# Pyrrhobryum paramattense

#### **Common Name(s):**

moss

### **Current Threat Status (2009):**

Range Restricted

### **Distribution:**

Indigenous. Australia (Queensland, New South Wales, Victoria and Tasmania), Lord Howe and Norfolk Islands. In New Zealand recorded from Raoul Island (Kermadec Islands), the North Island (Northland, Waipoua) and from Chatham Island.

### Features\*:

Acrocarpous, dioicous, yellow-green to dark green, moss 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 x 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 x 8  $\mu$ m); marginal cells  $\pm$  quadrate, 8  $\mu$ m. 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 x 0.6 mm, shouldered; base straight, entire; apex sharply acuminate, serrate: nerve reddish-brown, prominent, to  $60 \, \mu m$  wide at base; costal cells narrowly rectangular, 30-80 x 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 x 10  $\mu$ m; marginal; cells longer, rectangular to 70 x 12  $\mu$ m, basal cells irregularly rectangular to 80 x 12 µm. Antheridia up to 12 per perigonium, to 480 x 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 x 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 x 5 μm; basal cells thin-walled, rectangular, to 30 x 4 μm, broader absent. Archegonia c.30 per Perichaetium, 560 x 40  $\mu$ m; paraphyses clear, to 600 x 20  $\mu$ m; cells to 60  $\mu$ m 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.



**Caption:** Moumoukai, Raoul Island. Aug 2007. **Photographer:** Jeremy Rolfe from

**Photographer:** Jeremy Rolfe from specimen collected by David Havell



**Caption:** Moumoukai, Raoul Island. Aug 2007. Stem bases.

**Photographer:** Jeremy Rolfe from specimen collected by David Havell

## 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.

#### \*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 No. 16.* Australian Biological Resources Library, Panther Printnet, Canberra. 178Pp.

### For more information, visit:

http://nzpcn.org.nz/flora\_details.asp?ID=5069