

Chara globularis

COMMON NAME

Stonewort

FAMILY

Characeae

AUTHORITY

Chara globularis Thuillier

FLORA CATEGORY

Non-vascular – Native

BRIEF DESCRIPTION

Small branched submerged plant with a distinctive sulphur or musky smell.

DISTRIBUTION

Indigenous. New Zealand: North, South and Chatham Islands. Widespread globally.

HABITAT

Lakes and slow flowing waters, both fresh to slightly brackish conditions.

DETAILED DESCRIPTION

Aquatic, submerged, macro-algae. Often a tall plant (0.3-0.5 m) with slender shoots and a grey-green colour. Branches are not forked and branches and stems are mostly covered by a secondary cell layer (cortication), making them more resistant to physical damage. Small accessory cells at junctions between branchlet cells are either not obvious or longer around the fruiting bodies. Stems are anchored in the sediment by colourless rhizoids. Plant is monoecious, with antheridia and oogonia on the same plant, often located together. with fruiting bodies dispersed over the upper stem portions. The plant has a distinctive musky odour, and can be lime-encrusted in some water bodies.

SIMILAR TAXA

None, this is the only New Zealand charophyte with corticated branchlets and stems.

FRUITING

Produces elongate (>500µm long) black oospores that are round in transverse section. Oospore has 10-12 sinistral spiral ridges.

PROPAGATION TECHNIQUE

Fragments or oospores.

ETYMOLOGY

chara: Origin unknown, possibly from the Greek charis 'grace' or 'beauty'

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/chara-globularis/>

