises: A comment (R.K.Grant)	7–240
Effects of beating and wood quality on radiata pine kraft paper properties (R.P.Kibblewhite)	3–220
Effects of beating, beaters, and wood quality on wet web strength (R.P.Kibblewhite)	5–110
Effects of commercial hunting on red deer densities in the Arawata Valley, south Westland, 1972–76 (C.N.Challies)	7–263
Effects of forest fertilisation on nutrient losses in streamflow in New Zealand (D.J.Neary; J.H.Leonard)	8–189
Effects of hedging radiata pine on production, rooting, and early growth of cuttings (W.J.Libby; A.G.Brown; J.M.Fielding)	2–163
Effects of intensified harvesting on rates of nitrogen and phosphorus removal from <i>Pinus radiata</i> and <i>Eucalyptus</i> forests in Australia and New Zealand (R.J.Raison; P.K.Khanna; W.J.B.Crane)	12–394
Effects of nursery practice on <i>Pinus radiata</i> seedling characteristics and field performance: 1. Nursery seedbed density (A.D.Benson; K.R.Shepherd)	6–19
Effects of nursery practice on <i>Pinus radiata</i> seedling characteristics and field performance: II. Nursery root wrenching (A.D.Benson; K.R.Shepherd)	7–68

	Vo⊢page
Effects of severe thinning and pruning treatments on the intrinsic wood properties of young radiata pine (D.J.Cown)	3–379
Effects of site on expression of cone characters in radiata pine (R.D.Burdon; C.B.Low)	3–110
Effects of stocking and thinning on wind damage in plantations (K.W.Cremer; C.J.Borough; F.H.McKinnell; P.R.Carter)	12–244
Effects of strain rate on the surface morphology of <i>Pinus radiata</i> broken by transverse tensile forces (W.J.Cousins)	4–94
Effects of thermoperiod on seedling development in Eucalyptus obliqua (T.J.Blake)	6–27
Effects of thinning and fertiliser application on wood properties of <i>Pinus radiata</i> (D.J.Cown; D.L.McConchie)	1179
Effects of thinning on crown structure in radiata pine (G.R.Siemon; G.B.Wood; W.G.Forrest)	6–57
Effects of tree age on kraft pulping of Pinus radiata (A.J.Kerr; D.A.Swann)	10-577
Effects of whole-tree harvesting on the amount of soil carbon: Model results (J.Bengtsson; J.F.Wikström)	23380
Effects of wood age on the papermaking properties of radiata pine kraft pulps (J.M.Uprichard)	10–558
Effects of wood quality variation in New Zealand radiata pine on kraft paper properties (D.J.Cown; R.P.Kibblewhite)	10–521
Efficacy of acidic and alkaline solutions of alkylammonium compounds as wood preservatives (J.A.Butcher; J.Drysdale)	8-403
Elasticity of isolated lignin: Young's modulus by a continuous indentation method (W.J.Cousins)	7–107
Electrical impedance and its relationship to frost hardiness in <i>Pinus radiata</i> (D.H.Greer)	13-80
Electrical impedance ratio technique for rapid assessment of frost damage in <i>Pinus radiata</i> (D.H.Greer)	13–72
Electrical impedance techniques in physiological studies (C.Glerum)	10–196
Empirical models evaluated for prediction of fine fuel moisture in Australian <i>Pinus radiata</i> plantations (E.W.Pook)	23–278
Endogone flammicorona as a mycorrhizal associate of Douglas fir in New Zealand (M.Chu-Chou; L.J.Grace)	9–344
Environmental control of winter stress tolerance and growth potential in seedlings of <i>Picea abies</i> (L.) Karst. (M.Sandvik)	10–97
Environmental variables influencing the growth of radiata pine: (2) Effects of seasonal drought on height and diameter increment (D.S.Jackson; H.H.Gifford; J.Chittenden)	5–265

73

	Vo⊢page
Environmental variables influencing the increment of radiata pine. (1) Periodic volume increment (D.S.Jackson; H.H.Gifford)	4–3
Eruption, deterioration, and decline of the Nelson red deer herd (C.M.H.Clarke)	5–235
Establishing kauri in a pine stand and in scrub (D.O.Bergin; M.O.Kimberley)	17–3
Establishment of selected legumes in a mid-rotation <i>Pinus radiata</i> plantation (R.L.Gadgil; J.F.L.Charlton; A.M.Sandberg; P.J.Allen)	18–210
Establishment requirements of <i>Pinus radiata</i> cuttings and seedlings compared (G.G.West)	14-41
Ester formulation and surfactant affect response of radiata pine and gorse seedlings to 2,4,5-T (D.Preest)	9–44
Estimating bark thickness of Pinus radiata (A.Gordon)	13–340
Estimating crown weights of <i>Pinus radiata</i> from branch variables (H.A.I.Madgwick; D.S.Jackson)	4–520
Estimating stand weight—The importance of sample selection (H.A.I.Madgwick)	21–180
Estimating the above-ground weight of forest plots using the basal area ratio method (H.A.I.Madgwick)	11–278
Estimation of dry matter in <i>Pinus radiata</i> root systems. 1. Individual trees (D.S.Jackson; J.Chittenden)	11–164
Estimation of the oven-dry weight of stems, needles, and branches of individual <i>Pinus radiata</i> trees (H.A.I.Madgwick)	13–108
<i>Eucalyptus</i> species selection for soil conservation in seasonally dry hill country— Twelfth year assessment (B.T.Bulloch)	21–10
Evaluating the role of thinning in development forestry (J.B.Dargavel)	6–242
Evaluation of foliar urea applications in the presence and absence of surfactant on the nitrogen requirements of conditioned <i>Pinus radiata</i> seedlings (A.Coker; D.Court; W.B.Silvester)	17–51
Evaluation of planting stock quality several years after planting (G.Fry; B.R.Poole)	10–299
Evaluation of stock after planting (P.Willén; R.F.Sutton)	10–297
Evaluation of techniques used in determining frost tolerance of forest planting stock: A review (I.J.Warrington; D.A.Rook)	10–116
Evaluation of the assessment of Dothistroma needle blight in stands of <i>Pinus radiata</i> (J.B.van der Pas; M.O.Kimberley; D.J.Kershaw)	14–3
Evaluation of the economic impact of newly introduced pests (R.Baker; J.Cowley)	19–330
Evolution of chlorinated phenols from solutions of a waterborne wood preservative (Timbor) (A.J.Cserjesi)	5–196
Examination of croptyping in forest estate modelling (L.Te Morenga; B.Manley; S.Wakelin)	25–328
Exotic trees in the Canterbury high country (N.J.Ledgard; M.C.Belton)	15–298

Export log afforestation profitability 1973 (R.Fenton; R.B.Tennent)	Vol–page 5–323
Extended oxygen delignification of alkaline pulps from <i>Pinus radiata</i> (R.W.Allison)	11–287
Exterior weathering trials on <i>Pinus radiata</i> roofing shingles (D.V.Plackett; C.M.Chittenden; A.F.Preston)	14–368
Extraction of protein from <i>Pinus</i> tissue for analysis by electrophoretic and serological techniques (S.M.Butcher; D.W.Fountain)	17–121
Extraction thinning operations in young radiata pine at Kaingaroa Forest (K.C.Chandler)	6–193
F	
Factors which influence companies in forest management decisions (B.D.McConchie)	6–292
Failure of <i>Pinus radiata</i> veneer in tension across the grain (A.M.Carrington; R.B.Keey; M.D.Pugh; J.C.F.Walker)	24–120
Family and clonal variation in susceptibility of <i>Pinus radiata</i> to <i>Agrobacterium</i> <i>tumefaciens</i> in relation to <i>in vitro</i> shoot growth rate (B.A.Bergmann; A M.Stomp)	23–3
Family tests as a basis for the genetic improvement of <i>Eucalyptus nitens</i> in New Zealand (J.N.King; M.D.Wilcox)	18–253
Fate of ¹⁵ N urea fertiliser applied to a recently thinned radiata pine stand on a pumice soil (G.Worsnop; G.M.Will)	10–381
Fertiliser practice in New Zealand forest nurseries (P.J.Knight)	8–27
Fertiliser treatment of <i>Pinus radiata</i> at establishment and at thinning—An evaluation of its potential in Australia (W.J.B.Crane)	12–293
Fertiliser use in established radiata pine stands in New Zealand (D.J.Mead; R.L.Gadgil)	8–105
Fertiliser use in the management of pine and eucalypt plantations in Australia: A review of past and current practices (E.M.Birk)	24289
Fibre and fibre network behaviour in strained wet webs (R.P.Kibblewhite)	4–552
Fibre cross-section dimensions of undried and dried <i>Pinus radiata</i> kraft pulps (R.P.Kibblewhite; K.A.Hamilton)	14–319
Fibre, beating, and papermaking properties of kraft pulps from New Zealand beech species (<i>Nothofagus</i>) (R.P.Kibblewhite; D.Brookes)	7–425
Fibre-based composites in New Zealand: Past developments and future opportunities (D.V.Plackett; J.M.McLaughlan; R.J.Burton)	21–246
Field lysimeter to study water movement and nutrient content in a pumice soil under <i>Pinus radiata</i> forest. II. Deep seepage and nutrient leaching in the first 12 years of tree growth (P.J.Knight; G.M.Will)	7–274
	/ 2/7

Field nonformance of micromanance tod Davalas fin (C. A. Ditchia: A. I. Lana)	Vol-page
Field performance of micropropagated Douglas fir (G.A.Ritchie; A.J.Long)	16-343
First thinning options. Row thinning v. selection thinning (J.P.Wright)	6–308
Fluctuation in opossum populations along the north bank of the Taramakau catchment and its effect on the forest canopy (C.J.Pekelharing)	9–212
Foliage and growth distribution within crowns of <i>Pinus radiata</i> : Changes with age in a close-spaced stand (H.A.I.Madgwick)	23–84
Foliage biomass of Douglas fir in a 53-year-old plantation (M.Kay)	8–315
Foliage development within the crowns of <i>Pinus radiata</i> trees at two spacings (D.A.Rook; M.P.Bollmann; S.O.Hong)	17–297
Foliar concentrations of ten mineral nutrients in nine <i>Pinus radiata</i> clones during a 15-month period (P.J.Knight)	8–351
Foliar macronutrient concentrations and foliage retention in radiata pine clones on four sites (R.D.Burdon)	5250
Food sinks and food reserves of trees in temperate climates (C.Glerum)	10–176
"Forest Amelioration" (Book Review)	14–249
"Forest Biomass" (Book Review)	13–110
Forest health issues in South-east Asian countries (B.Poole)	19–159
Forest health problems affecting <i>Pinus radiata</i> in Spain with special reference to the Basque region (J.M.Cobos Suarez; M.M.Ruiz Urrestarazu)	19–228
Forest health—An industry perspective of the risks to New Zealand's plantations (D.New)	19–155
"Forest Policy in New Zealand—An Historical Geography" (Book Review)	19–136
"Forest Products Trade: Market Trends and Technical Developments" (Book Review)	21–119
"Forest Site Evaluation and Long-term Productivity" (Book Review)	1 9 –138
"Forest Trees in Australia" (Book Review)	18-233
Forestry quarantine risk of cargo imported into New Zealand (L.S.Bulman)	22–32
Forests and animals of the Hope catchment (R.Guest; G.B.Wilkinson)	7–123
Forests and scrublands of northern Fiordland (J.Wardle; J.Hayward; J.Herbert)	1–80
Forests of the Waitaki and Lake Hawea catchments (J.Wardle; R.Guest)	744
Formulation of sprays to improve the efficacy of foliar fertilisers (P.J.G.Stevens)	24–27
Forty years of Sirex noctilio and Ips grandicollis in Australia (F.D.Morgan)	19–198
Forward selection plots in breeding programmes with insect-pollinated tree species (P.G.Cannon; C.J.A.Shelbourne)	23–3
Four tree species and the calcium, magnesium, and potassium budgets of a Swedish forest site (H.M.Eriksson; C.Jönsson)	24-415

"Frankia Symbioses" (Book Review)	<i>Vo⊢page</i> 15–256
Free shrinkage of <i>Pinus radiata</i> at an elevated temperature (A.M.Carrington; R.B.Keey; J.C.F.Walker)	25–348
Frost damage, survival, and growth of <i>Pinus radiata</i> , <i>P. muricata</i> , and <i>P. contorta</i> seedlings on a frost flat (J.M.Balneaves)	18–161
"Fuelwood: The Energy Crisis That Won't Go Away" (Book Review)	14–252
"Fungi that Decay Ponderosa Pine" (Book Review)	5–359
Fungicidal control of <i>Phaeocryptopus gaeumannii</i> in a 19-year-old Douglas fir stand (I.A.Hood; J.B.van der Pas)	9–272
Fungicidal effectiveness of various salts of a tertiary amine (A.F.Preston; J.A.Butcher)	8–392
G	
General and specific combining ability in eight selected clones of radiata pine (M.D.Wilcox; C.J.A.Shelbourne; A.Firth)	5219
General and specific combining ability in families of <i>Pinus radiata</i> in New South Wales, Australia (I.G.Johnson)	20–3
Generalisation of multi-trait selection indices using information from several sites (R.D.Burdon)	9–145
Generation of a sustainable <i>Pinus radiata</i> cell suspension culture and studies of cellular nitrogen nutrition (R.D.Teasdale)	16–377
Genetic improvement of eucalypts in New Zealand (M.D.Wilcox)	10343
Genetic improvements from a radiata pine seed orchard (K.G.Eldridge)	12-404
Genetic survey of <i>Pinus radiata</i> . 1: Introduction, description of experiment, and basic methodology (R.D.Burdon; M.H.Bannister; H.A.I.Madgwick; C.B.Low)	22–119
Genetic survey of <i>Pinus radiata</i> . 2: Population comparisons for growth rate, disease resistance, and morphology (R.D.Burdon; M.H.Bannister; C.B.Low)	22–138
Genetic survey of <i>Pinus radiata</i> . 3: Variance structures and narrow-sense heritabilities for growth variables and morphological traits in seedlings (R.D.Burdon; M.H.Bannister; C.B.Low)	22–160
Genetic survey of <i>Pinus radiata</i> . 4: Variance structures and heritabilities in juvenile clones (R.D.Burdon; M.H.Bannister; C.B.Low)	22–187
Genetic survey of <i>Pinus radiata</i> . 5: Between-trait and age-age correlations for growth rate, morphology, and disease resistance (R.D.Burdon; M.H.Bannister; C.B.Low)	22–211
Genetic survey of <i>Pinus radiata</i> . 6: Wood properties: Variation, heritabilities, and interrelationships with other traits (R.D.Burdon; C.B.Low)	22–228

	Vol–page
Genetic survey of <i>Pinus radiata</i> . 7: Variation and inheritance of pinene composition in wood oleoresin (R.D.Burdon; R.E.Gaskin; J.A.Zabkiewicz; C.B.Low)	22–246
Genetic survey of <i>Pinus radiata</i> . 8: Population differences in monoterpene composition of cortical oleoresin (R.D.Burdon; J.A.Zabkiewicz; I.A.Andrew)	22–257
Genetic survey of <i>Pinus radiata</i> . 9: General discussion and implications for genetic management (R.D.Burdon)	22–274
Genetic variation and inheritance of resistance to Dothistroma needle blight in <i>Pinus radiata</i> (M.D.Wilcox)	12–14
Genetic variation in frost tolerance, early height growth, and incidence of forking among and within provenances of <i>Eucalyptus fastigata</i> (M.D.Wilcox)	12–510
Genotype and location effects on internode length of <i>Pinus radiata</i> in New Zealand (M.J.Carson; C.S.Inglis)	18–267
Genotype × environment interaction and optimal number of progeny test sites for improving <i>Pinus radiata</i> in New Zealand (S.D.Carson)	21–32
Grade Index for pruned butt logs (J.C.Park)	10-419
Grading random-width lumber by computer (C.L.Todoroki)	25–367
Graft incompatibility in radiata pine in New Zealand (G.B.Sweet; I.J.Thulin)	3-82
Grafting Eucalyptus deglupta (J.Davidson)	4–204
Growth and development of vegetative shoots of cut tawa trees at Pureora and Rotoehu (M.C.Smale)	12442
Growth and morphology of seedlings and juvenile cuttings in six populations of <i>Pinus radiata</i> (R.D.Burdon; M.H.Bannister)	15–123
Growth and nutrition of <i>Pinus radiata</i> on a recent coastal sand as affected by nitrogen fertiliser (I.R.Hunter; G.F.Foy)	13–3
Growth and nutrition of <i>Pinus radiata</i> on rhyolitic tephra as affected by magnesium fertiliser (I.R.Hunter; J.M.Prince; J.D.Graham; G.M.Nicholson)	16–152
Growth and predicted timber value of <i>Pinus radiata</i> cuttings and seedlings on a fertile farm site (D.G.Holden; B.K.Klomp; S.O.Hong; M.I.Menzies)	25–283
Growth and utilisation of young Cupressus macrocarpa (A.Somerville)	23–163
Growth and wood properties of <i>Pinus radiata</i> in relation to applied ethylene (J.E.Barker)	9–15
Growth and yield models for Pinus radiata in Tasmania (S.G.Candy)	19–112
Growth decline and phosphorus response by Douglas fir on a degraded high- country yellow-brown earth (M.C.Belton; M.R.Davis)	16-55
Growth effects of large gaps in <i>Pinus radiata</i> plantations (G.Minko; G.Hepworth)	20–22
Growth losses in <i>Pinus radiata</i> stands unsprayed for <i>Dothistroma pini</i> (R.C.Woollons; W.J.Hayward)	14-14

7	a
1	7

	Vo⊢page
Growth models for even-aged stands: <i>Pinus radiata</i> in Golden Downs Forest, Nelson (O.García)	14-65
Growth of Eucalyptus regnans in a plot at Rotorua (M.D.Wilcox; I.J.Thulin)	9166
Growth of first rotation radiata pine in Golden Downs State Forest, Nelson, for comparison with subsequent crops (A.G.D.Whyte)	2–227
Growth of naturally regenerated <i>Beilschmiedia tawa</i> and podocarps in unlogged and selectively logged podocarp/tawa forest, Pureora (M.C.Smale; M.O.Kimberley)	16–131
Growth of pampas grass (<i>Cortaderia</i> spp.) in New Zealand <i>Pinus radiata</i> forests (R.L.Gadgil; P.G.Barton; P.J.Allen; A.M.Sandberg)	20–176
Growth of <i>Pinus radiata</i> on ripped and unripped Taupo pumice soils (E.G.Mason; A.W.J.Cullen)	16–3
Growth of silver beech in northern Fiordland (J.Herbert)	3–137
Growth of two <i>Pinus radiata</i> stock types on ripped and ripped/bedded plots at Karioi Forest (E.G.Mason; A.W.J.Cullen; W.C.Rijkse)	18–287
Growth parameters of cell suspension cultures of <i>Pseudotsuga menziesii</i> and effects of nitrogen sources on growth (M.S.Lee; E.G.Kirby)	16–369
Growth rates in south Westland terrace rimu forest. 1. Growing stock and increment in virgin forest (D.A.Franklin)	3–304
Growth response of phosphorus-deficient <i>Pinus radiata</i> to various rates of superphosphate fertiliser (I.R.Hunter; J.D.Graham)	12–49
Growth response of <i>Pinus radiata</i> to fertiliser and herbicide treatment in a clearfelled logged and a clearfelled logged and burned <i>Nothofagus</i> forest (M.J.Phillips; K.M.Goh)	16–19
Growth, differentiation, and ultrastructure of microspore callus of <i>Picea abies</i> as affected by nitrogenous supplements and light (L.K.Simola; O.Huhtinen)	16–357
н	
Harvest residue effect on micro-climate, nutrition, and early growth of Sitka spruce (<i>Picea sitchensis</i>) seedlings on a restock site (M.F.Proe; J.Dutch; J.Griffiths)	24–390
Heartwood differentiation in <i>Pinus</i> species—A modified azo-dye test (N.H.O.Cummins)	2–188
Height growth of <i>Pinus radiata</i> as affected by stocking (J.P.Maclaren; J.C.Grace; M.O.Kimberley; R.L.Knowles; G.G.West)	25–73
Herbicides increase growth responses to fertiliser in a 5-year-old <i>Eucalyptus</i> regnans plantation (M.G.Messina)	20–168
Hexazinone use for grass and woody weed control—Effects on establishment and long-term growth of <i>Pinus radiata</i> plantations (G.R.Wilkinson; W.A.Nielsen; L.G.Edwards)	22–12

	Vol-page
Highly mechanised harvesting system in New Zealand (C.J.Terlesk; K.Walker)	12–199
History of forest health surveillance in New Zealand (D.J.Kershaw)	19–375
"Hormonal Control of Tree Growth" (Book Review)	19–135
How will New Zealand's forests respond to climate change? Potential changes in response to increasing temperature (D.Whitehead; J.R.Leathwick; J.F.F.Hobbs)	22–39
Hydrology and sediment regime of three small land-use basins in the central North Island, New Zealand (A.Dons)	17–161
Hymenogaster albus—A mycorrhizal fungus of Eucalyptus in New Zealand (M.Chu-Chou; L.J.Grace)	11–186
I	
Identification of Australasian species of wood-decay fungi—A New Zealand perspective (P.K.Buchanan)	19–294
IFS, an interactive forest simulator for long range planning (O.García)	11-8
Impacts of harvesting and site preparation on carbon cycling processes in forests: Guest editorial (C.T.Smith; W.J.Dyck)	23–341
Implications for silviculture from the Tarawera Valley regimes trial (R.N.James)	6-171
Implications of radiata pine afforestation studies (R.Fenton)	2–378
Import costs and overseas earnings of afforestatiom models for the export log trade (R.Fenton; M.M.Dick)	2–128
Import costs and overseas earnings of sawlog and export log afforestation (R.Fenton)	2–369
Improved techniques for the laboratory rearing of <i>Thanasimus formicarius</i> (W.Faulds)	18–187
Incidence and severity of Cyclaneusma needle-cast in fifteen <i>Pinus radiata</i> plantations in New Zealand (L.S.Bulman)	18–92
Increased mechanisation and soil damage in forests—A review (R.Wingate-Hill; B.F.Jakobsen)	12–380
Increased nutrient availability in topsoils under conifers in the South Island high country (M.R.Davis; M.H.Lang)	21–165
Individual-tree growth model for Pinus radiata (R.B.Tennent)	12–62
"Indonesian Forestry Abstracts, Dutch Literature Until About 1960" (Book Review)	18–231
Induction of vitrification in Picea sitchensis cultures (A.John; D.L.Pearson)	16–328
$Industrial \ company's \ view \ of \ nursery \ stock \ quality \ (D.J.Albert; G.Fry; B.R.Poole)$	10–2
Infection changes and volume loss in a 19-year-old <i>Pinus radiata</i> stand affected by Armillaria root rot (M.MacKenzie)	17–100

	Vo⊢page
Infection of <i>Pinus radiata</i> by <i>Dothistroma pini</i> : Effect of buffer capacity of needle homogenates (R.A.Franich; L.G.Wells)	7–35
Infection of pupae of Heliothis armigera by Paecilomyces farinosus (P.J.Alma)	5-42
Infection of wounds in Eucalyptus delegatensis (P.D.Gadgil, A.D.Bawden)	11–262
Influence of a heavy phosphate dressing and subsequent radiata pine response on the properties of a Riverhead clay soil (R.Ballard)	2–202
Influence of clearfelling on decomposition of <i>Pinus radiata</i> litter (R.L.Gadgil; P.D.Gadgil)	8–213
Influence of disease and insect problems on management practice in Kaingaroa Forest (D.A.Elliott)	6–188
Influence of introduced mammals on the forest and shrublands of the Grey River headwaters (J.Wardle)	4-459
Influence of moisture relationships on thinning practice (T.B.Butcher; J.J.Havel)	6–158
Influence of nitrogen and phosphorus stresses on the growth and form of radiata pine stems and crowns (G.M.Will; P.D.Hodgkiss)	7–307
Influence of nutrient medium upon shoot initiation on vegetative explants excised from 15- to 18-year-old <i>Picea glauca</i> (G.H.Mohammed; D.I.Dunstan; T.A.Thorpe)	16–297
Influence of photoperiod on growth and wood formation of <i>Pinus radiata</i> (P.A.Jenkins; H.Hellmers; E.A.Edge; D.A.Rook; R.D.Burdon)	7–172
Influence of silvicultural regimes on national and regional wood supply planning (M.R.Hosking)	6–266
Influence of silviculture and the role of thinning on a region's wood supply (A.L.Rockell)	6–253
Influence of soil type on the nitrogen and phosphorus content of radiata pine litter (D.Lamb; R.G.Florence)	5–143
Influence of stand and site on radiata pine litter in South Australia (R.G.Florence; D.Lamb)	4–502
Influence of time of application of cuprous oxide on control of Dothistroma needle blight (J.W.Gilmour; A.Noorderhaven)	1–160
Influence of tree age on the chemical composition of radiata pine (J.M.Uprichard; J.A.Lloyd)	10–551
Influence of ungulates on the forests and scrublands of south Westland (J.Wardle; J.Hayward; J.Herbert)	3–3
Influences of auxins and auxin synergists on adventitious root primordium initiation and development (B.E.Haissig)	4–311
Initiation, elongation, and remultiplication of <i>Larix decidua</i> micropropagules (A.M.Diner; A.Strickler; D.F.Karnovsky)	16–306

V0	⊳h–page
Injury to radiata pine as influenced by freezing and thawing rate, and low temperature duration (I.J.Warrington; A.K.H.Jackson) 11	-37
Inoculation experiments with <i>Phaeocryptopus gaeumannii</i> on Douglas fir seedlings (I.A.Hood) 7	7—77
Inoculation of Pinus caribaea var. hondurensis seedlings with Ganoderma lucidum in Fiji (I.A.Hood; T.I.W.Bell)13	3–53
Insect and fungal defects in red and silver beech (H.S.Litchwark) 8	3259
Insect invasion and survival of Douglas fir stumps (P.J.Alma; R.J.van Boven) 5	5–306
Intensive harvesting impacts on soil temperature and solution chemistry in the Maritimes region of Canada (M.K.Mahendrappa; D.G.O.Kingston) 24	1-402
Intensive site-preparation to control Armillaria root disease in second-rotationPinus radiata (M.Self; M.MacKenzie)25	5-111
Interaction of forest floor material and mineral soil on orthophosphate sorption (N.B.Comerford; W.J.Dyck) 18	3-191
"Interaction Theory in Forest Ecology and Management" (Book Review) 16	5–124
Internal checking in New Zealand-grown radiata pine after high temperature drying (D.H.Williams) 11	-60
Internode length of hoop pine: Genetic parameters and prospects for developing a long-internode breed (M.J.J.Dieters; R.R.Woolaston; D.G.Nikles) 20)—138
Interspecific competition between <i>Pinus radiata</i> and some common weed species— First-year results (B.Richardson; A.Vanner; N.Davenhill; J.Balneaves; K.Miller; J.Ray) 23	3–179
Intra-annual growth of young <i>Pinus radiata</i> in New Zealand (R.B.Tennent) 16	6–166
Introduction into New Zealand of Bracon phylacteophagus, a biocontrol agent of Phylacteophaga froggatti, eucalyptus leaf-mining sawfly (W.Faulds)20)—54
Introduction of poplar and willow pathogens into New Zealand and their effect (A.G.Spiers) 19	-347
Introduction of the Windsor RW30 Tree Harvester into early pine thinnings (Abstract) (O.H.Raymond) 6	5–241
Irrigation and fertiliser effects on productivity of a <i>Pinus radiata</i> seed orchard. 1: Response to treatment of an established orchard (A.R.Griffin; W.J.B.Crane; R.N.Cromer) 14	1289
Is there an inverse correlation between sexual and asexual reproduction in <i>Cryptomeria japonica</i> ? (T.Furukoshi) 4	1-426

J

Japanese sawmilling industry: Current situation, historic trends, and a comparison
with the New Zealand industry (F. Maplesden)23–209

Κ

Vo⊢page

Kaingaroa growth model for radiata pine and its implications for maximum volume production (Abstract) (D.A.Elliott; C.Goulding)	6–187
Keynote Address: Indigenous forest health in the South Pacific—A plant pathologist's view (F.J.Newhook)	19–231
Keynote Address: Maintaining health in plantation forests (G.B.Sweet)	19–143
Kinleith thinning operations of N.Z. Forest Products Limited (A.W.Grayburn)	6–214
Kraft fibre qualities of <i>Pinus radiata</i> toplogs, thinnings, and slabwood, and a "genetic misfit" (R.P.Kibblewhite; A.D.Bawden)	22–96
Kraft pulping properties of New Zealand-grown Picea abies and Picea sitchensis (J.A.Lloyd; L.Stratton)	14-404
L	
Laboratory screening trials with chemicals for the protection of green timber against fungi (J.A.Drysdale; A.F.Preston)	12–457
Laminated or solid New Zealand Douglas fir scaffold planks and the Standard specification for them (C.R.Hellawell)	2–249
Land use impacts on streamwater nitrogen and phosphorus (A.B.Cooper; J.E.Hewitt; J.G.Cooke)	17–179
Leaf-inhabiting fungi of eucalypts in New Zealand (M.Dick)	12–525
Leaf-inhabiting fungi of eucalypts in New Zealand. II (M.Dick)	20-65
Lepidopterous defoliators in a developing <i>Pinus radiata</i> stand (G.P.Hosking; J.A.Hutcheson)	17–331
Liberations and dispersal of red deer in northern South Island districts (C.M.H.Clarke)	1–194
Lift and storage practices: Their impact on successful establishment of southern pine plantations (M.P.Garber; J.G.Mexal)	10–72
Lifting and handling procedures at Edendale nursery—Effects on survival and growth of 1/0 <i>Pinus radiata</i> seedlings (J.Balneaves; M.Menzies)	18–132
Linear programming and its application to the locational planning of wood- processing industries (D.B.Abel)	3–259
Local employment multipliers for the pulp and paper industry in New Zealand (R.K.Grant)	6–122
Log parameters: Length, diameter, taper, form (Letter) (D.S.McDonald)	1–240
Log quality and the strength and stiffness of structural timber (H.Bier)	16–176
Log rotation effect on carriage sawing of swept logs (C.L.Todoroki)	25–246
Long-term foliar phosphorus response of <i>Pinus radiata</i> to superphosphate fertiliser (I.R.Hunter; J.D.Graham; S.S.Gallagher; K.T.Calvert)	15-89

New Zealand Journal of Forestry Science 28(1)

Long-term growth response of Douglas fir to weed control (D.S.Preest)	Vo⊢page 7—329
Long-term growth responses in <i>Pinus radiata</i> fertiliser experiments (R.C.Woollons; A.G.D.Whyte; D.J.Mead)	18-199
Long-term production and the effect of tree size on productivity of cutters in first thinnings of <i>Pinus radiata</i> at Tumut, New South Wales (S.N.Shaw)	12–180
Longevity of response in <i>Pinus radiata</i> foliar concentrations to nitrogen, phosphorus, and boron fertilisers (P.J.Knight; H.Jacks; R.E.Fitzgerald)	13305
Longitudinal flow and sap displacement in green sapwood stems (J.F.G.Mackay)	1–167
Longitudinal splitting of bark: A likely cause of "Type 3" resin pockets in <i>Pinus radiata</i> (L.A.Donaldson)	13–125
Loss of Compound 1080 (sodium monofluoroacetate) from Carbopol gel smeared on foliage to poison deer (C.L.Batcheler, C.N.Challies)	18–109
Lupin, fertiliser, and thinning effects on early productivity of <i>Pinus radiata</i> . growing on deep Pinaki sands (D.S.Jackson; H.H.Gifford; J.D.Graham)	13–159
Lupinus arboreus and inorganic fertiliser as sources of nitrogen for Pinus radiata on a coastal sand (R.L.Gadgil; A.M.Sandberg; J.D.Graham)	14–257
м	
Magnesium nutrition and dry matter allocation patterns in <i>Pinus radiata</i> (T.W.Payn; D.J.Mead; G.M.Will; I.R.Hunter)	25–39
Maintenance fertilisers for grazed pastures in New Zealand: An agriculture perspective on applying theory to management (I.S.Cornforth)	24–279
"Management of Radiata Pine" (Book Review)	23–249
Management of Tasmanian forests affected by regrowth dieback (T.J.Wardlaw)	19–265
Market requirements for <i>Pinus radiata</i> clearwood: Implications of length specifications (G.P.Horgan)	21–77
Mathematical solution for optimising the sawing pattern of a log given its dimensions and its defect core (J.M.P.Geerts)	14–124
Matters arising: Some pedological trends from recent West Coast soil surveys and their relevance to forest use (Mew and Leamy): A discussion (A.J.Pearce;	0.200
C.L.O'Loughlin)	8-309
Matters arising—Reply (G.Mew; M.L.Leamy)	8–311
Measured and estimated parameters for a model of nutrient uptake by trees (J.M.Kelly; A.H.Chappelka; B.G.Lockaby)	24–213
Measurement of trees: A rejoinder (Letter) (A.G.D.Whyte)	1–244
Metabolism during adventitious root primordium initiation and development (B.E.Haissig)	4–324
Meteorological factors associated with a fire whirlwind (J.T.Steiner)	6-421

0	F
ð	Э

	Vo⊢page
Method for assessment of recoverable volume by log types (M.W.Deadman; C.J.Goulding)	9–225
Methods for sampling foliage and insect populations of the beech forest canopy (W.J.Sweney; A.E.Jones)	5–119
Michaelis-Menten kinetics: Calculation and use in nutrient uptake models (K.C.J.van Rees)	24–226
Micronutrient and macronutrient uptake by <i>Pinus radiata</i> , and soil boron fractions, as affected by added nitrogen and boron (S.T.Olykan; J.A.Adams; A.H.Nordmeyer; R.G.McLaren)	26–61
Microsite effect on <i>Eucalyptus regnans</i> growth (J.L.Bathgate; L.B.Guo; R.F.Allbrook; T.W.Payn)	23–154
Mineral nutrition and growth of <i>Eucalyptus</i> seedlings (R.N.Cromer; A.M.Wheeler; N.J.Barr)	14–229
Minimum total cost: An improved weigh scaling strategy (V.G.Smith)	8–269
Modelling carbon allocation—A review (G.I.Ågren; J.F.Wikström)	23–343
Modelling competitive pasture effects on nutrient uptake by <i>Pinus radiata</i> (P.W.Clinton; C.M.Frampton; D.J.Mead)	24–268
Modelling of <i>Pinus radiata</i> wood properties. Part 1: Spiral grain (X.Tian; D.J.Cown; M.J.F.Lausberg)	25–200
Modelling of <i>Pinus radiata</i> wood properties. Part 2: Basic density (X.Tian; D.J.Cown; D.L.McConchie)	25–214
Modelling processes of planting stock production and establishment: Framework of the model and its use in practice (P.K.Räsänen)	1012
Modelling the interception of solar radiant energy in intensively managed stands (J.C.Grace; P.G.Jarvis; J.M.Norman)	17–193
Modified soil/block technique for assessing wood decay (M.E.Hedley; J.B.Foster)	2–237
Moisture removal from green sapwood during platen pressing (R.Wingate-Hill; R.B.Cunningham)	16–109
Molybdenum, sulphur, and boron deficiencies in <i>Lupinus arboreus</i> at Pouto Forest (R.L.Gadgil; P.J.Knight; A.M.Sandberg; P.J.Allen)	11–114
Monitoring bait acceptance in brush-tailed possum populations: Development of a tracer technique (D.R.Morgan)	11–271
Morphology of long-shoot development in Pinus radiata (M.P.Bollmann)	13–275
Morphology, strength, and biomass of manuka roots and their influence on slope stability (A.Watson; C.O'Loughlin)	15–337
Movement of marked sika (<i>Cervus nippon</i>) and red deer (<i>Cervus elaphus</i>) in central North Island, New Zealand (M.M.Davidson)	9 –77

	Vol-page
Multi-trait index selection of <i>Pinus radiata</i> progenies at five sites and associated genetic gains (C.J.A.Shelbourne; C.B.Low)	10–307
Mycological records. 1: Diplodia taxi (Sowerby) De Notaris (G.S.Ridley)	24-69
Mycological records. 2: Neurospora intermedia Tai (G.S.Ridley)	2471
Mycological records. 3: Coniothyrium ovatum Swart (G.S.Ridley)	25–105
Mycological records. 4: Vizella tunicata sp. nov. (P.D.Gadgil)	25–107
Mycorrhizal fungi of <i>Pinus radiata</i> planted on farmland in New Zealand (M.Chu- Chou; L.J.Grace)	17–76
Myrtle wilt and its possible management in association with human disturbance of rainforest in Tasmania (G.A.Kile; J.M.Packham; H.J.Elliott)	19–256
Ν	
Needle loss in black spruce: Nutrient concentration during shoot extension (P.Salonius; K.Beaton)	24–183
Nematodes in New Zealand forest nurseries (G.W.Yeates)	20–249
Nitrate losses from disturbed ecosystems in New Zealand—A comparative analysis (W.J.Dyck; J.R.Gosz; P.D.Hodgkiss)	13–14
Nitrogen availability and comparison to uptake in two New Zealand <i>Pinus radiata</i> forests (W.J.Dyck; C.A.Mees; P.D.Hodgkiss)	17–338
Nitrogen concentration in foliage of <i>Pinus radiata</i> as affected by nitrogen nutrition, thinning, needle age, and position in crown (H.A.I.Madgwick; P.N.Beets; A.M.Sandberg; D.S.Jackson)	13–197
Nitrogen distribution in stands of <i>Pinus radiata</i> with and without lupin in the understorey (R.L.Gadgil)	6–33
Nitrogen status of <i>Pinus radiata</i> seedlings after undercutting: Changes in total, soluble, and insoluble nitrogen (A.Coker)	14–277
Non-destructive assessment of spiral grain in standing trees (J.M.Harris)	14–395
Note on root-wood strength deterioration in <i>Nothofagus fusca</i> and <i>N. truncata</i> after clearfelling (C.O'Loughlin; A.Watson)	11–183
Note on the estimation of basic density of fresh wood chips (D.J.Cown)	10502
Nutrient accumulation in second-rotation <i>Pinus radiata</i> after harvest residue management and fertiliser treatment of coastal sand dunes (C.T.Smith; A.T.Lowe; P.N.Beets; W.J.Dyck)	24–362
Nutrient concentrations within stems of <i>Pinus radiata</i> (H.A.I.Madgwick; D.J.Frederick)	18–221
Nutrient content and uptake of close-spaced <i>Pinus radiata</i> (H.A.I.Madgwick; A.Sims; G.R.Oliver)	1865
Nutrient content of Pinus radiata seedlings (P.J.Knight)	854

Nutrient deficiencies in Pinus radiata in New Zealand (G.M.Will)	Vo⊢page 8–4
Nutrient dynamics and requirements of forest crops (T.Ericsson)	24–133
Nutrient losses from litterbags containing <i>Pinus radiata</i> litter: Influences of thinning, clearfelling, and urea fertiliser (G.M.Will; P.D.Hodgkiss; H.A.I.Madgwick)	13–291
Nutrient relationships of radiata pine in Tasman Forest, Nelson (J.A.Adams; T.W.Walker)	5–18
Nutrient uptake by woody root systems (N.B.Comerford; P.J.Smethurst; J.A.Escamilla)	24–195
Nutritional basis for feeding zone preference of <i>Arhopalus ferus</i> (Coleoptera : Cerambycidae) (G.P.Hosking; J.A.Hutcheson)	9–185

Nutritional relationships between pampas (Cortaderia spp.) and Pinus radiata	
(R.L.Gadgil; A.M.Sandberg; P.J.Allen)	22–3
Nutritional role of Lupinus arboreus in coastal sand dune forestry. 4. Nitrogen	

distribution in the ecosystem after tree planting (R.L.Gadgil)

0

Occurrence of Armillaria rhizomorph populations in the soil beneath indigenous	
forests in the Bay of Plenty, New Zealand (I.A.Hood; C.J.Sandberg)	17–83
"Oceanic Forestry" (Book Review)	18–135
Offspring sex ratios of <i>Bracon phylacteophagus</i> as influenced by host size and maternal age (W.Faulds)	20–290
Operations research in forest harvesting (R.J.McCormack)	12332
Opossums in the Hokitika River catchment (A.Boersma)	4-64
Opportunities for managing nitrogen uptake in established <i>Pinus radiata</i> plantations on sandy soils (J.C.Carlyle)	24–344
Organic carbon in forested sandy soils: Properties, processes, and the impact of forest management (J.C.Carlyle)	23–390
Origins of adventitious roots (B.E.Haissig)	4–299
Output of water, suspended sediment, and phosphorus and nitrogen forms from a small forested catchment (B.J.Bargh)	7–162

Ρ

Packaging and cool-storage effects on growth of <i>Cupressus macrocarpa</i> seedlings (J.M.Balneaves)	18–297
Paropsine chrysomelid attack on plantations of <i>Eucalyptus nitens</i> in Tasmania (D.W. de Little)	19–223
Partial defoliation and growth of 5-year-old radiata pine (D.A.Rook; A.G.D.Whyte)	6-40

9-324

Partial defoliation and wood properties of 5-year-old Pinus radiata (D.J.Cown)	<i>Vo⊢page</i> 7—192
Past and projected use of fertilisers in New Zealand forests (R.Ballard; G.M.Will)	7–192 8–15
Pathogenic fungus associated with <i>Platypus</i> attack on New Zealand <i>Nothofagus</i> species (W.Faulds)	7–384
Pathogenicity of <i>Seiridium unicorne</i> reduced by simultaneous inoculation with normal and degenerate isolates (N.M.Self)	24–78
Penetration of methyl bromide into <i>Pinus radiata</i> wood and its significance for export quarantine (D.J.Cross)	21–235
Peppermint group of eucalypts (M.D.Wilcox)	9–262
Perforation plates: Observations using scanning electron microscopy (B.G.Butterfield; B.A.Meylan)	1–116
Performance of <i>Pinus radiata</i> seedlings and cuttings to age 15 years (B.K.Klomp; S.O.Hong)	15–281
Performances of unmodified and copper-modified alkylammonium-treated stakes in ground contact (J.A.Drysdale)	13–354
Phaeocryptopus gaeumannii on Pseudotsuga menziesii in southern British Columbia (I.A.Hood)	12-415
Phosphate fertiliser and copper nutrition of maritime pine in south-western France (E.Saur)	24–321
Phosphorus cycling in a sandy podsol under <i>Pinus radiata</i> (R.L.Parfitt; K.R.Tate; G.W.Yeates; P.N.Beets)	24–253
Phosphorus levels in topsoils under conifer plantations in Canterbury high country grasslands (M.C.Belton; K.F.O'Connor; A.B.Robson)	25–265
Photoperiodic effect on pollen shedding in Pinus radiata? (R.D.Burdon)	7–214
Photosynthesis, respiration, and transpiration of radiata pine (G.B.Wood; E.G.Brittain)	3–181
Physical properties of Corsican pine grown in New Zealand (D.J.Cown)	4–76
Physical properties, resin content, and tracheid length of lodgepole pine grown in New Zealand (J.M.Harris)	3-91
Physiological ageing and site effects on wood properties of <i>Pinus radiata</i> (M.J.F.Lausberg; D.J.Cown; K.F.Gilchrist; J.H.Skipwith; C.R.Treloar)	25–189
"Physiological Ecology of Forest Production" (Book Review)	17–372
Physiological inputs to motor-manual techniques of thinning radiata pine (W.Fibiger; M.Henderson)	12–162
Physiological study of seed cone production in Pinus radiata (G.B.Sweet)	9–20
Phytophthora heveae, a pathogen of kauri (P.D.Gadgil)	4–59
Phytophthora spp. in indigenous forests in Australia (E.M.Davison; B.L.Shearer)	19–277

	Vo⊢page
Pine wilt nematode: An example of active risk assessment (G.P.Hosking)	19–335
"Pinus radiata—Biomass, Form and Growth" (Book Review)	23-413
<i>Pinus radiata</i> forest floors: Factors affecting organic matter and nutrient dynamics (M.L.Carey; I.R.Hunter; I.Andrew)	12–36
<i>Pinus radiata</i> plywood: Influence of panel width and loading method on bending properties (H.Bier)	14-400
<i>Pinus radiata</i> seedling growth and micronutrient uptake in a sand culture experiment, as affected by the form of nitrogen (S.T.Olykan; J.A.Adams)	25–49
<i>Pinus radiata</i> seedling water potential and root and shoot growth as affected by type and duration of storage (J.M.Balneaves; M.I.Menzies; S.O.Hong)	22–24
Pinus radiata stem volume increment and its relationship to needle mass, foliar and soil nutrients, and fertiliser inputs (I.R.Hunter; J.A.C.Hunter; J.D.Graham)	17–67
Pinus radiata wood residue qualities and some utilisation options (R.P.Kibblewhite)	14–382
"Plant Breeding in New Zealand" (Book Review)	14–250
Planting density effects of water use efficiency of trees and pasture in an agroforestry experiment (J.Eastham; C.W.Rose; D.A.Charles-Edwards; D.M.Cameron; S.J.Rance)	20–39
Planting stock quality in the nursery (C.Glerum; D.P.Lavender)	10-293
Planting stock quality, root growth capacity, and field performance of three boreal conifers (R.F.Sutton)	10–54
Plantlet formation in black and white spruce. III. Histological analysis of <i>in vitro</i> root formation and the root-shoot union (K.R.Patel; C.Rumary; T.A.Thorpe)	16–289
Pohutukawa (<i>Metrosideros excelsa</i>) health and phenology in relation to possums (<i>Trichosurus vulpecula</i>) and other damaging agents (G.Hosking;	22 40
J.Hutcheson) Pollination in <i>Pinus radiata</i> (B.S.Lill; G.B.Sweet)	23–49 7–21
Polyhedral viruses infecting two forest insect pests, <i>Selidosema suavis</i> and	7-21
Heliothis armigera (S.Moore; P.J.Alma)	4-51
Polynomial taper equation for Pinus caribaea (P.J.Allen)	21–194
Polynomial taper equations that are compatible with tree volume equations (C.J.Goulding; J.C.Murray)	5–313
Pot trial evaluation and comparison of six potential sources of phosphate for forestry (P.J.Knight; G.M.Will)	1–22
Potential for estimating carbon fluxes in forest soils using ¹⁴ C techniques (A.F.Harrison; D.D.Harkness)	23–367
Potential harvesting systems for row thinning of plantations for pulpwood (C.M.Kerruish; G.A.Moore)	12–344

	Vo⊢page
Potential increase in nutrient requirements of <i>Pinus radiata</i> under intensified management (B.Webber)	8–146
Potential of unmodified and copper-modified alkylammonium compounds as groundline preservatives (J.A.Butcher; A.F.Preston; J.Drysdale)	9–348
Predicting <i>Pinus radiata</i> site index from environmental variables (I.R.Hunter; A.R.Gibson)	14–53
Predicting the impact of silvicultural treatment on wood characteristics of <i>Pinus radiata</i> (R.K.Grant)	8–277
Prediction of internode length in <i>Pinus radiata</i> stands (J.C.Grace; M.J.Carson)	23–10
Preferences for land-use options involving forestry in the Mackenzie/Waitaki Basin (J.R.Fairweather; S.R.Swaffield)	25–20
Preliminary results of the effects of selection management of terrace rimu forest (I.L.James; D.A.Franklin)	7–349
Preliminary results on the effect of selection management of terrace rimu forest (James and Franklin): Comment (C.G.R.Chavasse)	8-312
Preliminary selection of suitable provenances of <i>Eucalyptus regnans</i> for New Zealand (M.D.Wilcox)	12–468
Preservation of nursery stock quality through packaging, storage, transport, and planting (B.D.Cleary; R.Tinus)	10–295
Preservative requirements for exterior particleboard predicted from accelerated laboratory tests (M.E.Hedley)	6-455
Pressure chamber techniques for monitoring and evaluating seedling water status (B.D.Cleary; J.B.Zaerr)	10–133
Pretreatments to hasten the drying of <i>Nothofagus fusca</i> (A.N.Haslett; J.A.Kininmonth)	16–237
Problems in the measurement of longitudinal sapwood permeability and hydraulic conductivity (R.E.Booker)	7–297
"Process Modeling of Forest Growth Response to Environmental Stress" (Book Review)	21–257
Production forest fertiliser trials: Information they should provide and how to get it (A.G.D.Whyte, D.J.Mead; R.Ballard)	8–178
Production of papers with high tensile and low stretch properties (R.P.Kibblewhite)	6-466
Productivity and costs, with special reference to the felling bench (T.G.H.Bankes)	12–171
Productivity of commercial thinning operations in Queensland plantations— Influence of alternative silvicultural options (G.J.Bacon; P.J.Hawkins; J.P.Ward)	12–308
Profitability of "normal" afforestation for the overseas log trade on Site Indexes 95 and 110 (R.Fenton; M.M.Dick)	2-289

n	1
9	T

	Vol-page
Profitability of radiata pine afforestation for the export log trade—on Site Index 95 (R.Fenton; J.R.Tustin)	2–7
Profitability of radiata pine afforestation for the export log trade—on Site Index 80 (R.Fenton; M.M.Dick)	269
Profitability of radiata pine afforestation for the export log trade—on Site Index 110 (R.Fenton; M.M.Dick)	2–100
Profitability of second log pruning (R.Fenton)	3–313
Profitability of thinning in radiata pine plantations (W.G.Forrest)	4–529
Profitability of thinning: Short- and long-term considerations (C.Boström)	12364
Programme for large-scale cutting propagation of Norway spruce (J.Kleinschmit)	4-359
Propagation of <i>Platanus</i> ¥ acerifolia Willd. from cuttings (V.Benea; V.Cristescu)	4–167
Propagation of spruce by stem cuttings (R.M.Girouard)	4–140
Propagation of willows by cuttings (J.Chmelar)	4-185
Propagation system for the production of rooted cuttings from physiologically mature <i>Pinus radiata</i> within 2 years of field collection (J.C.van Dorsser; T.Faulds)	21–135
Properties of treated and untreated <i>Pinus radiata</i> plywood after 12 years' weathering (J.M.McLaughlan)	21–96
Prospects for the introduction of traits in forest trees by cell and tissue culture (D.J.Durzan; R.A.Campbell)	4261
Protection forests of the Wairau catchment (B.R.Manson; R.Guest)	5–123
Protective value of regenerating tea tree stands on erosion-prone hill country, East Coast, North Island, New Zealand (D.O.Bergin; M.O.Kimberley; M.Marden)	25–3
Protective value of vegetation on Tertiary terrain before and during Cyclone Bola, East Coast, North Island, New Zealand (M.Marden; D.Rowan)	23–255
Provenance variation in New Zealand-grown <i>Eucalyptus delegatensis</i> . 1: Growth rates and form (J.N.King; R.D.Burdon; M.D.Wilcox)	23–298
Provenance variation in New Zealand-grown <i>Eucalyptus delegatensis</i> . 2: Internal checking and other wood properties (J.N.King; R.D.Burdon; G.D.Young)	23–314
Provenance variation in wood properties of Pinus caribaea var. hondurensis (J.A.Wright)	20–220
Provisional classification of South Island virgin indigenous forests (P.J.McKelvey)	14-151
Pruned Log Index (J.C.Park)	19-41
Pruning effect on incidence and severity of <i>Seiridium</i> cypress canker in a stand of <i>Cupressus lusitanica</i> (N.M.Self; C.K.S.Chou)	24–75
Pruning results from 2.44-, 4.27-, and 5.49-m pruned 19-year-old radiata pine (R.Fenton)	7–216

	Vo⊢page
Pulp blends of beaten and unbeaten fibre: Effects on paper properties, and possible commercial implications (R.P.Kibblewhite)	7–250
Puruki experimental catchment: Site, climate, forest management, and research (P.N.Beets; R.K.Brownlie)	17–137
Pyrolysis products of Pinus radiata bark (T.D.Lomax; R.A.Franich; H.Kroese)	21–111
Q	
Quantifying responses to fertiliser in the growth of radiata pine (A.G.D.Whyte; D.J.Mead)	6–431
Quarantine risks imposed by overseas passengers (J.E.Sheridan)	19–338
R	
Radiata pine bark—Aspects of morphology, anatomy, and chemistry (R.Sands)	5–74
Radiata pine corewood and slabwood, and their interrelations with pulp and handsheet properties (R.P.Kibblewhite)	10–533
Radiata pine: Wood age and wood property concepts (D.J.Cown)	10–504
Rainfall interception by mountain beech (L.K.Rowe)	5-45
Rapid propagation of poplars by tissue culture methods (H.C.M.Whitehead; K.L.Giles)	7-40
Ratio methods for estimating forest biomass (P.Snowdon)	22–54
Recent thinning trials with cable logging systems in New Zealand (G.Murphy)	12–224
Recent trends in plant quarantine policy in Australia and New Zealand and their implications for forestry (F.R.Wylie)	19–308
Reciprocal grafting between three spruce species (R. van den Driessche)	4-448
Recovery of clear lengths from pruned Pinus radiata sawlogs (J.C.Park)	15–207
Recruitment, growth, and survival of rimu seedlings in selectively logged terrace rimu forest (I.L.James; D.A.Franklin)	8–207
Reduced early growth rates of <i>Pinus radiata</i> caused by <i>Dothistroma pini</i> (J.B.van der Pas)	11–210
Reducing the frequency of seedling malformations in <i>Pinus radiata</i> nurseries by the application of insecticides (J.W.Ray; A.L.Vanner)	18–280
Regeneration patterns in <i>Beilschmiedia tawa</i> -dominant forest at Rotoehu (M.C.Smale; M.O.Kimberley)	13–58
Regeneration patterns in <i>Beilschmiedia tawa</i> -dominant forest at Rotoehu: A modified presentation of some of the data (M.C.Smale; M.O.Kimberley)	19–134
Regeneration patterns in montane conifer/broadleaved forest on Mt Pureora, New Zealand (M.C.Smale; M.O.Kimberley)	23–123

2	-
u	-4
,	-

	Vo⊢page
Relationship between ring width and wood characteristics in double-stemmed trees of radiata pine (J.W.P.Nicholls; A.G.Brown)	4–105
Removal of logging waste, thinning debris, and litter from a <i>Pinus radiata</i> pumice soil site (R.Ballard; G.M.Will)	11–152
Repellent to protect radiata pine seedlings from browsing by sheep (R.L.Knowles; F.Tahau)	9–3
Reproduction of Eucalyptus deglupta by cuttings (J.Davidson)	4–191
"Research for Forest Management" (Book Review)	16–124
Resin pockets and related defects of <i>Pinus radiata</i> grown in New Zealand (A.Somerville)	10-439
Resistance of Douglas fir to Pseudocoremia suavis (M.Kay)	13-46
Resistance of particle board to <i>Poria monticola</i> and <i>Lenzites trabea</i> (D.W.Smart; R.E.Cameron)	1–238
Response of radiata pine to superphosphate and Christmas Island "C" phosphate fertilisers (D.J.Mead)	4–35
Response of young <i>Pinus radiata</i> to cultivation and fertiliser near Motueka, New Zealand (D.J.Mead)	20–268
Response to fertiliser in a <i>Pinus radiata</i> plantation. 1: Above-ground biomass and wood density (R.N.Cromer; N.J.Barr; E.R.Williams; A.M.McNaught)	1559
Response to fertiliser in a <i>Pinus radiata</i> plantation. 2: Accumulation and partitioning of nutrients (R.N.Cromer; N.J.Barr; D.Tompkins)	15–71
Retention of spray on bracken pinnae: Effect of application volume and formulation (B.Richardson; J.Ray; A.Vanner)	16–87
Review of New Zealand thinning practices (A.Kirkland)	6–141
Review of thinning practices in New Zealand 1974 to 1981 (D.A.Elliott)	12–127
Rhyssa lineolata (Hymenoptera : Ichneumonidae) as a parasite of Sirex noctilio in New Zealand (M.J.Nuttall)	4-487
Rings of collapsed cells in <i>Pinus radiata</i> stemwood from lysimeter-grown trees subjected to drought (J.R.Barnett)	6461
Risk assessment and pest detection surveys for exotic pests and diseases which threaten commercial forestry in New Zealand (P.C.S.Carter)	19–353
Role of nitrogen in relation to cone production in <i>Pinus radiata</i> (G.B.Sweet; S.O.Hong)	8–225
Role of thinning in the management of privately owned plantations (S.Ollerenshaw)	6–283
Roles of auxins, antiauxin and phenol in the production and differentiation of callus on stem cuttings of <i>Populus robusta</i> (K.K.Nanda; P.Kumar; V.K.Kochhar)	4–338

	Vo⊢page
Root anchorage and root morphology of <i>Pinus radiata</i> on a range of ripping treatments (A.R.Somerville)	9–294
Root and shoot water potentials in stressed pine seedlings (D.Heth)	10–142
Root configuration and root regeneration in <i>Pinus radiata</i> seedlings (E.K.S.Nambiar)	10–249
Root growth potential: Its development and expression in forest tree seedlings (G.A.Ritchie; J.R.Dunlap)	10–218
Root invasion of <i>Pinus radiata</i> litter in trenched plots (R.L.Gadgil; P.D.Gadgil)	17–329
Root patterns of <i>Pinus radiata</i> planted in five ripping treatments in a Canterbury forest (J.M.Balneaves; P.J.de la Mare)	18–29
Root regeneration of root-pruned <i>Pinus radiata</i> seedlings. 2. Effects of root- pruning on photosynthesis and translocation (J-A.T.Stupendick; K.R.Shepherd)	10–148
Root strength deterioration in <i>Pinus radiata</i> after clearfelling (C.L.O'Loughlin; A.Watson)	9–284
Root system morphogenesis (R.F.Sutton)	10–264
Rooting cuttings of radiata pine: Environmental and physiological aspects (R.J.Cameron; D.A.Rook)	4–291
Rooting of brachyblast cuttings of pines in Korea (S.O.Hong)	4–150
Rooting of cuttings from mature Douglas fir (H.Brix)	4–133
Rooting of cuttings of <i>Pinus sylvestris</i> under mist (D.E.Boeijink; J.T.M.Broekhiuzen)	4–127
Rooting of Liquidambar styraciflua cuttings (M.V.Bilan)	4–177
Rotation age and silvicultural effects on wood properties of four stands of <i>Pinus radiata</i> (D.J.Cown; D.L.McConchie)	12–71
Rural tree decline in Australia (F.R.Wylie; J.Landsberg)	19–306
S	
Sampling procedures for estimating forest biomass in the Puruki watershed (J.C.Grace; H.A.I.Madgwick)	17–272
"Sampling Theory for Forest Inventory. A Teach-yourself Course" (Book Review)	18-235
Sawing methods for <i>Pinus radiata</i> pruned logs—An indicative study (D.J.Cown; D.L.McConchie; M.O.Kimberley)	18–345
Scheduling and control of large-scale thinning operations (A.H.Cole)	6–221
Season of parturition and fawning percentages of sika deer (<i>Cervus nippon</i>) in New Zealand (M.M.Davidson)	5–355

Seasonal and between-tree variation in the nutrient levels in *Pinus radiata* foliage (D.J.Mead; G.M.Will) 6–3

	Vol-page
Seasonal changes in carbohydrate concentration and composition of different tissue types of <i>Pinus radiata</i> trees (A.M.Cranswick; D.A.Rook; J.A.Zabkiewicz)	17–229
Seasonal changes in frost-tolerance of <i>Pinus radiata</i> seedlings raised in different nurseries (M.I.Menzies; D.G.Holden; L.M.Green; D.A.Rook)	11–100
Seasonal changes in levels of indole-acetic acid and abscisic acid in stem tissues of <i>Pinus radiata</i> (P.A.Jenkins; K.R.Shepherd)	4–511
Seasonal changes in standing crops of live and dead fine roots during two successive years in a thinned plantation of <i>Pinus radiata</i> in New Zealand (D.Santantonio; E.Santantonio)	17–315
Seasonal changes in the biomass of a young <i>Pinus radiata</i> stand (H.A.I.Madgwick)	13–25
Seasonal development of a young plantation of <i>Eucalyptus nitens</i> (D.J.Frederick; H.A.I.Madgwick; M.F.Jurgensen; G.R.Oliver)	16–78
Seasonal fluctuations in foliar nutrient concentrations in a young nitrogen- deficient stand of <i>Eucalyptus fastigata</i> with and without applied nitrogen (P.J.Knight)	18–15
Seasonal frost-tolerance of <i>Eucalyptus saligna</i> , <i>E. regnans</i> , and <i>E. fastigata</i> (M.I.Menzies; D.G.Holden; D.A.Rook; A.K.Hardacre)	11254
Seasonal frost-tolerance of Pinus radiata, Pinus muricata, and Pseudotsuga menziesii (M.I.Menzies; D.G.Holden)	1192
Seasonal growth of the female strobilus in <i>Pinus radiata</i> (G.B.Sweet; M.P.Bollmann)	1–15
Seasonal trends in translocation of ¹⁴ C photosynthate and their association with wood formation in radiata pine seedlings (P.A.Jenkins)	5-62
Sectional measurement of trees: A rationalised method (A.G.D.Whyte)	1–74
Seed maturation precedes cone ripening in New Zealand <i>Pinus radiata</i> (A.Rimbawanto; P.Coolbear; A.M.Dourado; A.Firth)	18–139
Seed production in radiata pine clones on four different sites (R.D.Burdon; C.B.Low)	3-211
Seed storage of several New Zealand indigenous trees. 1. Kauri (Agathis australis) (D.Preest)	9–337
Seed weight and <i>in vitro</i> bud induction potential in <i>Pseudotsuga menziesii</i> cotyledons cultured <i>in vitro</i> (M.Abo El-Nil; Z.S.Wochok)	16–283
Seed yield in a radiata pine seed orchard following pollarding (A.C.Matheson; K.W.Willcocks)	6–14
Seedling growth in tanekaha (<i>Phyllocladus trichomanoides</i>): Effects of shade and other seedling species (E.W.Pook)	9–193
"Seedling Physiology and Reforestation Success" (Book Review)	15–258
SEESAW: A visual sawing simulator, as developed in Version 3.0 (C.L. Todoroki)	18-116

	Vol-page
Selecting <i>Pinus radiata</i> for resistance to Dothistroma needle blight (S.D.Carson)	19–3
Selection of <i>Eucalyptus</i> species for soil conservation planting in seasonally dry hill country (R.L.Hathaway; M.King)	16–142
Selection of genetically superior <i>Eucalyptus regnans</i> using family tests (M.D.Wilcox)	12–480
Selection of special-purpose species: Effect of pests and diseases (I.Nicholas; E.Hay)	20–279
Selective logging in podocarp/tawa forest at Pureora and Whirinaki (M.C.Smale; A.E.Beveridge; G.F.Pardy; G.A.Steward)	17–29
Selective logging of dense podocarp forest at Whirinaki: Early effects (M.C.Smale; D.O.Bergin; A.D.Gordon; G.F.Pardy; G.A.Steward)	15–36
Selective pruning of radiata pine (W.R.J.Sutton; J.B.Crowe)	5–171
Sequoia sempervirens as an in vitro rejuvenation model (Y.Fouret; Y.Arnaud; C.Larrieu; E.Miginiac)	16–319
Shoot dieback in <i>Pinus radiata</i> caused by <i>Diplodia pinea</i> . I. Symptoms, disease development, and isolation of pathogen (C.K.S.Chou)	6–72
Shoot dieback in <i>Pinus radiata</i> caused by <i>Diplodia pinea</i> . II. Inoculation studies (C.K.S.Chou)	6–409
Shoot formation in <i>Eucalyptus globulus</i> hypocotyl explants (S.Oka; E.C.Yeung; T.A.Thorpe)	12–501
Shoot production and elongation on explants from vegetative buds excised from 17- to 20-year-old <i>Pseudotsuga menziesii</i> (D.I.Dunstan; G.H.Mohammed; T.A.Thorpe)	16–269
Short review of thinning practice in Victoria (J.P.Wright; J.E.Opie)	6–259
Short-term improvement programme through vegetative propagation (R.M.Rauter)	4–373
Shrinkage and density of radiata pine compression wood in relation to its anatomy and mode of formation (J.M.Harris)	7–91
Significance of the profit studies of afforestation for the export log trade (R.Fenton; M.M.Dick)	2–144
Silviculture and management of <i>Pinus radiata</i> for framing timber production (R.Fenton)	160
Simplified apparatus for determining leaf water potentials in pine needles (H.H.Gifford)	2–284
Simplified method-of-moments estimation for the Weibull distribution (O.García)	11–304
Site index equations for Douglas fir in Kaingaroa Forest (H.E.Burkhart; R.B.Tennent)	7–417
Site index equations for radiata pine in New Zealand (H.E.Burkhart; R.B.Tennent)	7–408

	Vol-page
Site index equations for radiata pine in New Zealand (Letter) (R.B.Tennent)	11–199
Skidtrails and their effect on the growth and management of young <i>Pinus radiata</i> (J.Firth; G.Murphy)	19–22
Slicing study of pruned Pinus radiata logs (A.Somerville; T.K.Gosnell)	16–96
Soil and foliar nitrogen after fertiliser treatment of ponderosa pine (D.Zabowski; C.L.Henry)	24–333
Soil damage associated with production thinning (G.Murphy)	12–281
Soil development under <i>Pinus radiata</i> and <i>Eucalyptus regnans</i> plantations (M.F.Jurgensen; D.J.Frederick; H.A.I.Madgwick; G.R.Oliver)	16–69
Soil pH and nutrient levels at Tikitere Agroforestry Research Area (M.F.Hawke; M.B.O'Connor)	23–40
Soil properties as affected by <i>Pinus radiata</i> plantations (J.Turner; M.J.Lambert)	18–77
Soil temperatures and growth of rooted cuttings of radiata pine (D.A.Rook; J.F.F.Hobbs)	5–296
Soil water in deep Pinaki sands: Some interactions with thinned and fertilised <i>Pinus radiata</i> (D.S.Jackson; E.A.Jackson; H.H.Gifford)	13–183
Soil-water nutrient concentrations after clearfelling and burning of <i>Pinus radiata</i> (W.J.Dyck; B.D.Webber; P.G.Barton)	11–128
Some pedological trends from recent West Coast soil surveys and their relevance to forest use (G.Mew; M.L.Leamy)	7–151
Some silvicultural effects of fertilisation (J.E.Barker)	8–160
"Spatial Data Analysis by Example" (Book Review)	15–255
Spatial relationships between Armillaria root rot of <i>Pinus radiata</i> seedlings and the stumps of indigenous trees (C.G.Shaw III; M.Mackenzie)	7–374
Species associations in <i>Ips grandicollis</i> galleries in <i>Pinus taeda</i> (C.Stone; J.A.Simpson)	20–75
Specific leaf area of <i>Pinus radiata</i> as influenced by stand age, leaf age, and thinning (P.N.Beets; P.M.Lane)	17–283
Spiral grain and xylem polarity in radiata pine: Microscopy of cambial reorientation (J.M.Harris)	3–363
Spiral grain in Canterbury <i>Pinus radiata</i> : Within- and between-tree variations and effect on mechanical properties (Addis Tsehaye; J.C.F.Walker)	25–358
Spiral grain patterns in plantation-grown <i>Pinus radiata</i> (D.J.Cown; G.D.Young; M.O.Kimberley)	21–206
Split- versus full-taper sawing of pruned plantation-grown logs (J.C.Park)	25-231
Spread of <i>Bracon phylacteophagus</i> , a biocontrol agent of <i>Phylacteophaga froggatti</i> , and impact on the host (W.Faulds)	21–185

97

	Vo⊢page
Spring needle-cast of <i>Pinus radiata</i> in Tasmania: I. Symptoms, distribution, and association with <i>Cyclaneusma minus</i> (F.D.Podger; T.J.Wardlaw)	20–184
Spring needle-cast of <i>Pinus radiata</i> in Tasmania: II. Effects of fertilisers and thinning on disease severity, and the impact of disease on growth (F.D.Podger; T.J.Wardlaw)	20–206
Sprouting and rooting on horizontally planted cuttings of sycamore (D.D.Hook; P.P.Kormanik; R.G.McAlpine)	4–221
Stand dynamics and density in radiata pine plantations (I.S.Ferguson; J.W.Leech)	6-443
Stand re-organisation: Results from the trials at Hautu Forest, New Zealand (C.J.Terlesk; M.McConchie)	18–329
Stand reorganisation to facilitate load accumulation in production thinning (C.J.Terlesk; M.McConchie; A.Twaddle)	13–325
Stand structure in terrace rimu forest of Saltwater Forest, south Westland, and its implications for management (H.G.Six Dijkstra; D.J.Mead; I.L.James)	15–3
Statistical appraisal of Armillaria root rot in New Zealand plantations of <i>Pinus radiata</i> (J.B.van der Pas)	11–23
"Steepland Forests: A Historical Perspective of Protection Forestry in New Zealand" (Book Review)	25–117
Stem sunscald after thinning and pruning young <i>Pinus radiata</i> in the sandy soil region of Chile (A.Huber; H.L.Peredo)	18-9
Storage of hardwood planting stock: Effects of various storage regimes and packaging methods on root growth and physiological quality (D.P.Webb; F.W.von Althen)	10-83
Strangulation pre-treatment effect on the development and rooting of fascicle cuttings of <i>Pinus radiata</i> (D.S.Koh; M.I.Menzies; S.O.Hong)	20–129
Strength and stiffness of Australian-grown stress-graded <i>Pinus radiata</i> with cross-sections of 35 × 150 mm and 35 × 200 mm (D.J.Grant; A.Anton)	14–135
Strength properties of Pinus radiata plywood at angles to face grain (H.Bier)	14–349
Stress resistance and quality criteria for tree seedlings: Analysis, measurement, and use (R.Timmis)	10–21
Stress-grades for <i>Pinus radiata</i> plywood from basic density and knot ratio (H.Bier)	16–197
Structural properties of timber from two poplar varieties (H.Bier)	15–223
Structural root morphology and biomass of three age-classes of <i>Pinus radiata</i> (A.Watson; C.O'Loughlin)	20–97
Successful control of fallow deer by recreational hunters in the blue Mountains, Otago (G.Nugent)	18–239
Successful propagation by cuttings of Picea abies in Finland (M.Lepistö)	4–367

	Vol-page
Summary statement of the 1973 vegetative propagation meeting in Rotorua, New Zealand (W.J.Libby)	4-454
Suppression of <i>Diplodia pinea</i> spore germination at the shoot surface of <i>Pinus radiata</i> (C.K.S.Chou)	113
Suppression of litter decomposition by mycorrhizal roots of <i>Pinus radiata</i> (R.L.Gadgil; P.D.Gadgil)	5–33
Surface area of needles in <i>Pinus radiata</i> with respect to age and crown position (U.Benecke)	9–267
Survival of <i>Eucalyptus saligna</i> grafted by different methods (W.Suiter Filho; J.Takeshi Yonezawa)	4–235
Susceptibility of farm shelter cypresses to three fungi associated with cypress canker disease (R.M.Beresford; R.I.Mulholland)	12–7
Susceptibility of <i>Pinus radiata</i> seedlings to infection by <i>Diplodia pinea</i> as affected by pre-inoculation conditions (C.K.S.Chou)	12–438
Sustained growth responses to superphosphate applied to established stands of <i>Pinus radiata</i> (D.W.Flinn; I.M.Moller; P.Hopmans)	9–201

Т

Tall oil pitch as bitumen extender (G.F.A.Ball; P.A.Herrington; J.E.Patrick)	23–236
Temperature and its effect on the germination and early growth of kauri (Agathis australis) (I.L.Barton)	8–327
Terminology of pine shoot growth (G.B.Sweet; M.P.Bollmann)	6–393
Testing the hypothesis that mean relative growth rates eliminate size-related growth differences in tree seedlings (D.B.South)	21–144
Tests of a distance technique for inventory of pine plantations (C.L.Batcheler; R.A.C.Hodder)	5–3
"The Conifer Manual" Vol.1 (Book Review)	22–111
"The New Zealand Beeches-Ecology, Utilisation, and Management" (Book Review)	15–117
"The Pines of Mexico and Central America" (Book Review)	21–256
"The Relascope Idea" (Book Review)	15–255
"The Structure of New Zealand Woods" (Book Review)	9–124
Theoretical ratio between "one-sided" and total surface area for pine needles (J.C.Grace)	17–292
Thinning and salvage strategies in plantations prone to wind damage—Case study of radiata pine plantations in the Ovens Valley, Victoria (P.G.Sheehan;	
P.B.Lavery; B.M.Walsh)	12–269

99

	Vo⊢page
Thinning in New Zealand radiata pine plantations—Future practices and research needs (J.R.Tustin; C.J.Terlesk; T.Fraser)	6–333
Thinning of radiata pine by crawler tractor on steep slopes in north-eastern Victoria: A preliminary study (C.J.Leitch; G.B.Moore)	12–213
Thinning Pinus radiata with the Kockums system (O.H.Raymond)	12–192
Thinning practices in Australia—A review of silvicultural and harvesting trends (C.M.Kerruish; K.R.Shepherd)	12–140
Thinning techniques applicable to Pinus radiata plantations (C.M.Kerruish)	6–200
Three-year response of <i>Pinus radiata</i> to several types and rates of phosphorus fertiliser on soils of contrasting phosphorus retention (I.R.Hunter; J.D.Graham)	13–229
Timber recovery from pruned <i>Pinus radiata</i> butt logs at Mangatu: Effect of log sweep (D.J.Cown; D.L.McConchie; C.Treloar)	14–109
Tissue and organ culture of <i>Eucalyptus</i> (R.A.de Fossard; C.Nitsch; R.J.Cresswell; E.C.M.Lee)	4–267
Tissue culture as a method for vegetative propagation of forest trees (R.N.Konar; R.Nagmani)	4–279
"Tissue Culture in Forestry" (Book Review)	13–364
Toxicity of tertiary amine acetates against basidiomycetes and soft-rot fungi (J.A.Butcher; A.F.Preston)	8–397
Trace constituents of natural and anthropogenic origin from New Zealand <i>Pinus</i> <i>radiata</i> needle epicuticular wax (R.A.Franich; H.W.Kroese; E.Jakobsson; S.Jensen; H.Kylin)	23–101
Trans-Tasman forest products trade after a decade of NAFTA 1966–75 (R.Fenton)	9–100
Trans-Tasman trade in forest products in the first five years of Nafta (R.Fenton)	4–39
Transformation of nitrogen fertilisers and movement of nutrients from the surface of a rhyolitic pumice forest soil (R.Ballard)	9–53
Transpiration in mountain beech estimated simultaneously by heat-pulse velocity and climatised cuvette (R.H.Swanson; U.Benecke; W.M.Havranek)	9–170
Treatment of Pinus sylvestris posts with a CCA preservative (R.K.Bagnall)	12–96
"Tree Diseases in Victoria" (Book Review)	12-533
Triclopyr—The forest managers' alternative to 2,4,5-T? (J.M.Balneaves; N.A.Davenhill)	20–295

U

Understorey species composition patterns in a *Pinus radiata* plantation on the central North Island volcanic plateau, New Zealand (R.B.Allen; K.H.Platt; R.E.J.Coker) 25–301

	Vol-page
Upper mid-crown yellowing in <i>Pinus radiata</i> : Some genetic and nutritional aspects associated with its occurrence (P.N.Beets; E.J.Jokela)	2435
Uptake and accumulation of nitrogen in <i>Pinus radiata</i> stands as related to age and thinning (P.N.Beets; D.S.Pollock)	17–353
Use of controlled environments in forestry research (K.R.Shepherd)	10–105
Use of cuttings of Norway spruce (<i>Picea abies</i> (L.) Karsten) in phenological research (K.Holzer)	4-433
Use of fertilisers at establishment of exotic forest plantations in New Zealand (R.Ballard)	870
Use of fertilisers in New Zealand forestry operations 1980 (G.M.Will)	11–191
Use of soil testing for predicting phosphate fertiliser requirements of radiata pine at time of planting (R.Ballard)	427
Use of the Bray soil test in forestry, 2. Determination of cation status (R.Ballard)	8–332
Use of the Bray soil test in forestry. I. Predicting phosphate retention capacity (R.Ballard)	8–239
Use of vegetative propagules for obtaining genetic information (R.D.Burdon; C.J.A.Shelbourne)	4-418
Use of vegetative propagules in forest genetics and tree improvement (W.J.Libby)	4–440
Use of X-rays in measuring ring widths from increment borings (J.C.Ellis)	1–223
"User-pays" and the impact on forest produce import and export quarantine in New Zealand (A.N.Cooper)	19–318
Using a Geographic Information System and geostatistics to estimate site index of <i>Pinus radiata</i> for Kaingaroa Forest, New Zealand (B.K.Höck; T.W.Payn; J.W.Shirley)	23–264
Utilisation of 25-year-old <i>Pinus radiata</i> . Part 1: Wood properties (G.D.Young; D.L.McConchie; R.B.McKinley)	21–217
Utilisation of 25-year-old <i>Pinus radiata</i> . Part 2: Warp of structural timber in drying (A.N.Haslett; I.G.Simpson; M.O.Kimberley)	21–228
V	
Variation in longitudinal permeability of green radiata pine wood (R.E.Booker;	

Variation in longitudinal permeability of green radiata pine wood (R.E.Booker; J.A.Kininmonth)	8–295
Variation in microfibril angle among three genetic groups of <i>Pinus radiata</i> trees (L.A.Donaldson)	23–90
Variation in needle characters of <i>Pinus radiata</i> from mainland California	- 14
(R.D.Burdon; C.B.Low)	7–16

101

	Vo⊢page
Variation in nutrient concentrations within <i>Pinus radiata</i> trees and their relationship to tree size (H.A.I.Madgwick; D.J.Mead)	20–29
Variation in some wood properties of <i>Pseudotsuga menziesii</i> provenances grown in New Zealand (M.J.F.Lausberg; D.J.Cown; D.L.McConchie; J.H.Skipwith)	25–133
Variation in wood characteristics of 20-year-old half-sib families of <i>Pinus radiata</i> (D.J.Cown; G.D.Young; R.D.Burdon)	22–63
Varying selection ratios (initial <i>versus</i> final crop stocking) in <i>Pinus radiata</i> evaluated with the use of MARVL (J.P.Maclaren; M.O.Kimberley)	21–62
Vector analysis of foliage data to study competition for nutrients and moisture: An agroforestry example (D.J.Mead; I.Mansur)	23–27
"Vegetation Map of Tongariro National Park, North Island, New Zealand" (Book Review)	13–110
Vegetative propagation and the genetic improvement of North American hardwoods (R.E.Farmer Jr)	4–211
Vegetative propagation in relation to Japanese forest tree improvement (R.Toda)	4-410
Vegetative propagation of birch (E.Vaclav)	4–237
Vegetative propagation of chestnut (E.Vieitez)	4–242
Vegetative propagation of eastern white pine by cuttings (Y.T.Kiang; O.M.Rogers; R.B.Pike)	4–153
Vegetative propagation of <i>Eucalyptus grandis</i> (I.P.Burgess)	4–181
Vegetative propagation of Japanese larch (W.G.Wunder)	4–161
Vegetative propagation of radiata pine by tissue culture: Plantlet formation from embryonic tissue (K.Reilly; J.Washer)	7–199
Vegetative propagation of some selected hardwood forest species in the Southeastern United States (P.P.Kormanik; C.L.Brown)	4–228
Vegetative propagation rooting practices with forest trees in India (H.P.Bhatnagar)	4-170
Vegetative propagation: Tissue and organ culture as an alternative to rooting cuttings (J.M.Bonga)	4–253
Veneer yields of New Zealand grown slash pine (S.L.Chong)	7–420
Volatile phytotoxic substances formed by litter of <i>Pinus radiata</i> (J.S.Waid; R.E.Lill)	5–165
Volume and taper of <i>Eucalyptus regnans</i> grown in the central North Island of New Zealand (W.J.Hayward)	17–109
Volume equations for the major indigenous species in New Zealand (J.C.Ellis)	8–267
Volume estimation of export pulplogs (J.C.Ellis; M.O.Kimberley)	25–123
Volume, taper, and bark thickness in seedlings and cuttings from Mamaku Forest, New Zealand (J.T.D.Penman)	18–311

Vo⊢page

144	,

Water potential and subsequent growth of <i>Pinus radiata</i> seedlings: Influence of lifting, packaging, and storage conditions (J.M.Balneaves; M.I.Menzies)	20–257
Water relations of three planting stock types of <i>Pinus caribaea</i> following transplanting (J.Williams)	587
Water status and growth initiation in <i>Populus</i> (W.R.N.Edwards; A.G.Robertson)	5287
Weight and nutrient content of above-ground biomass and litter of a podocarp- hardwood forest in Westland, New Zealand (M.P.Levett; J.A.Adams; T.W.Walker; E.R.L.Wilson)	15–23
What site factors determine the 4-year basal area response of <i>Pinus radiata</i> to nitrogen fertiliser? (I.R.Hunter; J.D.Graham; J.M.Prince; G.M.Nicholson)	1630
Wind stability: Forest layout and silviculture (A.Somerville)	10-476
Wind-damage profiles in a Pinus radiata stand (A.R.Somerville)	1175
Winter activity in the cambium of Pinus radiata (J.R.Barnett)	1–208
Within- and between-tree variation in lignin concentration in the tracheid cell wall of <i>Pinus radiata</i> (L.A.Donaldson)	15–361
Within- and between-tree variation in microfibril angle in <i>Pinus radiata</i> (L.A.Donaldson)	22–77
Wood anatomy of five exotic hardwoods grown in Western Samoa (L.A.Donaldson)	14–305
Wood basic density and moisture content of young <i>Eucalyptus regnans</i> grown in New Zealand (D.J.Frederick; H.A.I.Madgwick; G.R.Oliver)	12-494
Wood density as an indicator of the bending properties of <i>Pinus radiata</i> poles (D.J.Cown; J.D.Hutchison)	13-87
Wood density in radiata pine clones on four different sites (R.D.Burdon; J.M.Harris)	3–286
Wood density of Pinus caribaea var. hondurensis grown in Fiji (D.J.Cown)	11–244
"Wood in Australia" (Book Review)	13–365
Wood properties of clonal radiata pine grown in soils with different levels of available nitrogen, phosphorus, and water (J.M.Harris; D.L.McConchie;	0 415
W.A.Povey)	8-417
Wood properties of <i>Eucalyptus nitens</i> grown in New Zealand (M.J.F.Lausberg; K.F.Gilchrist; J.H.Skipwith)	25–147
Wood properties of New Zealand-grown Cunninghamia lanceolata (L.E.Fung)	23–324
Wood properties of <i>Pinus radiata</i> infected with <i>Dothistroma pini</i> (J.M.Harris; D.L.McConchie)	8-410
Wood properties of <i>Pinus radiata</i> : Seed-grown trees compared with grafts from different-aged ortets (G.B.Sweet; J.M.Harris)	6–114

Vo⊢page

Wood property variations in an old-crop stand of radiata pine (D.J.Cown; D.L.McConchie) 10-508

Χ

Xyleborus saxeseni, its life history and flight behaviour in New Zealand (G.P.Hosking) 3-37

Ζ

Zinc deficiency in nursery-grown Pinus radiata seedlings (P.J.Knight)	5–260
Zinc deficiency in <i>Pinus radiata</i> at Cape Karikari, New Zealand (A.J.Thorn;	
E.D.Robertson)	17–129