

Grasses of Cape York - Quinkan Country

Eriachne vesiculosa Lazarides

This species occurs in Cape York Peninsula as a perennial from 30-90 cm high. Stems are usually hairless although bearded or pubescent along stem nodes or joints. Leaves are cauline (arising along the stem) and leaf blades are densely covered above with small bladder like sacs, however, sacs are only visible with a microscope. Leaf blades are up to 30 cm long and 4 mm wide, usually with long simple hairs but sometimes hairless on both surfaces, and convolute (Fig. 1). Inflorescences or flowering branches terminate the stem and are exerted from leaf axils. The inflorescences or flowering branches are open panicles with branches arising along a central stem, panicles are 5-10.5 cm long, 1-3.5 cm wide. *Eriachne vesiculosa* has spikelets (the basic flowering unit) consisting of two glumes encompassing two bisexual florets (modified flowers) (Fig. 2). The florets are shorter than the glumes, usually cleistogamous (self-pollinating and not opening) with the lemma of each floret giving rise to a curved awn 18-30 mm long. The palea of each floret is tapered to a point and split into 2 bristle like awns to 3 mm long.



Fig. 1. Herbarium sheet of *Eriachne vesiculosa*

> BOTANICAL DESCRIPTION

A perennial species 30-90 cm high. The culms or stems hairless, with nodes bearded, tuberculate bearded or pubescent. Leaves hairless to quite hairy; upper surface densely vesicular, blade to 30 cm long and up to 4 mm wide, convolute. The inflorescences are open panicles, 5-10.5 cm long, 1-3.5 cm wide (Fig. 1). Spikelets are defined by two glumes 6-9 mm long. The glumes encompass two bisexual florets, the florets shorter than the glumes, often cleistogamous, the lemma 4-8 mm long. The lemma of each floret is awned, the lemma awn 18-30 mm long, with the palea of each floret tapered and split into 2 bristle-like awns to 3 mm long, (Fig. 2). The lemma is hairy throughout with hairs not exceeding the apex, and with two grooves present.



Fig. 2. Mature spikelet of *E. vesiculosa*

> DIAGNOSTIC FEATURES

Eriachne vesiculosa is one of many species of *Eriachne* characterised by long awned spikelets, the awns curled, curved or bent. Other long awned species of *Eriachne* which occur in the region and may be easily confused with this species are *E. armittii*, *E. burkittii*, *E. glauca*, *E. squarrosa*, *E. stipacea* and *E. rara*. Some of these species are more easily distinguished than others. Most are treated in this guide, however some of the key differences between the species are shown in Table 1. In other regions of

Australia e.g. the Northern Territory, additional species may also need to be considered. *Eriachne vesiculosa* is distinguished by the combination of the following characters, tightly convolute leaf blades with a dense covering of bladder like sacs on the upper surface, the florets shorter than the glumes and often cleistogamous, grooves present on the lemma and the palea apex split into two awns. Users are encouraged to consult Lazarides (2005) or Simon & Alfonso (2011) for more detail on distinguishing between these species.

Table 1: Characters useful in diagnosing 7 long awned *Eriachne* species found in the Quinkan region of CYP.

Species	Habit	Inflorescence	Floret to glume size	Palea apex	Groove on lemma apex
<i>E. armittii</i>	annual	contracted 2.5-7 cm long, 0.8-1.8 cm wide	Distinctly shorter than glume	Palea bifid into two awns	No
<i>E. stipacea</i>	annual/perennial	loose to open 5-13 long, 2.4-7 cm wide	Distinctly shorter than glume	Palea bifid into two awns	Yes or no
<i>E. squarrosa</i>	perennial	contracted, dense c. 3 cm long, c. 1.5 cm wide	Distinctly shorter than glume	Palea bifid into two awns	No
<i>E. burkittii</i> !*	short lived perennial	loose to open or drooping 10.5-19 cm long, 1-6 cm wide	Subequal to exceeding glume	Palea entire or bicuspidate	Yes
<i>E. rara</i>	short lived perennial	Open 3.5-10 cm long, 0.5-5 cm wide	Slightly shorter/ subequal to glume	Palea bifid into two awnlets	No
<i>E. vesiculosa</i> *	annual/perennial	Open 5-10.5 cm long, 1-3.5 cm wide	Much shorter than glume	Palea bifid into two awns	Yes
<i>E. glauca</i> *	perennial	contracted, dense 3-8.5 (-14) cm long, 1.5-3 (-5) cm wide	Subequal to glumes	Notched or bifid to 0.5 mm	Yes

! Purple colouring

* Short bladder like sacs on upper leaf surface (only visible with microscope or hand lens)



> NATURAL VALUES

This species is likely to provide seed for granivorous or seed eating animals.

> HABITAT

This species occurs north of the Gulf Development Road in Queensland and is known from a few scattered records in the Northern Territory around Borroloola and Kakadu. Found in wet areas, especially damp and seasonally flooded, often shaded sites, such as the channels and banks of watercourses, stream lines and grassy swamps. Growing usually in deep sandy often whitish soils (Lazarides 2005, Simon 2011).

> LAND MANAGEMENT NOTES

Species of this genus are considered generally to be of low forage value (Lazarides 2002).

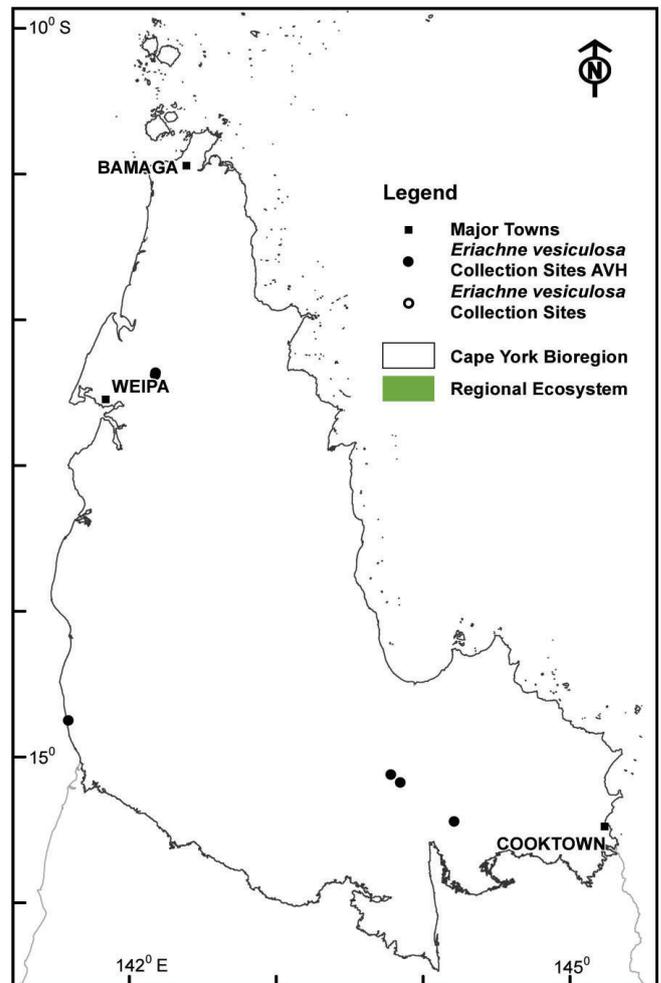


Fig 3. Map of CYP bioregion showing actual herbarium collections (from BRI and CNS) (solid circle) and site records (open circle) of *Eriachne vesiculosa*. (Mapping supplied by P. Bannink, DES). Data attribution: Environment and Science, Queensland Government, Biodiversity status of pre-clearing and 2015 remnant regional ecosystems series - version 10.0 licensed under Creative Commons Attribution.

RESOURCES:

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

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