

*E. calophylla* (*R. Brown*), "Red-gum" of South-west Australia.—A fine species, attaining 150ft. in height, with a trunk from 5ft. to 10ft. in diameter. Suitable for general building-purposes, framing, &c., but not durable when in contact with the ground. Of special value for wheelwrights' works and agricultural implements.

A valuable tanning extract, kino, is procured by tapping the tree, and sells at from £20 to £25 per ton in London. When dry it forms "gum-kino," and is employed medicinally and as a dressing for wounds. It would not be advisable to plant this species south of the Auckland Isthmus.

*E. corynocalyx* (*F. Mueller*), "Sugar Gum."—Attains the height of 120ft.; trunk 4ft. to 5ft. diameter, but not of rapid growth. Timber durable for railway-sleepers, fencing-posts, &c.

*E. viminalis* (*Labill.*), "Manna Gum."—A useful species, attaining the height of 300ft., and affording good timber for general building-purposes where great strength is not required.

*E. rostrata* (*Schlechtendal*), "Red-gum Tree."—One of the most valuable species of the genus, although not affording timber of the largest dimensions.

The timber is of great strength and durability, and is suitable for bridge and constructive works, heavy ship-timbers, fresh-water and marine piles, railway-sleepers, fencing-posts, and a variety of purposes. The jarrah is the only eucalypt that surpasses this species in durability, although several species afford timbers of somewhat greater strength. It flourishes in most parts of the colony, and should be largely planted in lowland districts where a moderately good soil can be obtained.

*E. Gunnii* (*Hooker f.*), "Swamp Gum."—At low levels—say, from 1,000ft. to 2,000ft.—this forms a tree from 100ft. to 200ft. in height; but at great altitudes—say, 5,000ft.—it becomes reduced to a shrub and forms miniature forests. Wood useful for ordinary carpentry and various purposes. This species will doubtless prove of value in alpine districts. In Tasmania it ascends to 5,500ft.

*E. resinifera* (*Smith*), "Red Mahogany Gum."—A medium-sized tree, affording strong and durable timber. Not suitable for planting in the South Island.

*E. botryoides* (*Smith*), "Bastard Mahogany."—Timber hard and durable; valued for wheelwrights' work, fencing-posts, &c. This species will probably prove valuable for planting on coastal sands in the North Island.

*E. goniocalyx* (*F. Mueller*), "White-gum Tree," "Grey Box," &c.—A fine species, ranging from 150ft. to 300ft. in height, with a trunk from 4ft. to 8ft. in diameter, producing a hard, tough, durable timber, not easily split, but suited for building and general purposes, specially valued by wheelwrights for spokes.

*E. robusta* (*Smith*), "Swamp Mahogany."—A useful species, affording logs 50ft. in length, 30in. by 30in. and upwards, forming serviceable timber where great strength is not required; specially valued on account of its durability in damp places.

Useful for planting in swampy land, especially near the sea. It may be employed to replace kahikatea forest in the North, but is unsuited for the South Island.

*E. globulus* (*Labill.*), "Blue Gum."—A well known species, attaining upwards of 300ft. in height, producing timber of great strength and durability, used for general building-purposes, shipbuilding, railway-sleepers, telegraph-poles, wheelwrights' work, fencing-posts, and other purposes.

A valuable tree, which flourishes, with but few exceptions, in lowland situations as far south as Port William, on Stewart Island. It is, however, killed off in situations near the sea in the vicinity of Invercargill, and the leaders are frequently killed at very low elevations in the South Island. It grows with great vigour on the pumiceous soil of the Taupo District, although not easily established at first.

*E. gomphocephala* (*De Candolle*), "Tootart."—A species affording valuable timber for shipbuilding, piles for bridges, and all other purposes where great hardness, strength, and durability are required. It is not of the largest dimensions, but logs can be obtained from 45ft. to 50ft. long, squaring 28in. by 28in. The timber is difficult to split, and in all respects is stronger than English oak. Specially suitable for limestone districts.

#### METROSIDEROS (*R. Brown*).

*Metrosideros tomentosa* (*A. Cunningham*). "The Pohutukawa." New Zealand: Sea-cliffs from the North Cape to Poverty Bay and White Cliffs; also by Tarawera and Taupo Lakes.—A magnificent tree when in flower, attaining the height of 70ft. Trunk usually short, from 2ft. to 3ft. in diameter. Timber firm, compact, dense, and heavy, of exceptional strength and durability. The huge tortuous arms are greatly valued for ship-timbers. Should be planted on all sea-cliffs in the Auckland District. Even in Wellington, specimens planted twenty years are over 30ft. in height.

#### EUGENIA (*Linne*).

*Eugenia Maire* (*A. Cunningham*). "Maire-tawhake." New Zealand, North Cape to Marlborough, in swamps.—A small tree, 40ft. to 50ft. high. Wood dense, compact, strong, durable; used for piles, house-blocks, fencing, &c., and occasionally for inlaying.

#### FRAXINUS (*Tournefort*). The Ash.

*Fraxinus excelsior* (*Linne*). "The Common Ash." Europe, Temperate Asia.—Height, 80ft. to 100ft. Wood remarkably strong, light, and elastic; used for axle-beds and all kinds of wheelwrights' work (except spokes), spade-trees and tool-handles, implements, blocks, bendware, oars, and many other purposes.

*F. Americana* (*Linne*). "White American Ash." Canada to Florida.—Similar to the preceding species. Timber applied to the same purposes, but somewhat stronger; waved logs are utilized for furniture. Largely imported into England.