

Nitella stuartii

COMMON NAME

Stonewort

FAMILY

Characeae

AUTHORITY

Nitella stuartii A. Braun

FLORA CATEGORY

Non-vascular – Native

BRIEF DESCRIPTION

Small branched submerged plant, with branches of uneven length.

DISTRIBUTION

Indigenous. New Zealand: North, South Island. Also Australia, India.

HABITAT

Lakes and slow flowing streams.

DETAILED DESCRIPTION

Aquatic, submerged, macro-algae. Low-growing (>0.3 m), with a 'birds-nest' appearance. Forked branchlets arise in whorls from central stems, which are anchored in the sediment by colourless rhizoids. Branchlets of different lengths arise in two tiers from each whorl, giving a densely branched, untidy appearance. Stem and branchlets are comprised of strings of single cells that are easily punctured. Plant is monoecious, with antheridia and oogonia on the same plant, usually located together on terminal branchlets and without mucus present on fertile heads. Branchlets repeatedly divide, with one cell comprising the branchlet beyond the last fork.

SIMILAR TAXA

Can be distinguished from *Nitella hyalina*, *N. pseudoflabellata*, and *N. subtilissima*, as these three species have 2 cells beyond the last branchlet form compared to 1 cell in *N. stuartii* and *N. opaca*. *N. opaca* lacks the second tier of branchlets in each whorl.

FRUITING

Oospores are laterally compressed, small at

PROPAGATION TECHNIQUE

Fragments or oospores.

REFERENCES AND FURTHER READING

Broadly, P.A.; Flint, E.A.; Nelson, W.A.; Cassie Cooper, V.; de Winton, M.D.; Novis P.M. Chapter 23 Twenty –Three :Phyla Chlorophyta and Charophyta (Green Algae). In: New Zealand Inventory of Biodiversity (Volume 3), Gordon, D.P. (Ed), Canterbury University Press, 616pp.

Casanova, M.T.; de Winton, M.D.; Karol, K.G.; Clayton J.S. (2007). *Nitella hookeri* A. Braun (Characeae, Charophyceae) in New Zealand and Australia: implications for endemism, speciation and biogeography. *Charophytes* (1): 2-18

de Winton, M.D.; Dugdale, A.M.; Clayton, J.S. (2007). An identification key for oospores of the extant charophytes of New Zealand. *New Zealand Journal of Botany*:463-476

Wood RD, Mason R 1977. Characeae of New Zealand. *New Zealand Journal of Botany* 15: 87-180.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/nitella-stuartii/>

