Pyrrhobryum paramattense

COMMON NAME

moss

SYNONYMS

Mnium paramattense Müll.Hal.

FAMILY

Rhizogoniaceae

AUTHORITY

Pyrrhobryum paramattense (C. Müll.) Manuel

FLORA CATEGORY

Non-vascular - Native

STRUCTURAL CLASS

Mosses

CURRENT CONSERVATION STATUS

2009 | Range Restricted | Qualifiers: SO

DISTRIBUTION

Indigenous. New Zealand: Kermadec Islands (Raoul Island), North Island (Northland, Waipoua), Chatham Islands (Chatham Island (Rēkohu, Wharekauri). Also Australia (Queensland, New South Wales, Victoria and Tasmania), Lord Howe Island, Norfolk Island.





Moumoukai, Raoul Island. Aug 2007 (from specimen collected by David Havell). Photographer: Jeremy R. Rolfe, Licence: CC BY.



Moumoukai, Raoul Island. Aug 2007. Stem bases (from specimen collected by David Havell). Photographer: Jeremy R. Rolfe, Licence: CC BY.

DETAILED DESCRIPTION

Acrocarpous, dioicous, yellow-green to dark green, 50–100 mm tall. Stems dark reddish brown, simple, sparingly branched; lower stems bare, immature stems with distant scale leaves. Leaves sparse, crisped when dry, spreading when moist, lanceolate to linear-lanceolate, up to 7.0 × 0.4 mm, acuminate; margin plane, denticulate in upper-half with clear sharp twinned teeth, bordered by 2-3 rows of cells, bistratose below, multistratose above; costa broad, prominent, brownish, percurrent with sharp twinned teeth above, 150 µm wide at base; costal cells quadrate, rounded or slightly rectangular (14 × 8 µm); marginal cells ± quadrate, 8 µm. Rhizoides near bases, red to brownish, weakly papillose to 0.8 mm long, to 25 µm wide; cells to 100 µm long, indistinct. Perigonia c. 6, bud-like, clustered at base of stems. **Perigonial leaves** lanceolate to oblong-lanceolate, up to 1.4×0.6 mm, shouldered; base straight, entire; apex sharply acuminate, serrate: nerve reddish-brown, prominent, to 60 µm wide at base; costal cells narrowly rectangular, $30-80 \times 4-9 \mu m$. Laminal apical cells \pm thick-walled, very variable in shape and size, linear to irregularly rectangular to 30 x 5 µm; medial cells thin-walled, rectangular to hexagonal, to 40 × 10 µm; marginal; cells longer, rectangular to $70 \times 12 \,\mu\text{m}$, basal cells irregularly rectangular to $80 \times 12 \,\mu\text{m}$. Antheridia up to 12 per perigonium, to 480 × 120 µm; stalk to 40 µm long; paraphyses clear, ± same length as antheridia, to 20 µm wide; cells rectangular, to 120 µm long. Perichaetia numerous, basal or on short lateral basal branches. Perichaetial leaves broadly lanceolate to 4.7 × 0.5 mm, gradually tapering to long, serrate subulae; upper cells thick-walled, quadrate, to 10 µm; medial cells thick-walled, rectangular, to 18–20 × 5 µm; basal cells thin-walled, rectangular, to $30 \times 4 \mu m$, broader absent. **Archegonia** c. 30 per perichaetium, $560 \times 40 \mu m$; paraphyses clear, to $600 \times 20 \mu m$; cells to 60 µm long. Calyptra c. 3 mm long, smooth, brown. Seta reddish yellow, 10–50 mm long, erect to curved. Capsule dark red, to 3 mm long, inclined, asymmetrical, clavate-curved, smooth; annulus present. Operculum short, obliquely-rostrate; 600-700 µm long, striate below, finely papillose above; endostome segments fragile, as long as teeth, weakly papillose; basal membranes high; cilia shorter, 1-2. Spores 12-18 µm, finely papillose to smooth.

FRUITING

Fruits have been found but there is insufficient information to provide an exact fruiting time.

THREATS

Not Threatened. Listed only because it is known from very few sites within a narrow geographic range. All known sites are on protected land.

SUBSTRATE

Terricolous, saxicolous and corticolous on moist rock, soil, tree-fern trunks and on rotting logs.

ATTRIBUTION

Fact Sheet Prepared for NZPCN by: P.J. de Lange (23 November 2011). Description adapted from Streimann (2002)

REFERENCES AND FURTHER READING

Streimann H. 2002. The mosses of Norfolk Island. *Flora of Australia Supplementary Series 16*. Australian Biological Resources Study, Canberra, AUS. 178 p.

NZPCN FACT SHEET CITATION

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https://www.nzpcn.org.nz/flora/species/pyrrhobryum-paramattense/ (Date website was queried)

MORE INFORMATION

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