ALLOPTERIGERON,
A NEW GENUS IN ASTERACEAE (INULEAE)

C. R. Dunlop

Department of Primary Production, P.O. Box 5160, Darwin, N.T. 5794.

Abstract

Allopterigeron Dunlop, a new genus from Northern Australia, is described. The new combination, Allopterigeron filifolius (F. Muell.) Dunlop is made for its only species; a detailed description is given with locality records and illustrations.

Introduction

During the course of a revision of Pterigeron (DC.) Benth. (= Streptoglossa Steetz in F. Muell.) (Dunlop, 1981) it became evident that P. filifolius (F. Muell.) Benth. was not closely related to other members of the genus.

Pterigeron filifolius was originally described under Pluchea Less. (Mueller, 1859a) as the only member of sect. Oliganthemum. In the same year Mueller (1859b) described Pluchea sect. Rhodanthemum to accommodate the group of species which was later to form the genus Pterigeron (Bentham, 1867). Bentham incorrectly combined Mueller’s two sections under Pterigeron on the superficial resemblance between the female florets.

ALLOPTERIGERON Dunlop

Allopterigeron Dunlop, gen. nov., Streptoglossa Steetz in F. Muell. affinis, a qua flosculis discis 3-partitis sterilibus et antheris ecaudatis differt.


Typus: A. filifolius (F. Muell.) Dunlop.


Only one species is included in this genus.

Allopterigeron filifolius (F. Muell.) Dunlop, comb. nov.


Annual herb to 40 cm high; stems and leaves sparsely hairy and glandular; trichomes multisepitate, usually appressed to the stem, occasionally greatly elongated; glands minute, stipitate. Stems erect, diffusely branched. Leaves filiform, slightly fleshy, the margins recurved, 2-45 mm long, c. 0.6 mm wide. Capitula terminating short lateral branches, scattered; florets 4-7. Outermost phyllaries inserted c. 2 mm below the receptacle on the peduncle, the inner ones subtending the outer florets; narrow lanceolate, acuminate, smooth, glabrous with minute glands occasionally present; inner phyllaries.
c. 10 mm long, outermost c. 1 mm long, recurved at maturity, never wholly reflexed. 

Receptacle irregularly sculptured, glabrous c. 0.8 mm broad, scarcely broader than the peduncle. Marginal florets 3-5, c. 5 mm long; ligules white, c. 1 mm long, minutely 2-lobed; style base bulbous. Disc florets 2-3, ovary vestigial; pappus absent; style strongly papillate; corolla tube white, c. 5 mm long, sparsely glandular; anthers c. 1 mm long. 

Achenes c. 2 mm long, closely ribbed, constricted below the pappus; sericeous with duplex hairs; carpododium oblique. Pappus setae in several series, uneven. Fig. 1.

Distribution

Northern Territory and Queensland. Map 1.

Specimens Examined


QUEENSLAND: Thursday Is., F. M. Bailey s.n., 1.v.1897 (BRI); New Holland (prob. Endeavour R.), Banks & Solander s.n., 1770 (NSW); Cape York Peninsula, L. J. Brass 19714, 27.vii.1948 (CANB); 15°45'S, 144°39'E, N. Byrnes 3090, 27.vii.1974 (BRI, DNA).

Notes

Pappus bristles were not seen on any of the sterile disc florets although Mueller (1859a) described them as occasionally having one or two bristles. The ovary of these florets is so reduced that the only evidence of its existence is a slight colour change at the base of the corolla and a few minute duplex hairs (Fig. 1).

Affinities

The most distinctive feature exhibited by Allopterigeron and that which separates it from all of the apparently closely related genera is the extreme reduction in the disc florets. Besides being few in number (2 or 3), the disc florets are three-partite and sterile with an entire stigma. They also lack a pappus and the anthers are without tails. The absence of anther tails is not unknown in the Inuleae (Merxmüller et al., 1977; Randeria, 1960) and it is there that Allopterigeron is best placed with what Merxmüller et al., have
Fig. 1. A-F *Allopterigeron filifolius* (F. Muell.) Dunlop, from *Dunlop 4990*. A, disc floret; B, corolla of marginal floret; C, achene; D, style of disc floret; E, stamen; F, capitulum.
defined as the *Pluchea* group within the Inulinae. Of the eighteen genera listed for the
group *Allopterigeron* appears to be closest to *Pterigeron* (= *Streptoglossa* Steetz in F.
Muell.) where it was placed by Bentham (1867). Both genera possess ligulate female
florets and have achenes of similar size, shape, vestiture and form of pappus. The achenes
of *Allopterigeron* also have the superficial ribs seen in a number of species of
*Streptoglossa* (Dunlop, 1981). Beside the severe reduction in the disc florets mentioned
above, *Allopterigeron* may be distinguished from *Streptoglossa* by the structure of the
involucre. In *Allopterigeron* the bracts of the involucre extend well down the peduncle
with only the inner-most series subtending the diminutive receptacle. The involucre of
*Streptoglossa* is inserted around and beneath the broad receptacle.

The main differences between these genera are summarised in the following key:

Florets few (c. 6); disc florets sterile, 3-partite; anthers tailless ............................ *Allopterigeron*
Florets numerous (15-190); disc florets fertile, 4-, 5-partite; anthers tailed .......................... *Streptoglossa*

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**References**

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