

# Triodia karijini

## Name

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

## Citation

*Nuytsia*, in press, (2017).

## Derivation

*karijini* — from *Karijini*, meaning 'hilly place' in the local Banyjima language, in reference to both the habitat on hills, and the nearby Karijini National Park; used as a noun in apposition.

## Common name

Pilbara Mountain Spinifex

## Synonyms

*Triodia* sp. Karijini (S. van Leeuwen 4111)

## Diagnostic features

Foliage non-resinous to weakly resinous; leaf sheath surfaces hairy or not; leaf blades epistomatous (soft-type), 19–33.5 cm long; lower glume 3–6.3 mm long, L:W 5–7.8, 3–5-nerved; lowest lemma 3-lobed to shortly awned, the lobes narrowly triangular with or without a short  $\pm$ terete awn, lemma body uniformly textured, with hairs arranged in longitudinal rows; lowest lemma midlobe 2.0–3.0 mm long; palea glabrous, not or scarcely winged; only known from ironstone ridges above 900 m on mountains in the eastern Hamersley range.

## Habitat

Occurs on or near outcropping ironstone, on summits or steep hillslopes of mountains.

## Distribution and frequency

Endemic to the eastern Hamersley Range. Only known from three locations, all above 900 m, on summits or steep slopes of mountains in the central Hamersley range, from near Mt Mossenson on the eastern edge of the Karijini National Park to Mt Robinson. The total known range is 43 km. Populations can be dense but are patchy and restricted to mountain tops and sides.

## Similar species

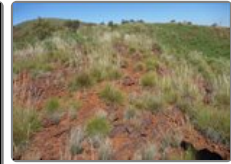
*Triodia karijini* belongs to the Soft group, sharing the epistomatous (soft-type) leaf blades. Three other Pilbara species in the Soft Group (*T. veniciae*, *T. melvillei* and *T. pisoliticola*) share the combination of narrowly lanceolate glumes and uniformly textured (not bitextured) lemmas.

*Triodia veniciae* is the most similar species morphologically, sharing the narrowly triangular to sub-awned lemmas lobes 2–3.2 mm long and hairy leaf sheath surfaces. *Triodia veniciae* is copiously resinous (non-resinous to weakly resinous in *T. karijini*), and palea with hairs restricted to central zone (palea glabrous in *T. karijini*), and 7–14 spikelets on longest basal panicle branches (3–6 spikelets in *T. karijini*). *Triodia karijini* is only known from above 900 m on ironstone ridges on mountains in the Hamersley Range, while *T. veniciae* is only known from shale slopes in the Chichester range north of the Fortescue River.

The closest genetic relative of *T. karijini* is *T. pisoliticola*, which shares the narrowly lanceolate glumes and non-



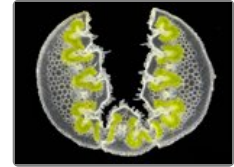
*T. karijini* spikelet.



*T. karijini* habitat.



*T. karijini* orifice and hairy sheath.



*T. karijini* leaf section.



*T. karijini* inflorescence.



*T. karijini* glumes.



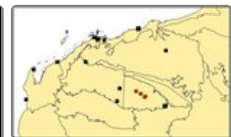
*T. karijini* lemmas.



*T. karijini* lemma bases.



*T. karijini* paleas.



*T. karijini* map.

resinous, epistomatous leaves, but occurs disjunctly in the western Hamersley Range. *Triodia karijini* differs from *T. pisoliticola* in having narrowly triangular to sub-awned lemma lobes (distinctly awned in *T. pisoliticola*) and generally shorter leaves 19–34 cm long (24–59 cm long in *T. pisoliticola*).

*Triodia melvillei* occurs within the range of *T. karijini*, but can be distinguished by having prominently awned lemmas with midlobe 10–14 mm long (acute to sub-awned with midlobe 2.0–3.0 mm long in *T. karijini*), and resinous foliage (non-resinous in *T. karijini*). *Triodia melvillei* also usually occurs on red loam flats, and only rarely on rock on high mountains.

### Conservation status

Priority One.

### Identification without florets

The non-resinous to weakly resinous foliage and epistomatous (soft) leaves, combined with central-Hamersley Range distribution and mountain habit are diagnostic. All four of the other species with epistomatous (soft-type) leaves in the eastern Hamersley Range (*T. biflora*, *T. melvillei*, *T. pungens* and *T. sp. Mt Ella*) have copiously resinous foliage. *Triodia biflora* and *T. pungens* also have glumes with L:W<4 (L:W 5–6.8 in *T. karijini*). *Triodia sp. Mt Ella* has glabrous sheath surfaces (but often ciliate margins), while *T. karijini* has sparsely to moderately densely hairy sheath surfaces and glabrous margins.

### Variation

A fairly uniform species, but differs in the degree of resin on the foliage, from none to traces in lines along the leaf blades.

### Notes

Specimens of *Triodia karijini* were not represented in Lazarides (1997), Lazarides *et al.* (2005) or *Ausgrass* (Sharp & Simon, 2002; Simon & Alonso, 2014).

A full description of *T. karijini* can be found in Barrett (2017b).

Does not occur in an area that stock can readily access.