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Glossary

300 index Stem volume mean annual volume increment for a 30-year-

old stand, at 300 stems per ha and pruned to 6 m.

Adventious Abnormal development of plant parts; used here in respect to

epicormic branches from needle fascicles.

Allozyme Variant of an enzyme coded by a different allele.

Branch index Average diameter of the largest branch in each of the four

quadrants of a standard log length.

Broad-sense hertitability (H²) – the proportion of the combined additive and non-

additive components to total phenotypic variability.

Chipwood Wood suitable for making chips (small pieces of wood) used

to make pulp, wood composites, etc.

Clearwood Defect-free wood produced by a tree following pruning.

Conditioning In nurseries, those techniques used to prepare growing stock

for the shock of planting in the field.

Crown thinning Removal of dominant or co-dominant trees in order to

favour the best trees in these crown classes. Also called

thinning from above.

Cutting Logging – the felling of trees.

Regeneration - planting stock derived by rooting shoots or

other plant parts.

Decurrent Spreading crowns resulting from branches growing nearly as

fast as the central leader.

Epistasis Genetic dominance of one allele over others.

Fascicle Short-shoot, which in radiata pine typically has three needles.

Gibberellin Plant hormone that regulates growth and other developmental

processes.

Internode index Percentage of the log length comprising clear lengths greater

than 0.6 m.

Internode The clear proportion of a stem between branch whorls.

Lammas shoot Abnormal late-season growth of leaves, leader or branches.

In radiata pine, the growth of upper branches results in

retarded leader syndrome.

Lignotuber Woody storage structure close to ground level which has

concealed, dormant buds. Found in many eucalypts.

Log sweep Lack of straightness in a log. Often measured in mm per m of

log length.

Low thinning The removal of trees in lower crown classes (subdominants

or suppressed trees) to favour the upper crown classes. Also

called thinning from below.

Meristem Plant tissue of rapidly dividing cells that differentiate into

new tissues or organs.

Microfibril angle The angle at which cellulose microfibrils in the S2 layer of the

cell walls wind around the cell.

Micropyle In radiata pine, a minute opening in the ovule through which

the pollen tubes enter.

Multinodal When a tree produces more than one whorl of branches per

year. A commonly used term for a polycyclic tree.

Narrow sense heritability (h^2) – the proportion of the additive to total variance

Ortet The original plant from which vegetatively propagated

plants are derived.

Outbred Genetic material produced through the mating of unrelated

individuals (outcrossing).

Outrow A row of trees removed during thinning to provide easier

access for harvesting equipment.

Ovule The part of an ovary that develops into a seed.

Parenchyma Thin-walled, live ground tissues in plants having various

functions and found in different organs: e.g. the pith or rays

in stem wood.

Phenotype The observed description of characters or traits.

Plantlet Tiny vegetative plant that needs to be on-grown to form

planting stock.

Polycyclic Multiple growth cycles of shoots. See also multinodal.

Procambium A meristematic tissue in plants that provides the primary

tissues of the vascular system.

Provenance The original geographic source of seed.

Ramicorn A large, high-angled branch.
Seedling A young plant derived from seed.

Selection index Numeral value that represents multiple traits and often

weighted by their economic importance.

Selection thinning Removal of trees in the upper crown classes to favour trees

in the lower crown classes. Also called dominant thinning.

Serotinous Pertaining to cones that remain on the tree without

opening.

Shelterbelt A single row or multiple rows of trees or shrubs that

alter wind flow and microclimate in the sheltered zone. Timberbelts emphasise an economic product from the

trees. See also windbreak.

Shelterwood A regeneration method in which most trees are harvested

but some are retained to provide a suitable microclimate and seed for natural regeneration. The remaining mature

trees are later removed.

Silvopastoral An agroforestry system consisting of trees, pastures and

animals.

Site index A species-specific measure of actual or potential forest

productivity. For radiata pine plantations, it is usually the

top height at age 20 years.

Slabwood Wood from the outer portion of logs, often used for other

purposes such as chipwood or energy.

Somatic embryogenesis A process by which ordinary plant tissue is grown into

differentiated somatic (diploid) embryos.

Stool beds An area, usually in a nursery, where plants are grown to

obtain cuttings for vegetative propagation.

Stratification The practice of exposing seed to cold, moist treatments to

overcome dormancy and promote even germination.

Strobilus The cone of a conifer.

Tracheid Longitudinal wood element predominant in softwoods.

Trait A characteristic of an organism.

Undercutting In nurseries growing bare-rooted stock, the practice of

cutting the tap root in the nursery bed.

Uninodal When a tree produces only one 'whorl' of branches per year.

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Windbreak Any barrier (natural, such as trees, or artificial, such as

fences or walls) that provide protection against the wind.

See also shelterbelt.

Wrenching In nurseries growing bare-rooted stock, the practice of

disturbing tree roots to stimulate the development of a

fibrous root system.