Triodia chichesterensis

Name

Triodia chichesterensis B.M.Anderson, *ined*.

Citation

Austral. Syst. Bot., in press, (2017)

Derivation

chichesterensis — refersto the Chichester region of the Pilbara where this species is found, and the Latin suffix *–ensis*, from.

Common name

Quartzite Spinifex

Synonyms

None

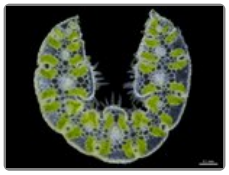
Diagnostic features

Foliage non-resinous; leaf sheath surfaces glabrous; orifice hairs woolly; leaf blades amphistomatous (hard-type), 3–11 cm long; inflorescences with 4–11 spikelets total and 0–3 branches bearing more than 1 spikelet; lower glume elliptic, 6.5–10 mm long, 9–14-nerved; lemmas lobed for at least half their length, bitextured; lemma midlobe hairy; habit on rocky or gravelly substrates, usually with quartzite strew (although these often scarcely outcropping or flat); distribution in the central Chichester sub-region in the north Pilbara.

T. chichesterensis spikelet.

T. chichesterensis habitat.

T. chichesterensis orifice.

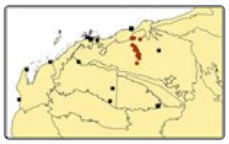


T. chichesterensis leaf section.

T. chichesterensis inflorescence.

T. chichesterensis lemmas.

T. chichesterensis paleas.



T. chichesterensis map.

Habitat

Occurs on sand or loam over rocky or gravelly substrates, often with pieces of quartzite evident at the surface. Although the rocky substrates are often scarcely above the level of a surrounding plain with deeper soils, the difference in substrate is usually sufficient to result in environmental sorting between *T. chichesterensis* and *T. lanigera*, since the two species often grow abutting but not intermixed (although in the southern extent of their overlapping distribution both may grow on rocky substrates).

Distribution and frequency

Endemic to the north Pilbara, where it is restricted to the central Chichester sub-region.

Similar species

Triodia chichesterensis belongs to the Basedowii group, sharing the group features of non-resinous foliage, amphistomatous (hard-type) leaf blades and many-nerved (≥6) glumes.

Triodia chichesterensis is distinguished from most species of the Basedowii group (except *T. scintillans* and *T. vanleeuwenii*) by having short leaves up to 11 cm long, lemmas lobed for about half their length, and longest basal pedicels more than 3 mm long.

Triodia scintillans and *T. vanleeuwenii* can be most easily distinguished from *T. chichesterensis* by the presence of minute sparkling droplets (absent in *T. chichesterensis*), and having glabrous and generally shorter lemma midlobes 2.2–5.2 mm long (hairy and 4.2–8 mm long in *T. chichesterensis*); the distributions of the three species do not overlap.

The distribution of *T. chichesterensis* in the central Chichester sub-region overlaps only with *T. lanigera*, with which it co-occurs and occasionally hybridizes. *Triodia lanigera* can be distinguished by having woolly leaf sheaths, longer

leaf blades with longest leaves usually >12 cm long and larger inflorescences having 5–38 spikelets and (0)2–9 branches bearing more than one spikelet (*T. chichesterensis* has glabrous leaf sheaths, leaf blades 3–11 cm long, and inflorescences with 4–11 total spikelets and 0–3 branches bearing more than 1 spikelet). Morphological distinctions between *T. chichesterensis* and *T. lanigera* break down in a few hybrid populations.

Conservation status

Priority Three recommended.

Identification without florets

The combination of amphistomatous (hard-type) leaf blades, (≥6) glumes, and distribution in the central Chichester region distinguishes *T. chichesterensis* from all species except *T. lanigera*. *Triodia lanigera* can be distinguished by the characters noted above.

Variation

Occasional hybrids between *T. chichesterensis* and *T. lanigera* exist and span the range of intermediate morphology between the two species.

Notes

Triodia chichesterensis was considered under a broad concept of *T. lanigera* by Lazarides (1997), Lazarides *et al*. (2005) and *Ausgrass* (Sharp & Simon, 2002; Simon & Alonso, 2014). A full description of *T. chichesterensis* can be found in Anderson *et al*. (2017a).