

Triodia degreyensis

Name

Triodia degreyensis M.D. Barrett, *ined.*

Citation

Nuytsia, in press, (2017)

Derivation

degreyensis — from De Grey Station, where the species occurs, and the Latin prefix *-ensis*, indicating origin.

Common name

De Grey Spinifex

Synonyms

None

Diagnostic features

Foliage not or weakly resinous; leaf sheath surfaces glabrous; leaf blades epistomatous (soft-type); lower glume 12.4–17 mm long, narrowly lanceolate, L:W>5, 7–13-nerved; lemmas 3-lobed and 3-awned, bitextured, with dense appressed hairs all over surface in lower part; callus 0.25–0.45 mm long, acute to pungent; palea bitextured, hairy; habitat on gravelly slopes; distribution in north-east Pilbara.

Habitat

Occurs on lower slopes of low hills, amongst gravel and rocks.

Distribution and frequency

Endemic to the north-east Pilbara, where it is only known from a single range.

Similar species

Triodia degreyensis belongs to the Soft group, sharing the epistomatous (soft-type) leaf blades. Four other species (*Triodia avenoides*, *T. basitricha*, *T. schinzii* and *T. sp.* Mt Ella) in the Pilbara share the combination of epistomatous (soft-type) leaves, narrowly lanceolate glumes, awned lemma lobes and bitextured lemmas with a transverse line at maturity.

Triodia basitricha has shorter glumes 10–12.5 mm long (12.4–16 mm long in *T. degreyensis*) and hairs on the leaf sheath surfaces (glabrous in *T. degreyensis*).

Triodia avenoides and *T. schinzii* have glabrous paleas (hairy in *T. degreyensis*), a long-pungent callus 0.8–1.5 mm long (broadly acute to shortly pungent and 0.25–0.45 in *T. degreyensis*), glumes usually longer than the spikelet excluding awns (glumes shorter to subequal to the spikelet in *T. degreyensis*), and grow on sand flats and dunes (*T. degreyensis* on rocky or gravelly slopes).

Triodia sp. Mt Ella has shorter glumes up to 6.3–10.5(–12) mm long (12.4–16 mm long in *T. degreyensis*), 3–5 glume nerves (7–13 nerves in *T. degreyensis*), and is copiously resinous (not or weakly resinous in *T. degreyensis*).

Triodia melvillei and *T. pisoliticola* share epistomatous (soft-type) leaves and awned lemmas, but have uniformly textured lemmas and lack a transverse line on the lemma.

Triodia karijini and *T. veniciae* have epistomatous (soft-type) leaves and narrowly lanceolate glumes, but the lemma



T. degreyensis spikelets.



T. degreyensis habitat.



T. degreyensis plant.



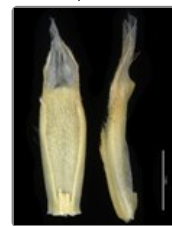
T. degreyensis leaf section.



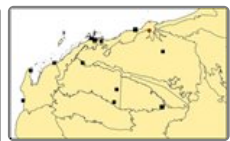
T. degreyensis glumes and spikelet.



T. degreyensis lemma bases.



T. degreyensis paleas.



T. degreyensis map.

lobes are long-acute to sub-awned, and lemmas are uniformly textured and lack a transverse line; both species occur well south of the known range of *T. degreyensis*.

Conservation status

Priority One recommended.

Identification without florets

Only two species with long (>12 mm), narrowly lanceolate glumes occur in the north-east Pilbara, *T. schinzii* and *T. degreyensis*. The two species can be distinguished by substrate (*T. schinzii* on sand, *T. degreyensis* on gravel or stony slopes), inflorescence height (up to 1 m in *T. degreyensis*, (0.6–)1.2–2.1 m in *T. schinzii*), and often by glume length (12.4–17 mm in *T. degreyensis*, 12–32 mm in *T. schinzii*; in the vicinity of *T. degreyensis* populations, *T. schinzii* always has glumes >17 mm long).

Variation

No significant variation known.

Notes

The related species *T. schinzii* occurs immediately adjacent to the only known population of *T. degreyensis*, but grows on red sand rather than stony gravel.

DNA sequences indicate a relationship with *T. avenoides*, which occurs on sand in the west Pilbara, but morphologically it is most similar to *T. bitextura*. *Triodia bitextura* as currently circumscribed occurs across northern Australia from the West Kimberley to Queensland, and has several forms, some of which may eventually be described as distinct taxa.

Triodia degreyensis was not represented in Lazarides (1997), Lazarides *et al.* (2005) or *Ausgrass* (Sharp & Simon, 2002; Simon & Alonso, 2014). A full description of *T. degreyensis* can be found in Barrett (2017b).