

Hollia myrmecoa

COMMON NAMES

moss

BIOSTATUS

Native

CURRENT CONSERVATION STATUS

2025 | Data Deficient | Qualifiers: S?O

CATEGORY

Non-vascular

STRUCTURAL CLASS

Mosses

DETAILED DESCRIPTION

Corticolous, medium-sized, densely clustered, glossy, pale to medium green, drying pale grey-green or brownish with straw-like texture. **Stems** red-brown, thin, creeping, to 50 mm long; branches erect, robust, dense, to 15 mm long; apex tight with a conical appearance. **Branch leaves** whorled, imbricate to slightly spreading to patent when dry, spreading at 45 degrees when moist, $1.5\text{--}1.7 \times 0.56\text{--}0.92$ mm, ovate to lanceolate, concave, acute, ecostate; base cordate; margin incurved near apex, entire; laminal cells thick-walled, lacking papillae, rhomboidal to linear-rhomboidal; apical cells variable, c. $24\text{--}34 \times 8$ μm ; medial cells sigmoid, $32\text{--}50 \times 6\text{--}8$ μm , unbordered; alar cells conspicuous, orange in a basal band, 5–8 cells high; cells variable, $\pm$ quadrate, c. 20 μm wide, more rectangular at margin, thick-walled; basal cells between alar cells rectangular, c. 50×6 μm , $\pm$ porose and sinuose, yellow-brown across base. **Stem leaves** sparse, ovate to oblong-lanceolate, $0.48\text{--}0.88 \times 0.21\text{--}0.49$ mm; alar cells not as well developed; laminal cells narrower, $\pm$ sigmoid. **Rhizoids** sparse but conspicuous on lower stems, wiry, reddish, smooth, to 3 mm long, c. 20 μm wide; branches short; cells to 90 μm long. Dioicous. **Male plants** perennial, either dwarf or large. **Perigonial leaves** narrowly ovate-lanceolate. **Perichaetial leaves** long-linear to oblong-lanceolate, c. 10.0×1.2 mm, obtuse to acute, ecostate; 2–4 conspicuously long perichaetial leaves at base of capsule sheathing seta, remainder shorter; base straight; margin entire; laminal cells linear, thick-walled; upper cells c. 40×8 μm , slightly sigmoid; medial cells similar, less sigmoid; basal cells c. $100\text{--}160$ μm long, porose, yellow-orange across base. **Calyptra** 4.0–4.5 mm long, cucullate, yellow to pale red-brown, smooth. **Seta** 5–12 mm long, terminal, reddish. **Capsule** 3.0×0.6 mm, solitary, red, erect or suberect (cylindrical or asymmetrical, respectively), smooth. **Operculum** to 1.6 mm long, slender, obliquely rostrate. **Peristome** single, reddish; teeth 16, $280\text{--}550 \times 120$ μm , broadly lanceolate, inserted below capsule mouth on short basal membrane, densely papillose on both sides; cells horizontally rectangular; medial lines straight. **Spores** large, 100–190 μm .

DISTRIBUTION

Indigenous. New Zealand: Kermadec (Raoul Island) only. Also Australia, Norfolk Island and New Caledonia. As this species is known in Australia to range along the eastern side of that country to as far south as Victoria it possibly occurs elsewhere in New Zealand proper.



Raoul Island (Nov 2011) from a specimen collected by Peter de Lange (May 2011).
Photographer: Jeremy R. Rolfe, Licence: CC BY.



Raoul Island (Nov 2011) from a specimen collected by Peter de Lange (May 2011).
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HABITAT

Corticolous—a moss of the high forest canopy of Raoul Island. Gatherings have been made from both ‘dry’ and ‘wet’ forest types, and mostly from material strewn on the forest floor after big storms. The preferred host tree seems to be Kermadec pohutukawa (*Metrosideros kermadecensis*), and most gatherings have been made in association with the large foliose lichen *Pseudocyphellaria argyracea*.

THREATS

Known in the New Zealand Botanical Region (see de Lange & Rolfe 2010) only from Raoul Island where three chance gatherings were made from fallen canopy branches in 2009 and 2010. Indications are that this species is probably locally common on Raoul however, until a proper survey is undertaken it seems wise to treat this species as Data Deficient.

GENUS

Hollia

FAMILY

Dicnemonaceae

AUTHORITY

Hollia myrmecoa Siber ex Hoppe

SYNONYMS

Eucamptodon muelleri Hampe et Müll.Hal

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

FRUITING

Fruiting material has been found in May gatherings.

REFERENCES AND FURTHER READING

de Lange PJ, Rolfe JR. 2010. New Zealand indigenous vascular plant checklist. New Zealand Plant Conservation Network, Wellington, NZ. 131 p.

Streimann H. 2002. The mosses of Norfolk Island. Flora of Australia Supplementary Series No. 16. Australian Biological Resources Library, Panther Printnet, Canberra. 178 p. <https://www.publish.csiro.au/book/3535>.

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/hollia-myrmecoa/>

PDF DATE

25 May 2026