Abstract
A new monotypic Australian genus, *Dichromochlamys*, is described in the tribe Astereae. The species *D. dentatifolia* (syn. *Pterigeron dentatifolius* F. Muell.), is described and illustrated and a distribution map is provided. The relationships of the genus are discussed.

Introduction
In a recent revision of the genus *Pterigeron* (DC.) Benth. (= *Streptoglossa* Steetz in F. Muell.) (Dunlop, *ined.*) of the tribe Inuleae, *Pterigeron dentatifolius* F. Muell. was recognised as distinct from the rest of the genus. Its position within Inuleae was also seen to be anomalous, possessing as it does characters usually associated with the Astereae rather than the Inuleae. All other species currently recognised under *Pterigeron* are rightly placed in the Inuleae and with the exception of one species, will be transferred to *Streptoglossa* in a forthcoming paper.

*Pterigeron dentatifolius* was described by F. Mueller (1875) and based on a collection of Christopher Giles' from Central Australia. Lack (1929, 1957) in his account of *Pterigeron* in the 'Flora of South Australia' was aware that *P. dentatifolius* stood apart from the other species of the genus, distinguishing the achenes as flattened rather than terete. He also made drawings on a herbarium sheet, now in AD, of the conical receptacle of *P. dentatifolius* but failed to note this distinctive and aberrant (in *Streptoglossa*) feature in his 'Flora'.

*Dichromochlamys* Dunlop, gen. nov., *hiochlamydi* F. Muell. et Sond. *affinis*, a qua receptaculo conico, pappo sessili et involucris veteribus incurvis differt.


*Typus: D. dentatifolia* (F. Muell.) Dunlop.


The generic name, meaning cloak of two colours, refers to the involucre in which the dark coloured backs of the phyllaries contrast with the white scarios margins.

*Dichromochlamys dentatifolia* (F. Muell.) Dunlop, *combin. nov.*


*Type*: between Alice Springs and Charlotte Waters, *C. Giles s.n.*, v. 1875 (MEL 42554, holotype).
Herb to c. 25cm high. Stems and leaves villous to woolly, rarely glabrous; glandular. Stems branched from the base, decumbent. Leaves spathulate, coarsely toothed at apex, rarely entire; 1—3.5cm long, 2—10mm wide at apex, tapering to c. 1mm at the base. Capitula held above the foliage on long peduncles; peduncles and involucres densely glandular, dark purple to pale brown. Outer phyllaries lanceolate, flat; the median and inner narrower, channelled, with broad white scarious margins. Receptacle densely glandular, the edge beset with fine hairs to c. 3mm long. Florets 100—150; marginal florets more numerous than disc florets. Ligules of marginal florets white to pink, c. 3mm long, c. 0.3mm wide. Corollas of disc florets yellow, 4—5mm long, glandular. Achenes obovate, symmetrical, constricted below the pappus, sericeous on lower three-quarters with minute scattered glands below the apex; pappus c. 5mm long, bristles uneven with the outer series shortest. (Fig. 1.)

Distribution

Dichromochlamys is restricted to the inland arid regions of the Northern Territory, Queensland, New South Wales and South Australia. (Map 1.)

Map 1. Distribution of Dichromochlamys dentatifolia (F. Muell.) Dunlop.
Fig. 1. *Dichromochlanthus dentatifolia* (F. Muell.) Dunlop. Leaf outlines: a, from *Ising 3765*; b, from *Lothian 1515*; c, from *Latz 4389*. d, capitulum; e, achene; f, style; g, stamen (d-g from *Latz 3154*).
Ecology
Specimens from Queensland and the Northern Territory have been recorded from clay soils with a pebbly surface, associated in several instances with gidgee (Acacia cambagei R.T. Baker). The species has also been recorded from calcareous clays, saline soils, sandy loam and rocky sites.

Notes
A minor variant with glabrous leaves was noted amongst collections from South Australia (e.g. Ising 3735a, Symon 9371). It is neither geographically, nor ecologically distinct (Symon 9371 consists of glabrous and hairy plants) and in other respects is typical of the species.

Selection of Specimens Examined


Affinities
The position of Dichromochlamys within Asteraceae is clearly with the tribe Astereae. The genus has the typical ecaudate anthers and sterile style appendages of the tribe as outlined by Grau (1977) in the most recent review of the tribe. In common with other Australian members of Astereae (e.g. Vittadinia, Ixiochlamys), Dichromochlamys has decidedly flattened achenes with a combination of duplex and glandular hairs. By contrast, Streptoglossa (Inuleae), with which this taxon was originally placed by Mueller, has tailed anthers and terete achenes with duplex hairs. The conical receptacle and yellow disc florets of Dichromochlamys further distinguish it from Streptoglossa which has a flat receptacle and purple disc florets.

Within Astereae, Dichromochlamys is most closely allied to Ixiochlamys F. Muell. et Sond. ex Sond. with which it bears a superficial resemblance in habit and foliage. Both have similar achenes which are flattened and smooth, without striations or protuberances of related genera such as Vittadinia, Brachycome and Calotis. The achenes of Ixiochlamys are consistently beaked, presenting the most obvious character for distinguishing the two genera.

Dichromochlamys is also distinguished by the conical receptacle and the characteristic way in which the involucral bracts remain incurved after fruiting. In Ixiochlamys the receptacles are flat and the involucres reflexed on drying. The form and texture of the involucral bracts are also markedly different. In Ixiochlamys the bracts are flat with a relatively uniform, thin, texture while those of Dichromochlamys, particularly in the median and inner series, are inward curved or channelled along the bony and rigid central part and have flat, scarious margins.
Acknowledgements

I am indebted to Dr Hj. Eichler for the opportunity to undertake this study at Herbarium Australiense during October 1979. My stay in Canberra was both profitable and enjoyable and I thank Dr Eichler and the staff of the herbarium for their hospitality. Mr Lyn Craven deserves my special thanks for his advice and help which in many ways contributed to this study.

I would like to thank the heads of the following herbaria for the loan of material and, in the case of several herbaria, for the opportunity to visit their institutions: AD, ADW, BRI, CBG, MEL, NSW, NT.

My thanks are also due to my wife, Adrianne, for preparing the illustrations.

References


Index to Collections

The following index is to all specimens examined. Herbaria from which specimens have been seen are indicated by the usual acronyms.

Basedow 306 (NSW); s.n. (AD). Blake 10035 (BRI). Chalmers s.n. (AD). Chippendale NT7236 (CANB, MEL, NT). Dick WQ349 (BRI). Dunlop 2553, 2601 (NT). Everist 7546 (BRI). Giles s.n. (MEL). Henry s.n. (MEL). Hill 237, 1538 (AD). Ising 3735 (AD); 3735a (ADW); 3764, 3765 (AD); s.n. [1931 (AD); 23, 28.vii.1936 (AD); ix.1950 (ADW); x.1950 (AD, ADW); viii.ix.1952 (AD); i.x.1953 (AD); 8.x.1953 (ADW); 1954 (AD); vii, viii.x.1955 (AD)]. Koch 3491399 (NSW); s.n. (AD). Latz 1689 (DNA, K, NT, PERTH); 3154 (DNA, L, NT, PERTH); 4241 (DNA, NT); 4389 (AD, ADW, NT). Lothian 1064 (AD); 1086 (AD); 1515 (AD); 1590 (AD). Mulham 1309 (NSW). Orchard 628 (AD). Richards s.n. (MEL). Symon 5596, 5739, 5909 B, 5921 A, 9103, 9257, 9371 (ADW).