

THE STATUS OF BEDFORDIA ON THE AUSTRALIAN MAINLAND

by

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Bedfordia arborescens Hochr. in *Candollea* 5:332-4 (1934)
vice *B. salicina* sens. auctt., non strict. (Labill.) DC.
Prodr. 6:441 (1838) [*Cacalia salicina* Labill. *Nov. Holl.*
Plant. Spec. 2:37 t. 179 (1806)].

Until early in 1973, the genus *Bedfordia* DC. was believed to consist of two species, *B. linearis* (Labill.) DC. which is restricted entirely to Tasmania and *B. salicina* (Labill.) DC., the mainland and Tasmanian forms of which were considered to be conspecific. Investigations into the status of the mainland form which occurs in Victoria and eastern N.S.W., including the ACT., have led to the discovery that a validly published name for the mainland plant has been in existence for about 40 years.

In ignorance of the fact that the mainland *Bedfordia* had been separated from its Tasmanian ally and named, the present author had undertaken research aimed eventually at a taxonomic separation of the mainland and Tasmanian forms, the two on examination being quite distinct. A request to the Australian Botanical Liaison Officer at the Herbarium, Royal Botanic Gardens, Kew, for a photograph of Labillardiere's type of *B. salicina*, elicited a reply which drew the author's attention to a description of *B. arborescens* by B. P. G. Hochreutiner together with photographs of the type. Examination of these photographs [the type of *B. arborescens* is lodged in the herbarium of the Conservatoire et Jardin Botaniques in Geneva and photographs of this type are also held in the Herbarium Australiense (CANB)] and comparison with material from throughout Victoria, New South Wales and the A.C.T. have demonstrated quite clearly that Hochreutiner's description of *B. arborescens* applies accurately to all mainland *Bedfordia* material. By coincidence, the existence of Hochreutiner's description had also been noted (almost at the same time) by Dr. N. T. Burbidge.

It appears that since 1934, Australian botanists have overlooked the existence of Hochreutiner's name for this taxon, and consequently all publications in which this genus has been featured have continued to refer the mainland *Bedfordia* to *B. salicina*.

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Muelleria 3 (1): 64-66 (1974).

The Tasmanian *B. salicina* must be regarded as being restricted to that state. The author has collected and examined material from widely separated localities in southern and northern Tasmania but has not noted any plants which were not distinctly referable to *B. salicina*. Correspondingly, all mainland specimens examined show clear affinities to *B. arborescens*. Further, no intermediate forms between the two species or any significant variation have been observed. Thus the two species appear to be separated quite distinctly and are confined to their respective geographical ranges.

It is to be regretted that the type material for *B. arborescens* should have been lodged in a distant European herbarium with no known duplicates being distributed to Australian institutions.

<i>B. salicina</i>	<i>B. arborescens</i>
Leaves—10–17 x 1.0–2.5cm.	—18–24cm x 2.0–4.5cm.
Venation—impressed on upper surface, prominent on lower surface, not terminating at the margins with a mucro.	—impressed on upper surface, obscure and not readily noticeable on the lower surface, the major lateral veins terminating at the margins with a small, blunt mucro.
Margins—sub-crenate, shortly and closely revolute.	—crenate, obscurely revolute, the infolding obscured by the indumentum.
Indumentum—Very short and dense, a single layer of very closely appressed, tangled hairs, not obscuring the prominent veins.	—in two layers, the under layer dense, tangled and closely appressed; the secondary layer of long, floccose hairs obscuring the veins (the hairs of this “secondary” layer originate from the apices of glandular protuberances which arise from the cell surface; some of these long, tangled hairs may be irregularly branched 2–3 times, although the majority are quite simple).
Inflorescence—short, quite dense axillary panicles; <i>rhachis</i> quite stout; <i>rhachilla</i> short, stout; <i>axes</i> lengthening only slightly after anthesis; <i>peduncles</i> mostly absent or to 3mm long; <i>bracteoles</i> short, stout; <i>indumentum</i> very short, dense, the individual hairs not discernable to the unaided eye.	—long, loose axillary panicles or corymbs; <i>rhachis</i> relatively insubstantial, brittle; <i>rhachilla</i> almost as long as the <i>rhachis</i> , also thin and brittle; <i>axes</i> lengthening following anthesis; <i>peduncles</i> 1–2.5cm long; <i>bracteoles</i> long (c. 1.0cm), filiform, dry; <i>indumentum</i> long, loose but thick, the hairs quite distinguishable.

Table summarizing the major differences between *Bedfordia salicina* and *B. arborescens*.

Fig. 30.

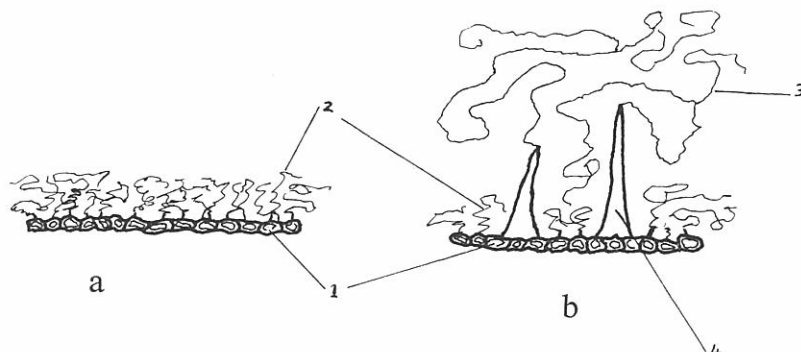


Fig. 30.—a—section through lower epidermal leaf cells of *B. salicina*; b—similar section through *B. arborescens*. (1) epidermal cells; (2) short, compact indumentum present in both spp.; (3) long, secondary layer hairs of *B. arborescens*; (4) protuberances from which secondary layer hairs arise. (All x 80; diagrams drawn from observations on 4th pair seedling leaves of both spp.).

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My thanks are also due to the staffs of the national herbaria in Melbourne and Sydney for their help in enabling me to examine the collections of *Bedfordia* held by these institutions.