



Acrolejeunea pycnoclada var. *pycnoclada*

Common Name(s):

liverwort

Current Threat Status (2009):

Data Deficient

Distribution:

Indigenous. Kermadec Islands: Raoul Island

Habitat:

The sole known gathering from Raoul Island came from the bark of a large *Metrosideros kermadecensis* overhanging the ephemeral watercourse that drains Sunshine Valley. Sunshine Valley is a major ravine/gorge system draining the south-eastern side of Raoul Island.

Features*:

Corticolous. Plant olive green in colour. Stems to 8 mm or more long, most shorter, appressed to bark. 0.3 mm (dry) to 0.9 mm (wet) wide. Branches mostly of *Lejeunea* type but occasionally *Frullania* type. Stem diameter 90-110 μm , ventral merophyte of 4-5 cells in width, Cortical cells subrectangular to irregular in shape 20-30 x 12-22 μm , cortical cells c.17 surrounded by c.20 medullary cells. Leaves are imbricated when dry spreading but not becoming squarrose when wet. Lobe c.540 x 330 μm , broad, short crescent shaped with a rounded apex which is incurved. The dorsal base is not auriculate. The ventral margin is short and more or less recurved. The keel is curved, not decurrent and the cells not or weakly protuberant. Median leaf cells are ovoid 22 x 15-16 μm , base cells larger 29-31 x 16-17 μm , trigones are medium sized Y shaped (the sides swollen), intermediate thickenings scattered to scarce. Oilbodies were not present. Lobule is narrowly ovate rectangular with slightly oblique apex, the free margin is almost straight. Teeth (2-)3 each 1-2 cells long, erect, the first is at tip of the free margin, the hyaline papilla is at the base of the second tooth which is therefore the 'apical tooth', the lobule is about half the length of the lobe. Underleaf, in position slightly overlapping the base of the adjacent underleaf, broad oval in shape, about 320 μm wide and 190 μm long. The median cells ovoid 150-18 x 13-15 μm , slightly larger at base 22-25 x (9-)10-13. The rhizoid disc is small. Reproductive structures not present in the sole Kermadec gathering.

Flowering:

Not seen

Fruiting:

Not seen

Threats:

First recognized from New Zealand in May 2011 from a single copious gathering made from Raoul Island, Sunshine Valley. The identity of the gathering was not known until the specimen was examined more closely in New Zealand, however despite the many liverworts collected from Raoul in May 2009 and May 2011 there were no further gatherings of this species evident, so it is likely that *Acrolejeunea pycnoclada* is very uncommon on Raoul Island. However, until a thorough survey for this inconspicuous plant is undertaken it is considered inappropriate to provide a more definitive threat listing.

***Attribution:**

Fact Sheet Prepared for NZPCN by P.J. de Lange 10 July 2011. Description based on Raoul island specimen and drawn up by J.E. Braggins and P.J. de Lange

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