

Notes on *Eucalyptus brachycorys* Blakely and *E. comitae-vallis* Maiden

By M. I. H. Brooker*

Abstract

The taxonomy and distribution of the two Western Australian mallees *E. brachycorys* and *E. comitae-vallis* are discussed. *E. brachycorys* has constricted buds and brown, shallowly-pitted seed. *E. comitae-vallis* has non-constricted buds and grey, deeply-pitted seed. The two taxa have roughly a western and eastern distribution respectively and, as yet, are not known to overlap.

Eucalyptus comitae-vallis was described by Maiden (1923). The type was collected at Comet Vale (J. T. Jutson 239) and this locality was the only one known to Maiden at the time. The species is not referred to again in the "Critical Revision". *E. brachycorys* was described by Blakely (1934) and was apparently based on two specimens collected by Max Koch (Nos. 990, 1608) at Cowcowing. Blakely classified both species in the Series Dumosae in different Subseries neither of which as a whole contains natural groups of eucalypts.

Gardner (1960) who must have seen many more specimens of these species than Blakely, commented on specimens attributed to *E. comitae-vallis* from between Kulja and Bodallin, between Koorda and Wyalkatchem and from Mt Holland and remarked on their characteristically constricted buds with a smaller, narrower operculum. He recognized these forms as *E. brachycorys*

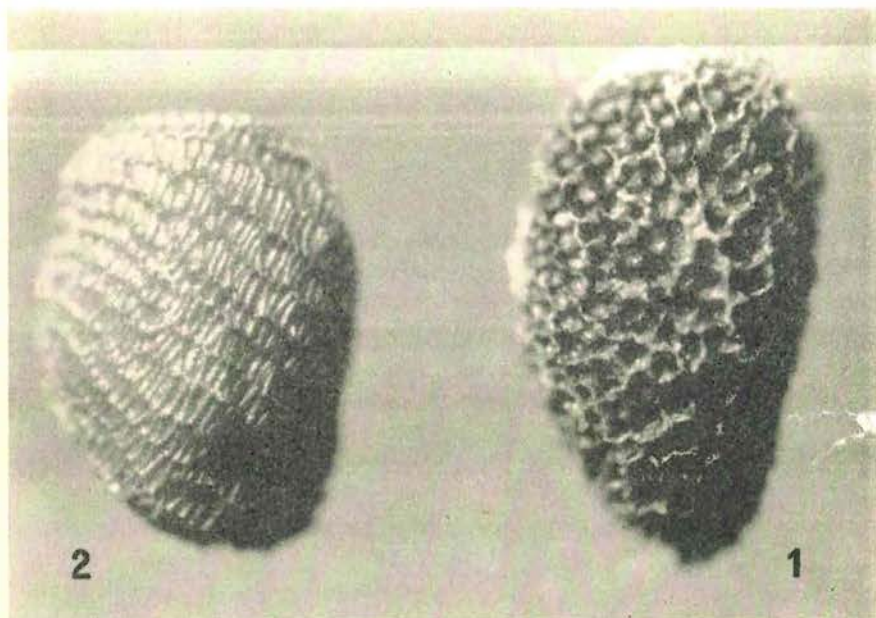


Figure 1—A seed of *E. comitae-vallis* (7 miles north of Menzies, M. I. H. Brooker 2033).
Figure 2—A seed of *E. brachycorys* (near Dalwallinu, M. I. H. Brooker 1905).

* Forestry and Timber Bureau, Canberra, A.C.T. 2600.

Blakely but appears to have regarded them as a nonspecific variant. Pryor and Johnson (1971) agreed with Gardner on the closeness of the relationship, as "comitae-vallis" and "brachycorys" were placed next to each other as anticipated subspecies in their classification. However, Johnson (1972) revised his opinion and relocated *E. brachycorys* in the Dundasianae.

Natural groups in the Section *Dumaria* are recognizable by seed characters (Carr and Carr 1969, Brooker 1971), and Pryor and Johnson (1971) have devised their classification of the species in the *Dumaria* on this basis. The species of the Series *Torquatae* (e.g. *E. comitae-vallis*) have grey seed with deep, more or less hexagonal pits; those of the Series *Dundasianae* (e.g. *E. brachycorys*) have brown seed with shallow elongate pits (Figs. 1, 2).

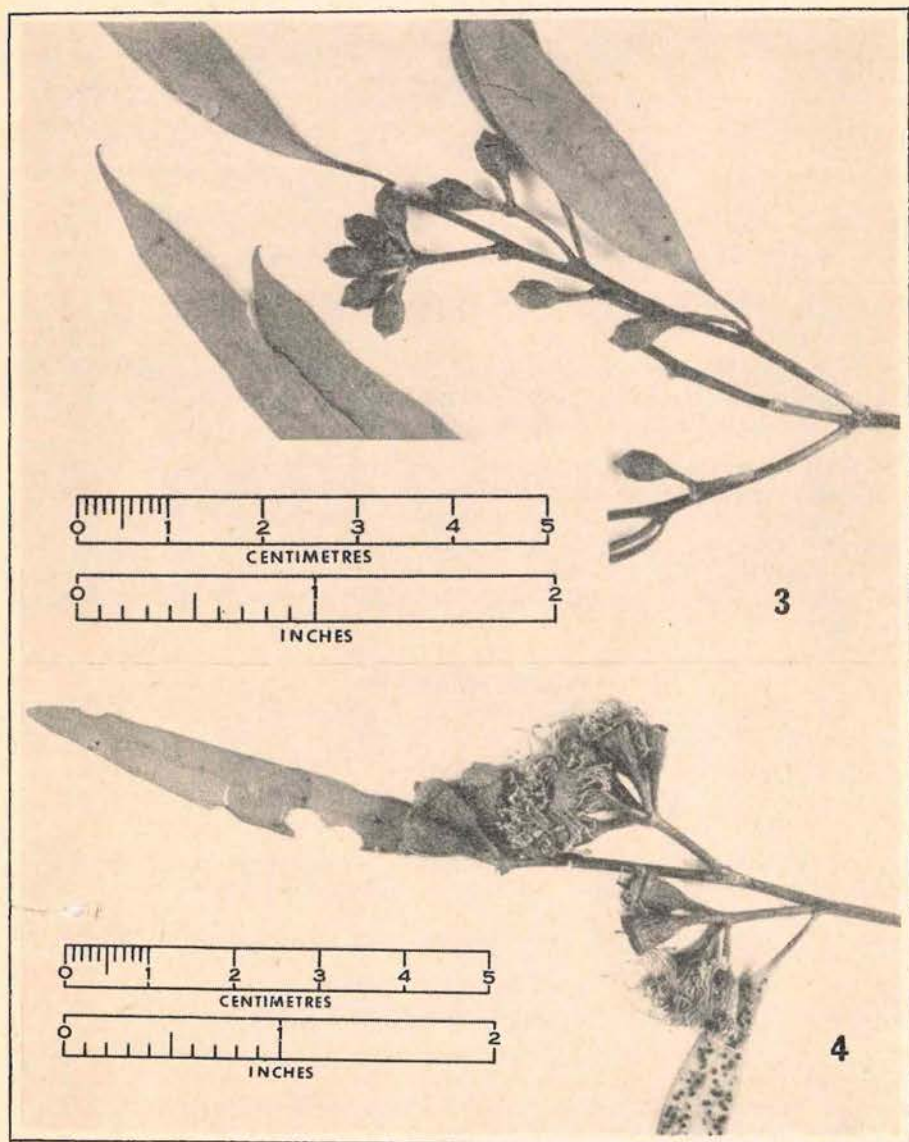


Figure 3—Buds of *E. comitae-vallis* (Comet Vale, J. T. Jutson).

Figure 4—Buds of *E. brachycorys* (Cowcowing, M. Koch 1041).

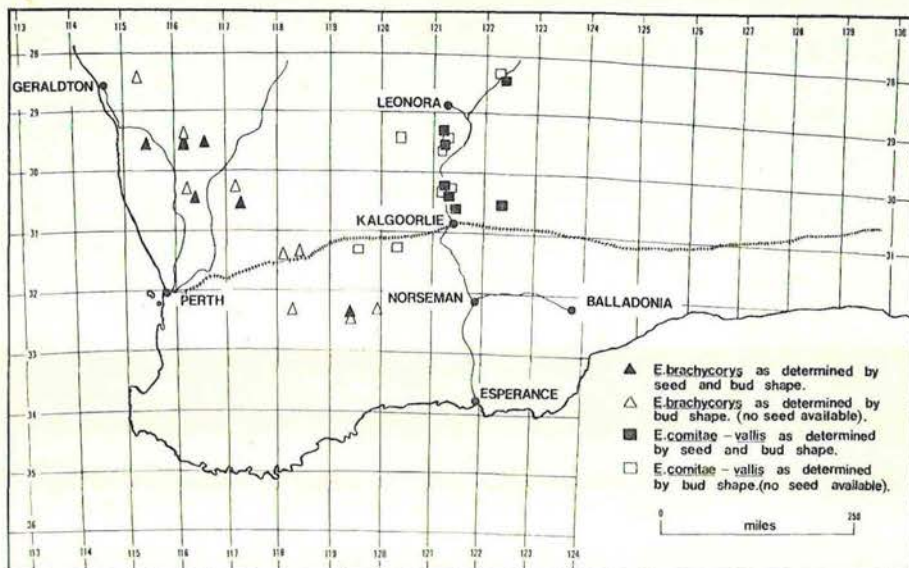


Figure 5—Distribution of *E. comitae-vallis* and *E. brachycorys*.

Another distinction between *E. comitae-vallis* and *E. brachycorys* is that the buds of the former are unconstricted while those of the latter are constricted at the join of the operculum (Figs. 3, 4).

The two species are not known to overlap in distribution (Fig. 5). *E. brachycorys* has a westerly distribution. To the north-west it approaches geographically the related *E. oraria*, and to the south-east the related *E. cylindrocarpa*. By contrast, *E. comitae-vallis* has an easterly distribution. To the north-east it grades into the related *E. concinna*—the difference being that the operculum of the former is usually pointed and that of the latter usually depressed hemispherical.

Acknowledgements

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