

Eragrostis jacobsiana B.K.Simon

This species is a tufted annual or slender perennial, erect, between 20 to 60 cm tall (Fig. 1). A fairly restricted species of *Eragrostis* (Love Grass) with most collections from around the Laura/Quinkan region. *Eragrostis* species are usually very easy to recognise, the spikelets (the basic flowering unit) are usually comprised of many overlapping florets (modified flowers). The regular overlapping florets give the spikelet a distinctive herringbone pattern (Fig. 3) and the spikelets are often laterally compressed, i.e. flattened from one side to the other, like a spear head or knife blade. *Eragrostis jacobsiana* has leaves both at the base of the plant and arising along the stem. The leaf blades are flat, 5-9 cm long, 2-3 mm wide, smooth and hairless. The inflorescences or flowering branches are relatively sparse and simple, 18-25 cm long, 2-4 cm wide (Fig. 2), with branches arising along a central stem. Each inflorescence branch bears 2 to 5 spikelets, the inflorescences have a “fairy lights” appearance. The spikelets consist of two glumes, the lower glume shorter than the upper glume, which encompass many florets (7-44), the glumes are smaller than the florets. All florets are bisexual, the lemmas are distinctly shaped like the hull of a boat and are partially stacked inside each other from the bottom to the top. The upper florets are usually immature with no developed male or female organs. The deciduous glumes and lemmas fall off with age and expose the distinct zig zagged stem of the spikelet common to many *Eragrostis* species.

> BOTANICAL DESCRIPTION

An erect tufted annual or short lived perennial, between 20-60 cm tall, the culms sparsely branched. The leaf-blades flat, 5-9 cm long, 2-3 mm wide, smooth and glabrous. The flowering head a panicle, 18-25 cm long, 2-4 cm wide. The spikelets oblong, elliptic or ovate, compressed but a little biconvex or inflated at the base, 5-17 mm long, 2.5-3 mm wide. Glumes are deciduous, unequal, ovate, lower 1-1.2 mm long, upper 1.5-1.6 mm long. Lemma boat shaped 2-2.5 mm long, palea with two keels and flaps.



Fig. 1a. Habit of *Eragrostis jacobsiana*



Fig. 2. Inflorescence of *Eragrostis jacobsiana*

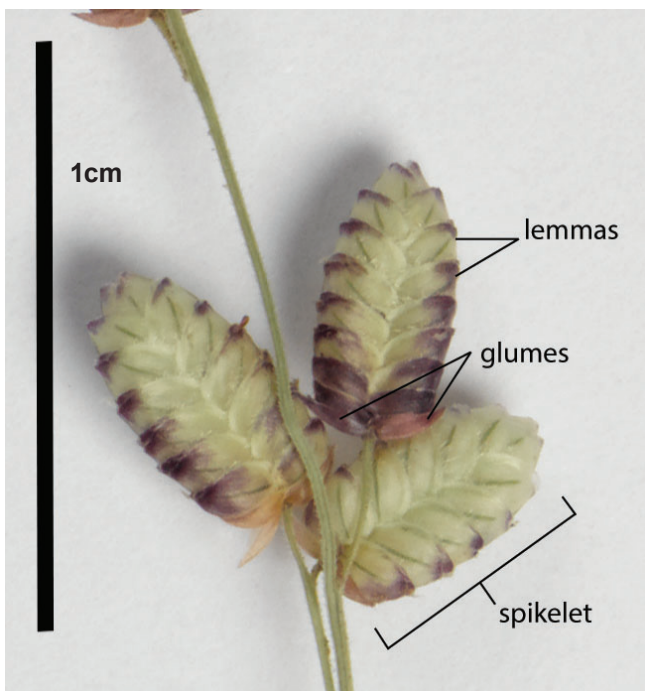


Fig. 3. Spikelet of *Eragrostis jacobsiana*

> DIAGNOSTIC FEATURES

Although this genus is easy to recognise identifying plants to species can be very problematic. *Eragrostis jacobsiana* is relatively distinct, the spikelets are quite wide and rounded in a loose relatively open inflorescence with the base of the spikelets slightly swollen or biconvex (Fig. 3). However, it is difficult to differentiate between it and *Eragrostis cassa* especially as both are not well collected from the region and the variation that exists within the two species is not well understood. Currently *Eragrostis cassa* is only known from one location at the tip of Cape York Peninsula. For further information on this species and for tools to identify species of *Eragrostis* see Simon & Alfonso 2011 and Palmer et al. (2005).

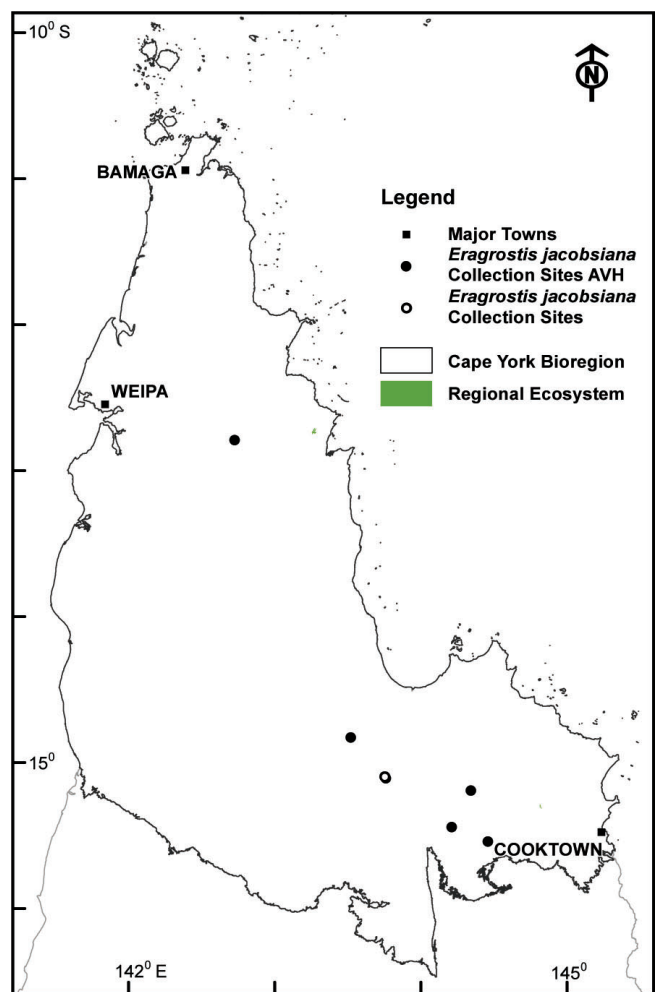


Fig. 4. Map of CYP bioregion showing actual herbarium collections (from BRI and CNS) (solid circle) and site records (open circle) of *Eragrostis jacobsiana*.

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

This species is only known from a handful of collections around Laura, the Hahn River Roadhouse and Batavia Downs on the Peninsula Development Road. Usually found growing in low lying wet areas or spring fed drainage lines with *Eucalyptus leptophleba* or *Melaleuca viridiflora* on sandy soil.

> LAND MANAGEMENT NOTES

Eragrostis species are economically significant both as fodder and weeds species however there are no specific attributes recorded for this species (Lazarides 1997).

RESOURCES:

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

Lazarides, M. (1997) A revision of *Eragrostis* (Eragrostideae, Eleusininae, Poaceae) in Australia. Australian Systematic Botany 10(1): 8.

Palmer, J., Lazarides, M., McCusker, A. & Weiller, C.M. in Mallett, K. (ed.) (2005) *Eragrostis*. Flora of Australia 44B: 346-348.

Simon, B.K. & Alfonso, Y. (2011) AusGrass2, <http://ausgrass2.myspecies.info/> accessed on [20 March 2017].

Simon, B.K. in Mallett, K. (ed.) (2005) *Eragrostis*. Flora of Australia 44B: 399, 460, Fig. 72H-O.

For more information: www.capeyorknrm.com.au | 1300 132 262



This project is supported by the Queensland Government Department of Natural Resources and Mines through the Queensland Regional Natural Resource Management Investment Program