

## SHORT COMMUNICATIONS

***Digitaria aequiglumis* (Poaceae), a new weed for Western Australia****Introduction**

*Digitaria* Haller is a cosmopolitan genus represented in Western Australia by 15 indigenous and four introduced species. In early 1996, the first author collected a weedy *Digitaria* (Lepschi & Lally 2486) on the northern outskirts of Perth which did not match any *Digitaria* species so far recorded from Western Australia. Subsequent examination of the collection by the second author revealed the plant to be *D. aequiglumis* (Hackel & Arechav.) Parodi, a South American species sparingly naturalized in eastern and southern Australia (Webster 1984).

*Digitaria aequiglumis* is superficially similar to the two most common introduced *Digitaria* species in Western Australia, *D. ciliaris* (Retz.) Koeler and *D. sanguinalis* (L.) Scop., and could easily be confused with either taxon. The purpose of this note is to draw attention to the presence of *D. aequiglumis* in this state to allow the recognition of any further occurrences of this species.

***Digitaria aequiglumis*** (Hackel & Arechav.) Parodi, Rev. Fac. Agron. Vet. 4:47 (1922). *Panicum aequiglume* Hackel et Arechav., Anal. Mus. Nac. Montevideo 1: 113 (1894).

Detailed descriptions of *D. aequiglumis* may be found in Vickery (1961), Webster (1984, 1987), Jessop (1986) and Jacobs & Wall (1993). The species is illustrated in the latter two references, as well as in Henrard (1950).

*Specimen examined.* WESTERN AUSTRALIA: 6.2 km N of Swan River crossing on Great Northern Highway, c. 7.5 km S of Bullsbrook, 27 Jan. 1996, B.J. Lepschi & T.R. Lally 2486 (BRI, CANB, PERTH).

*Distribution.* Native to southern South America, introduced into Europe and Australia, where it is naturalized in urban Adelaide and Sydney (Webster 1984). Within Western Australia known from one site on the northern outskirts of Perth.

*Habitat.* Lepschi & Lally 2486 was collected growing in brown sandy-loam on a roadside, in association with *D. ciliaris*, *D. sanguinalis* (Lepschi & Lally 2487), *Euphorbia* sp., *Sonchus oleraceus* and other weedy grasses and herbs. Plants of *D. aequiglumis* appeared to be confined to drier sites on the road verge, whereas *D. ciliaris* and *D. sanguinalis* occupied not only these areas but also moist soil in a shallow drainage ditch running parallel to the road.

*Notes.* As mentioned above, *D. aequiglumis* is superficially similar to the weedy *D. ciliaris* and *D. sanguinalis*. *Digitaria aequiglumis* may be distinguished from these species by the following key, which may be inserted into the key in Bennett (1987):



p. 955 rewrite lead 3 as follows:

3. Lower glume absent, upper glume subequal to lemma. Primary inflorescence branches unwinged ..... \**D. aequiglumis*
3. Lower glume present (though may be as little as 0.1 mm long in *D. sanguinalis*), upper glume shorter than lemma. Primary inflorescence branches winged
4. Upper glume 1/3 to 1/2 as long as lemma. Lower lemma scabridulous ..... \**D. sanguinalis*
4. Upper glume 1/2 to 3/4 as long as lemma. Lower lemma puberulous or sericeous and densely long-ciliate ..... \**D. ciliaris*

The indigenous *D. bicornis* (Lam.) Roem. & Schult., also resembles *D. aequiglumis*, but this taxon is confined to tropical areas in Australia (Webster 1984) and is unlikely to be found in association with *D. aequiglumis*. *D. bicornis* may be distinguished from *D. aequiglumis* by characters of the inflorescence and spikelets (see Webster 1984).

A feature of plants in the population represented by *Lepschi & Lally* 2486 is their distinctive pale green colour (both in life and when dried), and the first author was easily able to distinguish individuals of *D. aequiglumis* from *D. ciliaris* and *D. sanguinalis* (both darker purplish-green), on this character alone at the above locality. This is not specifically noted by any other authors (see above), although Vickery (1961) describes the spikelets in this species as "light green". Further observations on live and dried material are required to determine whether plant colour can be used as an aid to the identification of this taxon.

How *D. aequiglumis* arrived in Western Australia is unknown, but given the locality of *Lepschi & Lally* 2486, introduction via road traffic from eastern Australia seems likely. *Digitaria aequiglumis* does not appear to be a particularly aggressive or successful weed in areas where it is naturalized in eastern Australia, but its weed potential in Western Australia is unknown. Other species of *Digitaria* (e.g. *D. ciliaris* and *D. sanguinalis*) are important weeds in Australia and elsewhere (Kleinschmidt and Johnson 1977, Muenscher 1980, Wilson *et al.* 1995).

## References

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*Crowea angustifolia* Sm. *Proc. Linn. Soc. New South Wales* 1803: 279 (1803). Type: Western Australia, 1803, A. Menzies (nol. LINN).

*Crowea angustifolia* Turcz., *Bull. Soc. Nat. Moscou* 22/2: 13 (1849). Type: Western Australia, J. Drummond 3rd coll. n. 12 (holo: KW; no: K, MEL 4548, NSW 69928, TCD).

*Notes.* Archibald Menzies, the collector of the type of *C. angustifolia* Sm., visited King George Sound in August 1791 with George Vancouver. The date on the herbarium sheet in herb. LINN is therefore incorrect if it refers to the year in which it was collected.

*Crowea angustifolia* Sm. var. *platyphylla* Benth., *Fl. Austral.* 1: 330 (1863) as *C. angustifolia* Turcz. var. *platyphylla*. Type: Near the Franklin River [i.e. Frankland River], Western Australia, G. Maxwell (no: MEL 4549).

*Crowea dentata* Benth., *Fl. Austral.* 1: 330 (1863) - *Crowea angustifolia* Sm. var. *dentata* (Benth.) Paul G. Wilson, *Nuytsia* 1: 16 (1970). Type: King George Sound, Western Australia, W. Baxter (holo: K).

*Notes.* The names *Crowea angustifolia* Sm. and *C. angustifolia* Turcz. are taxonomic synonyms and also homonyms since they are based on different types.

Wilson (1970) recognized that *C. angustifolia* Turcz. var. *platyphylla* Benth. represented a variety distinct from the typical variety. He considered that the name was incorrect since the varietal epithet was attached to an illegitimate species name. Since he assumed that it would create a later homonym if the epithet were transferred to *C. angustifolia* Sm. he made the new combination *C. angustifolia* Sm. var. *dentata* (Benth.) Paul G. Wilson. However, as has been pointed out by Chapman (1991), this action was incorrect since homonyms have to be based on different types; in this case the types are the same whether the varietal epithet *platyphylla* is attached to the name *C. angustifolia* Sm. or to the name *C. angustifolia* Turcz.

I have therefore decided to 'correct' Bentham's combination by assuming that he had inadvertently provided the wrong bibliographic citation for the species name. This action appears to be sanctioned under article 33.3 of the International Code of Botanical Nomenclature (Tokyo Code).

*Crowea exalata* F. Muell., *Trans. Philos. Soc. Victoria* 1: 11 (1855). Type: Mitta Mitta River, Victoria, February 1854, F. Mueller (lecto: MEL 4410) *vide* Wilson, *Nuytsia* 1: 119 (1970).

*Crowea exalata* F. Muell. subsp. *exalata*

*Leaves:* narrow-spathulate or narrow-elliptic, 15–30 x 2 mm to 50 x 6 mm, flat or with recurved margin, glabrous or sparsely puberulous. *Petals:* 6–12 mm long. *Anther appendage* densely bearded.



Lepschi, B J and Macfarlane, T D. 1997. "Digitaria aequiglumis (Poaceae), a new weed for Western Australia." *Nuytsia: journal of the Western Australian Herbarium* 11(3), 425–427. <https://doi.org/10.58828/nuy00277>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/225409>

**DOI:** <https://doi.org/10.58828/nuy00277>

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