

varieties in this country. A variety with very large single fruits is understood to be identical with the Tasmanian "blue-gum" that for over half a century has commanded such a high reputation as a timber-yielder. Another variety has three fruits of smaller size together on the same stalk. This is believed to have been derived from eastern Australia, and to be a tree of greatly inferior value as compared with the type from Tasmania. The question needs further investigation, but meantime planters of this species will do well to obtain their seed from first-class parent trees and preferably from those of Tasmanian origin.

The species has a very wide range in New Zealand, especially fine stands of it being now seen in certain parts of Canterbury, Otago, and even Southland; but in almost contiguous localities it has been killed out or hopelessly injured by frost or other cause. There is much to suggest that failure in these cases has been due in part to the planting of inferior and weaker strains, and that had seed been always obtained from the best Tasmanian stock, results would have been generally more satisfactory.

Sap-wood of *E. globulus*, like sap-wood of almost all other trees, will soon decay when exposed to the weather or placed in contact with the soil; but experienced men who have made careful tests are of opinion that fencing-posts of good size cut out of the best heart-wood will easily last sixteen years. Mr. B. Chambers, of Havelock North, Hawke's Bay, mentions a case on his farm where a blue-gum gate-post outlasted two mountain-totara posts in succession on the opposite side of the gateway. The timber of *E. globulus* is very compact and interlocked in texture. This greatly raises its value for many technical purposes, but makes a serious difficulty in converting large logs without powerful sawing machinery. Generally in future plantings the farmer will be wise to choose a tree whose timber is more freely fissile.

*Eucalyptus Macarthuri*, Deane and Maiden.—The tree is of erect habit, and under forest conditions develops a long clean bole with little taper; in open situations it sends out strong side branches and carries a wide-spreading mass of foliage very suitable for wind-break purposes. The dead bark persists on the stem and large branches, and becomes ultimately thick and deeply furrowed; it is of the soft type, with very short brittle fibres, and can be easily crushed in the hand. The leaves in the juvenile stage are sessile (*i.e.*, stalkless), opposite in pairs, broad at the base and acute towards the apex; as compared with the young-state leaves of *E. viminalis*, which they closely resemble, they are usually broader and perhaps a little thicker. The adult or mature-state