Pyrrhobryum paramattense

COMMON NAMES
moss

BIOSTATUS
Native

CURRENT CONSERVATION STATUS
2025 | At Risk – Uncommon | Qualifiers: DPS, DPT, SO
Jump to previous conservation statuses

CATEGORY
Non-vascular

STRUCTURAL CLASS
Mosses

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 × 4–9 µm. **Laminal apical cells** ± 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 × 12 µm, basal cells irregularly rectangular to 80 × 12 µm. **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 × 4 µm, broader absent. **Archegonia** c. 30 per perichaetium, 560 × 40 µm; paraphyses clear, to 600 × 20 µm; 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.



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.

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.

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

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.

GENUS
Pyrrhobryum

FAMILY
Rhizogoniaceae

AUTHORITY
Pyrrhobryum paramattense (Müll.Hal.) Manuel

SYNONYMS
Mnium paramattense Müll.Hal.

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

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

NVS CODE
PYRPAR

PREVIOUS CONSERVATION STATUSES
2014 | At Risk – Naturally Uncommon | Qualifiers: DP, SO
2010 | At Risk – Naturally Uncommon | Qualifiers: DP, SO
2005 | Range Restricted | Qualifiers: SO
Jump to current conservation status

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.

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

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/pyrrhobryum-paramattense/

PDF DATE
25 August 2026