Nitella stuartii

COMMON NAMES
Stonewort

BIOSTATUS
Native

CATEGORY
Non-vascular

SIMPLIFIED DESCRIPTION
Small branched submerged plant, with branches of uneven length.

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.

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

HABITAT
Lakes and slow flowing streams.

GENUS
Nitella

FAMILY
Characeae

AUTHORITY
Nitella stuartii A. Braun

FRUITING
Oospores are laterally compressed, small at

PROPAGATION TECHNIQUE
Fragments or oospores.

REFERENCES AND FURTHER READING
Broady, 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/

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