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Evidence for the Existence of a Natural Hybrid between Eucalyptus globulus and Eucalyptus ovata

By

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(Read 8th November, 1937)

Plates VII-VIII

In the course of a joint investigation made at Bagdad by Mr. R. G. Brett and myself on suspected hybrids of *Eucalyptus globulus* and *Eucalyptus viminalis*, a tree was found by Mr. Brett which we considered to be a hybrid of *E. globulus* and *E. ovata*. After considering all other possible origins for the tree, including the possibility that it was an importation from outside Tasmania, we both reached the definite conclusion that its was a hybrid derived from the above two species.

Owing to the great dissimilarity between the young growth of E. globulus and E. ovata, this tree should provide an unusually good opportunity of testing for hybridization by raising seedlings. I have grown somewhere about fifty seedlings from it, and hope to raise ten or more to maturity.

It is considered that the result definitely confirms the theory that the tree is a hybrid, and, as at present the occurrence of natural hybrids is a controversial matter, it seems worth while to record the evidence. The seedlings range from something hardly disglobulustinguishable from E.to something indistinguishable from E. ovata, through intermediate types. Plate VII, fig. I (a), is a photograph from a *globulus*-like seedling, fig. I (b)a photograph from an *ovata*-like seedling. Fig. II (a) is a photograph from a seedling of E. globulus, and fig. II (b) from a seedling of E, ovata, grown under the same conditions. These are shown for comparison. Figs. I (a) and (b) and II (b) are directly comparable; II (a) is from a rather older plant.

In Plate VII all the photographs are on the same scale. Points worth noticing are the square-sectioned thick stem and large pointed leaves on the *globulus* and *globulus*-like specimens, and the thin, markedly glandular stem and small oval leaves on the *ovata* and *ovata*-like specimens.

The resemblance of I (a) to II (a) and of I (b) to II (b), and the difference between I (a) and I (b), is not so noticeable in the photograph as in the actual plants, owing to the striking colour difference between young E. globulus and young E. ovata, which is matched in the extreme cases of the seedlings from the suggested hybrid.

Plate VIII, fig. III (c), shows some fruit of the suspected hybrid parent. Figs. III (b) and III (a) show fruit from E. globulus and E. ovata for comparison.

The above is a part of work done for the biological survey of Tasmania initiated by Dr. J. Pearson.

PLATE VII

FIG. I (a), I (b).--Photographs of foliage of two contrasted seedlings from the suspected hybrid.

FIG. II (a).-Foliage from young E. globulus.

FIG. II (b) .-- Foliage from young E. ovata.

PAP. & PROC. ROY. SOC. TAS. 1937

PLATE VII

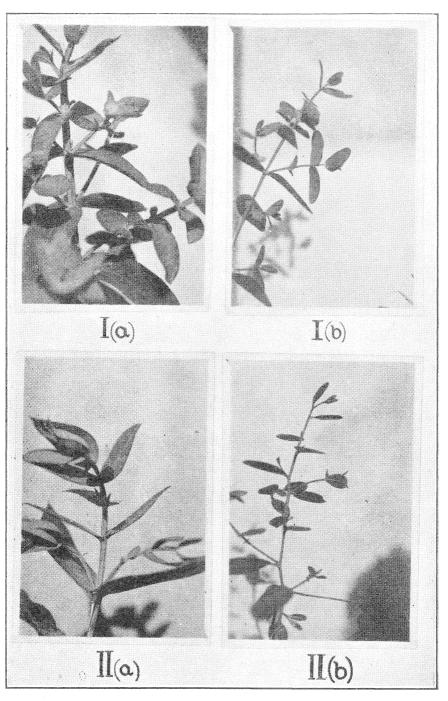


PLATE VIII

FIG. III (a).—Fruit of E. ovata.
FIG. III (b).—Fruit of E. globalus.
FIG. III (c).—Fruit of suspected hybrid.

PLATE VIII

