

Nitella pseudoflabellata

COMMON NAME

Stonewort

FAMILY

Characeae

AUTHORITY

Nitella pseudoflabellata (A. Braun) R.D. Wood

FLORA CATEGORY

Non-vascular – Native

NVS CODE

NITPSE

BRIEF DESCRIPTION

Small branched submerged plant, with regular layered groups of branches, dividing more than once. Fruiting heads with slimy coating.

DISTRIBUTION

Indigenous. New Zealand: North, South Island. Widespread globally.

HABITAT

Lakes swamps and slow flowing waters.

DETAILED DESCRIPTION

Aquatic, submerged, macro-algae. Small (0.1-0.4 m) compact plant with regular, repeatedly forked branches. Forked branchlets arise in whorls from central stems, which are anchored in the sediment by colourless rhizoids. 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 rounded fertile heads covered by heavy mucus. Two cells beyond the last fork include a small, terminal conical end cell.

SIMILAR TAXA

Can be distinguished from the similar *Nitella hyalina*, as the latter has an additional tier of shortened branchlets at each whorl. *N. subtilissima* is very similar, but branchlets usually fork only once and only female, monoecious plants have been seen in New Zealand.

FRUITING

Oospores are dark brown, laterally compressed, between 330 and 450 µm in length and low spiral ridges, with a papillate/tuberculate surface.

PROPAGATION TECHNIQUE

Fragments or oospores.

Notes on taxonomy

Likely to represent a species complex in New Zealand, which requires further determination.

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-pseudoflabellata/>