

reddish-yellow, strong, and very durable in any situation. The species appears to be at its best on limestone formations in Gippsland, Victoria, where the trees present long branchless boles of the type required for carrying wires. *E. Bosistoana* has not yet been successively cultivated in New Zealand, but, reasoning from natural habitat, we might expect it to flourish on limestone country a little inland from our northern coasts.

(2.) *E. hemiphloia*.—Dead bark flaky, sub-fibrous; leaves very broad on seedlings and saplings, oval to very narrow on older trees; ripe seed-cups  $\frac{1}{16}$  in. long by  $\frac{3}{16}$  in. wide, or sometimes much smaller; mature wood pale, dense, strong, and very lasting. The species has a wide distribution on lowlands and uplands in eastern Australia. The trees as the traveller usually see them in Victoria and New South Wales are short, with spreading branches, and valuable only for fence-posts and fuel. In sheltered valleys they run up to a good pole-height. The best specimens known to the writer in New Zealand grew at "Trecarne," near Cambridge. They belonged to a small-fruited variety of the species. When first noted by the writer they were about thirty years old. In diameter they were then large enough for telegraph-poles, but some of them were deficient in length. *E. eugenoides* in the same plantation and of the same age more than equalled them in diameter and greatly exceeded them in length of clean stem. *E. Macarthuri*, also in the same plantation and of the same age, had already been yielding posts and poles of quite good durability. The boxes are thus in a similar position to the ironbarks. They must be still treated experimentally. *E. hemiphloia* varies greatly in merit under natural conditions in Australia. If we are to succeed with it as a cultivated timber-yielder in New Zealand competent steps must be taken to obtain supplies of seed from certified and approved parent trees where the species is at its best in cool parts of its native home. We have wasted much time and money in this country through breeding from inferior parent trees.

#### SPECIES IN ORDER OF RESISTANCE TO LOW TEMPERATURES.

It will further help the planter in selection of species for his particular district if our list is now presented in the order of resistance to low temperatures, as follows:—

Climatic Conditions.	Species.
Winters with severe and prolonged frosts and heavy falls of snow	<i>E. Gunnii</i> , <i>E. gigantea</i> , <i>E. Dalrympleana</i> (probably).
Winters with frequent severe frosts and occasional falls of snow	<i>E. viminalis</i> , <i>E. gigantea</i> .
Winters with many frosty nights usually followed by clear days	<i>E. globulus</i> (seaboard), <i>E. Macarthuri</i> (inland), <i>E. acervula</i> , <i>E. eugenoides</i> .
Winters with mild frosts usually followed by clear days	<i>E. eugenoides</i> , <i>E. saligna</i> , <i>E. botryoides</i> , <i>E. hemiphloia</i> , <i>E. Muelleriana</i> , <i>E. sideroxylon</i> , <i>E. laevopinea</i> (probably), <i>E. Bosistoana</i> (probably), <i>E. pilularis</i> .
Winters without or almost without frost, with many hot days in summer	<i>E. longifolia</i> , <i>E. corynocalyx</i> , <i>E. crebra</i> , <i>E. paniculata</i> , <i>E. siderophloia</i> .