Dimeria acinaciformis R.Br.

A short annual grass, between 10-40 cm tall, erect or sprawling from the centre before becoming erect. The leaves arise along the stem (cauline) with leaf blades 1-4 cm long and 1-2 mm wide and hairy (Fig. 1). The basic flowering units or spikelets are arranged along spike-like branches the flowering head consisting usually of two branches arranged opposite each other (Fig. 2). The flowering heads either exserted some distance from the leaves or sometimes partially enclosed by the leaf sheath (that part of the leaf which clasps the stem). The spikelets (the basic flowering unit) are shortly stalked and arranged as solitary units along the stem, alternating from one side of the branch to the other, the stem of the branch is bent in a zig zag pattern, which is especially obvious when spikelets have fallen or from the 'back' of the branch which is naked of spikelets (Fig. 3). The spikelets are laterally compressed or flattened from one side to the other, so that they appear broadest from the sides. The spikelets are prominently awned, the awn twisted and bent and arising from the lemma which is 10-12 mm long.

> BOTANICAL DESCRIPTION

An annual grass erect or with decumbent culms between 10-40 cm high (Fig. 1). The leaves are basal and cauline, with leaf blades lanceolate, 1-4 cm long, 1-2 mm wide; usually hairy. The leaf sheath is glabrous. The inflorescence is comprised of a pair of spike like branches or racemes held directly opposite each other, 2.5-5 cm long, wings along the branch stem give it a flattened appearance (Fig. 2). The spikelets are solitary and arranged on the 'front' of the flowering branches but alternate from side to side with the stem bent to form a zig-zagged outline, the 'back' of the stem is naked of spikelets. Spikelets are readily deciduous, 4.5-5.5 mm long and laterally compressed (Fig. 3). A prominent awn is present, 10-12 mm long emerging from the bisexual lemma within the spikelet.

Fig. 1. Herbarium sheet of *Dimeria acinaciformis*

Fig. 2. Inflorescence of *Dimeria acinaciformis*

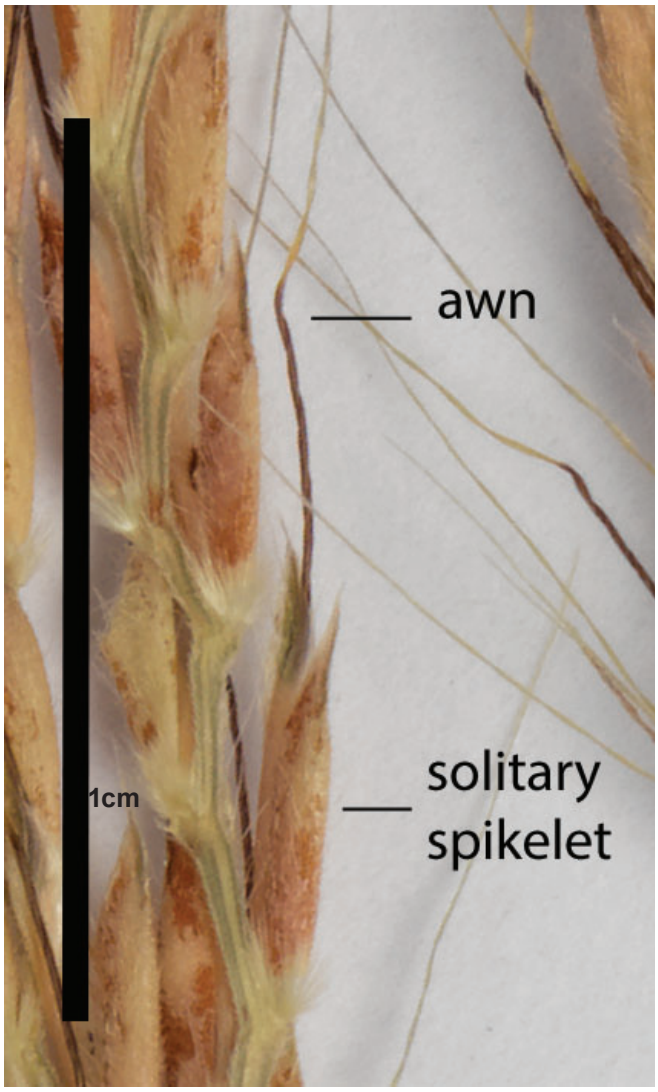

Fig. 3. Spikelets of *Dimeria acinaciformis* back view

Fig. 4. Inflorescence of *Dimeria chlordiformis*

> DIAGNOSTIC FEATURES

Dimeria acinaciformis is distinguished by the combination of the following characters, an annual habit, the flowering head consisting of two opposing branches, and awned spikelets arranged as solitary units along the branches of the flowering head, the branch stem shallowly zig-zagged. From other species of *Dimeria* it is identified by either the size of the spikelets or the annual habit. *Dimeria chloridiformis* (Fig. 4) is a tall perennial species with usually three branches in the flowering head. *Dimeria ornithipoda* is very similar but has spikelets usually ≤ 3 mm long. This species may also be confused with *Ischaemum decumbens* and differences are discussed under that species.

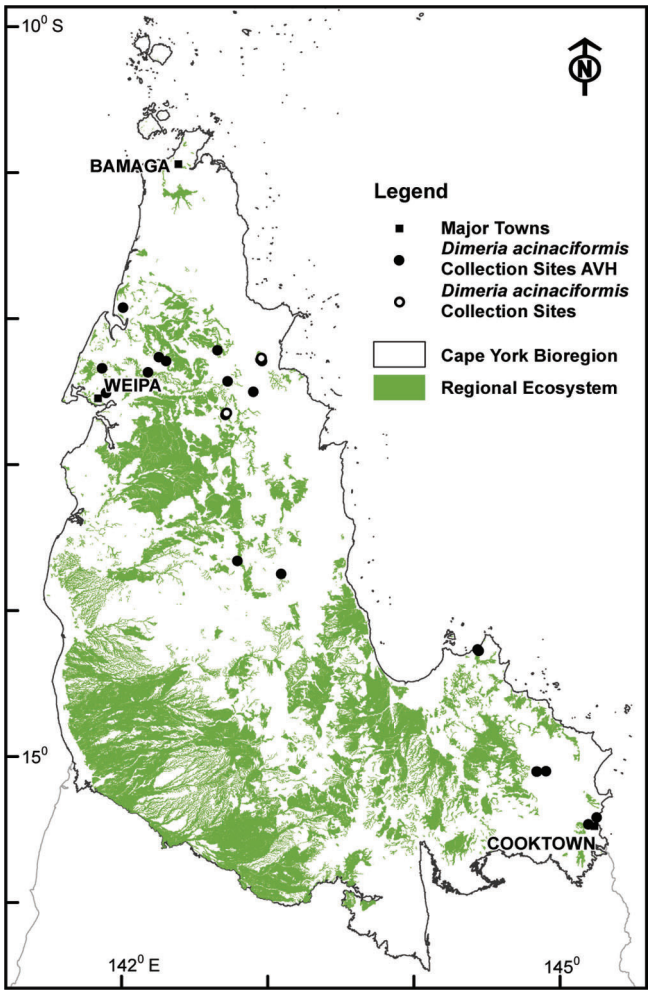

Fig. 5. Map of CYP bioregion showing actual herbarium collections (from BRI and CNS) (solid circle) and site records (open circle) of *Dimeria acinaciformis*. The green shading indicates areas where this species might also be found, based on similarity of habitat to locations where the species has been recorded. (Mapping supplied by P. Bannink, DES). Data attribution: Environment and Science, Queensland Government, Biodiversity status of pre-clearing and 2015 remnant regional ecosystems series - version 10.0 licensed under Creative Commons Attribution.

> HABITAT

In Australia this species is recorded from Cape York Peninsula and across the Top End of the Northern Territory. Often collected from wet situations either in *Melaleuca* woodland or seepage areas in open woodland, usually on sandy soils.

RESOURCES:

AVH (2017) Australia's Virtual Herbarium, Council of Heads of Australasian Herbaria, <http://avh.chah.org.au>, accessed 30 May 2017.

Simon, B.K. & Alfonso, Y. (2011) AusGrass2, http://ausgrass2.myspecies.info/accessed on [date 29 March 2017].

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