Sporadanthus ferrugineus

COMMON NAME
bamboo rush, giant wire rush

SYNONYMS
None (described in 1999)

FAMILY
Restionaceae

AUTHORITY
Sporadanthus ferrugineus de Lange, Heenan, et B.D.Clarkson

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Rushes & Allied Plants

CHROMOSOME NUMBER
2n = 18

CURRENT CONSERVATION STATUS
2017 | At Risk – Relict | Qualifiers: RR

PREVIOUS CONSERVATION STATUSES
2012 | At Risk – Relict
2009 | At Risk – Relict | Qualifiers: CD, De, RR
2004 | Range Restricted

DISTRIBUTION
Endemic. New Zealand: North Island (Waikato – formerly Kaitaia)

HABITAT
Lowland, oligotrophic, high moor, restiad bogs.

WETLAND PLANT INDICATOR STATUS RATING
OBL: Obligate Wetland
Almost always is a hydrophyte, rarely in uplands (non-wetlands).

Male flowers. Photographer: Peter J. de Lange, Licence: CC BY-NC.

Sporodanthus. Photographer: Peter J. de Lange, Licence: CC BY-NC.

DETAILED DESCRIPTION

Robust, dioecious perennial, 1–6 m high, forming dense rafts. **Rhizome** 10–15 mm diameter, horizontal, branched. **Roots** 3–5 × 250–300 mm, white. **Culms** up to 6 m tall, 10–15 mm diameter, brittle, rigid, upright, terete to subterete, smooth or slightly grooved, glaucous green when young, maturing red-brown or yellow-brown; branched in upper ≣ ; branches numerous, slender, firm, flexible, upright; basal 140–200 mm of culm conspicuously swollen with soft, spongy, light brown tissue. **Culm** base with 3–7 loosely appressed, overlapping scales; scales 10–50 × 15–40 mm, ovate to broadly ovate, coriaceous, light brown to brown, apex rounded and mucronate. **Leaves** along culm solitary, distant, tightly appressed; lamina 15–50 × 15–50 mm, ovate to broadly ovate, brown to dark brown, fading to grey; basal leaves pectinate, upper leaf margins entire or fractured; apex rounded, mucronate. **Inflorescence** a terminal panicle up to 150 mm long , red-brown, upright to spreading, sometimes drooping; male inflorescence dense, crowded; female inflorescence sparse, diffuse. **Flowers** pedicellate to almost sessile. **Tepals** 6, in 2 whorls of 3, 2.0–3.0 × 0.4–0.5 mm, subulate to lanceolate, light brown to yellow-brown, channelled, apex acute to weakly acuminate, mucronate. **Stipe** 0.6–0.8 mm long. **Male flowers** with 3 stamens; filaments 1.8–2 .0 mm long, anthers 1.0–1.3 × 0.2–0.4 mm, cream, pollen yellow; pistil rudimentary. **Female flowers** with 1 pistil; style 0.8–1 .3 mm long, pink, papillose on upper surface, decurrent with ovary on lower surface; ovary 0.3–0.7 × 0.2–0.6 mm, ± globose, amber to dark brown, vertical groove on upper surface; staminodes 3, each 0.5–0.8 mm long. **Fruit** 1.2–1.5 × 0.5–0.7 mm, narrowly ellipsoid, sides dark brown, suture light brown to cream-brown, surmounted by persistent, long style; dehiscing along lower suture. **Seed** 0.7–0.8 × 0.5–0.6 mm, shortly oblong to broadly ovate, light orange-brown when fresh fading to light brown.

SIMILAR TAXA

Distinguished from *Sporadanthus traversii* by the culms which are 10–15 mm cf. 1–5 mm; tepals not keeled, mucronate, rather than keeled and acuminate, and 2–3 mm cf. 4–6 mm long; by the dehiscent ellipsoid rather than oblong-ellipsoid fruit, 1.0–1.5 mm cf. 3.0–3.5 mm long; and seeds which are 0.7–0.8 × 0.5–0.6 mm cf. 1.2–1.5 × 0.9–1.0 mm long.

FLOWERING

October–December

FLOWER COLOURS

Brown, Yellow

FRUITING

November–January

PROPAGATION TECHNIQUE

Easy from seed. Can be grown in most soils but inclined to be rather slow. Resents competition and root disturbance.

THREATS

Threatened in the past by wetland drainage, which eliminated the species from 95% of its known range by 1970. Today confined to Torehape, Kopouatai and Moanatuatua. Of these Moanatuatua is no longer a truly viable, functioning system and Torehape is being restored, but only Kopouatai truly preserves the *Sporadanthus*-dominated raised bog ecosystem intact. All three populations remain highly vulnerable to fire—itself an issue as there is good evidence that fires are necessary to maintain the species but it is also clear that excessive burning will eliminate it.

Extra information
Re-creating rare restiad wetlands in the Waikato story in Issue 26 of Trilepidea (November 2006).

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 18 January 2005. Description adapted from de Lange et al. (1999).

REFERENCES AND FURTHER READING

de Lange PJ, Heenan PB, Clarkson BD, Clarkson BR. 1999. Taxonomy, ecology, and conservation of *Sporadanthus* (Restionaceae) in New Zealand. *New Zealand Journal of Botany 37*: 413–431. https://doi.org/10.1080/0028825X.1999.9512645.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/sporadanthus-ferrugineus/