



Riccardia furtiva

Common Name(s):

liverwort

Current Threat Status (2009):

Range Restricted

Distribution:

Indigenous. Australia and New Zealand. In New Zealand recorded from both North and South Islands

Features*:

Monoicous plant found creeping at the bases of other bryophytes. Thallus small, filamentous, clear green with cell walls in older regions often pigmented brown. Growth indeterminate, branching usually simply pinnate to bipinnate, main axis and side branches not differentiated. Thalli 7-20 mm long, 141-196 microns wide. Apices rounded. Mucilage papillae 25 x 15 microns, dorsal, ventral and occasionally lateral, persisting for less than 1/3 of thallus (rarely not persisting at all). Rhizoids ventral, occasional. Gemmae not observed. Stolons absent. Axis biconvex to almost plano-convex, with subacute to rounded margin, 90-268 microns (7-13 cells) thick, cells of similar size throughout thallus, with cell walls notably thickened, sometimes heavily so in central region, epidermal cells often chlorotic. Dorsal epidermal cells isodiametric to oblong, 16-26 x 13-18 microns, and 9-13 microns deep. Ventral epidermal cells tending to be oblong rather than isodiametric, 23-40 x 13-19 microns, and 10-15 microns deep. Dorsal subepidermal more hexagonally elongate, 20-38 x 15-19 microns. Ventral subepidermal and internal cells similar. Oil-bodies: sparse or absent, if present then 5-14 x 4-8 microns and confined to the heavily thickened internal cells, or present as small (5 x 4 microns) pale brown, granular structures in subepidermal cells. Endophytic mycorrhizae sparse or absent. Male and female branches commonly on separate branch systems. Male branches solitary, shortly stalked, arising from the main or large axial branches. Antheridial cavities on dorsal surface in 2-6 pairs, separated by 2-4 cells. Female branches solitary, occurring in any region of the main axis or on the side branches with 1-5 pairs of archegonia. Calyptra covered with irregularly arranged multicellular protrusions. Sporophytes poorly known, few seen have *Riccardia* Type IV thickening, outer cell walls with the inner tangential and adaxial radial thickened, the walls of the inner cell layer apparently lacking bands of thickening or with ill-defined bands.

Fruiting:

Although fruit has been seen insufficient information exists to provide any details on the timing of fruiting

Threats:

Almost certainly incorrectly listed as Range Restricted. This species is biologically sparse and appears to be widespread but never common. It may not even be threatened. The specific epithet *furtiva* alludes to the ease with which this species is overlooked, a critical point when making a conservation assessment!

*Attribution:

Fact sheet prepared for NZPCN by P.J. de Lange (27 August 2006). Description adapted from Brown & Braggins (1989).

References and further reading:

Brown, E.A.; Braggins, J.E. 1989: A revision on the genus *Riccardia* S.F. Gray in New Zealand with notes on the genus *Aneura* Dum. *Journal of the Hattori Botanical Laboratory* 66: 1-132.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=5072



Caption: *Riccardia furtiva*

Photographer: John Braggins



Caption: *Riccardia furtiva* - showing plants growing at the bases of other bryophytes (it's usual condition)

Photographer: John Braggins