

sycamore might perhaps be successfully grown in small groups amongst well-established trees. The wood of the sycamore is of considerable value, being used for cabinetmaking, pattern-making, and in the manufacture of various musical instruments.

*Acacia melanoxylon* (*Blackwood*).—The blackwood is an evergreen tree, native of south-eastern Australia and Tasmania, where under favourable conditions it grows to a height of 80 ft. Although hardy and easily transplanted, it has not proved a suitable tree for planting in this district. During the first year after planting it made extraordinary growth, frequently up to 6 ft., but after that the growth became slower; its stem became very much divided, and gradually assumed the appearance of a large shrub quite unsuitable for timber-production. It is thought, however, that by cutting down the trees and allowing the root-suckers to grow up a better crop will be obtained. The timber is most valuable for furniture, railway-carriages, boatbuilding, tool-handles, and for certain parts of organs, pianos, and billiard-tables. The fine-grained wood is cut into veneers; it takes a fine polish, and is considered almost equal to walnut.

*Liquidambar styraciflua* (*Sweet-gum*).—The sweet-gum is a native of North America, growing in the morasses and springs of forests, and having a wide geographic range. Planted experimentally here, it appears to be quite hardy, but beyond that no information is yet available as to its ultimate suitability. In its native home it is said to reach a height of 100 ft. with a stem-diameter of 10 ft. The timber is heavy, fine-grained, durable, easily worked, admitting of a high finish, very suitable for furniture.

*Juniperus virginiana* (*Red-cedar*).—Native of the eastern States of North America, growing to a height of 100 ft. The timber is valuable for a great variety of purposes, but owing to its exceedingly slow growth this species would not be a profitable one for timber-production. A small number only have been planted here amongst the experimental lots.

*Eucalyptus Stuartiana* (*Apple-scented Gum*).—A medium-sized tree, growing to about 100 ft. in height; found throughout the eastern and southern parts of Australia and in Tasmania. It is a fibrous-barked tree with drooping branches and copious foliage. The hardiest species of eucalyptus tried here, and the only one now being planted. It grows rapidly from the start, and on this account has been found to be the best species for growing on land where the growth of fern is particularly heavy. It is not affected by frost on the higher ground, but on low-lying land it is sometimes slightly damaged. The timber, though strong and of a handsome dark colour, is not considered a very valuable one in Australia, where it is mostly used for fencing and for fuel. The fact, however, must be taken into consideration that Australia has at the present time an abundance of the finest hardwoods, so that it is reasonable to believe that the *Stuartiana* will be comparatively a more valuable timber-tree in this country.

*Eucalyptus amygdalina* (*Almond-leaved Peppermint-gum*).—A native of south-eastern Australia and Tasmania. A variety of this species, *E. regnans*, is sometimes found growing to a height of 400 ft. Next to *E. Stuartiana*, *amygdalina* has succeeded best in this district. On exposed situations and on low land it is apt to be destroyed by frost, and the planting of it has for this reason been discontinued, all the suitable ground having been filled up. In sheltered situations it grows very fast, and many of the older trees are now 40 ft. in height. The timber is used for shingles, rails, fence-posts, and inner building-material; but it is not a strong timber. *E. amygdalina* is also the chief species used in the manufacture of the well-known eucalyptus-oil.

*Eucalyptus pauciflora* (*White-gum*).—Native of New South Wales, Victoria, and Tasmania. It is a large handsome tree, with a smooth white bark and generally drooping foliage, growing best in moist soil. Excepting *E. Stuartiana* and *E. amygdalina*, this is the only other species that has been planted to any extent; and, like the *amygdalina*, it has succeeded only in situations where it was not affected to any extent by frost. Its timber is used for ordinary building and fencing purposes.

*Eucalyptus Sieberiana* (*Australian Mountain-ash*).—Native of south-eastern Australia and Tasmania. A straight-stemmed tree, reaching 150 ft. in height and 5 ft. in stem-diameter. A small number only of this species was planted, and, although a few very fine specimens are to be seen, the results as a whole did not justify any further planting. *E. Sieberiana* furnishes a timber of excellent quality, which is used for shipbuilding, implement-handles, cart-shafts, swingletrees, and also for fencing and general building purposes.

*Eucalyptus obliqua* (*Messmate-gum*).—A large tree, attaining a height of from 200 ft. to 300 ft.; found in New South Wales, Victoria, and Tasmania. The planting of this species has been attended with results similar to those of the previous-mentioned one, only a small number in a particularly favourable situation having succeeded. The timber of this tree is used extensively for cheap fencing-rails, palings, shingles, and other rough woodwork; but is not durable underground, and does not possess great strength.

*Eucalyptus acervula* (*syn. Gunnii of Mueller*) has proved almost as hardy as any other species planted, but on account of its comparatively slow growth is not suitable for planting on heavy fern land.

*Eucalyptus tereticornis* (*Swamp-gum*) has been a failure; and the results obtained with *Eucalyptus meliodora* (*Yellow-box*), *E. urnigera* (*Urn-fruited Gum*), *E. coccifera* (*Alpine Peppermint-gum*), *E. Muellerii* (*Mountain-gum*) are also disappointing.

Although so many of the species of eucalypti tried have so far, on account of adverse climatic conditions, proved unsatisfactory, there is little doubt that many of the most valuable species may later on be introduced amongst well-established crops of the hardier species with good results.