

Glyceria maxima

COMMON NAME

floating sweetgrass, reed sweetgrass

FAMILY

Poaceae

AUTHORITY

Glyceria maxima (Hartm.) Holumb.

FLORA CATEGORY

Vascular – Exotic

STRUCTURAL CLASS

Grasses

NVS CODE

GLYMAX

CONSERVATION STATUS

Not applicable

BRIEF DESCRIPTION

Robust bright green grass, up to nearly 2 m tall, with creeping rhizomes that form large patches excluding all other plants. The tip of the leaf is boat-shaped. The seedheads are open and branched with many spikelets. The sheath has obviously cross veins.

DISTRIBUTION

Widely naturalised, abundant in most lowland parts of North Island, more scattered and absent from much of South Island.

HABITAT

Aquatic in drains and other slow flowing waterbodies, often forming dense floating mats in open frost-free areas. Also in swamps.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

Almost always is a hydrophyte, rarely in uplands (non-wetlands).

DETAILED DESCRIPTION

Perennial aquatic grass, to 1.8 m tall. **Root system** extensive up to c. 1 m deep, as well as sprawling underground stems. **Leaves** shiny, hairless and mid-green in colour; 0.7–2 cm wide, growing 30–60 cm above the water surface; end in an abrupt point, edges are rough to touch. **Flower head** open, branched, 15–45 cm long comprising a large number of spikelets that range from yellow to green in colour, with a purplish tinge. **Seeds** small, dark brown, produced prolifically throughout summer and autumn.

SIMILAR TAXA

Glyceria declinata and *G. fluitans*. Both of the other *Glyceria* species present in New Zealand are much smaller (up to 50 cm tall) with narrow sparingly branched, distinctively brown seedheads and form low clumps as opposed to the tall erect clumps formed by reed sweetgrass.

FLOWERING

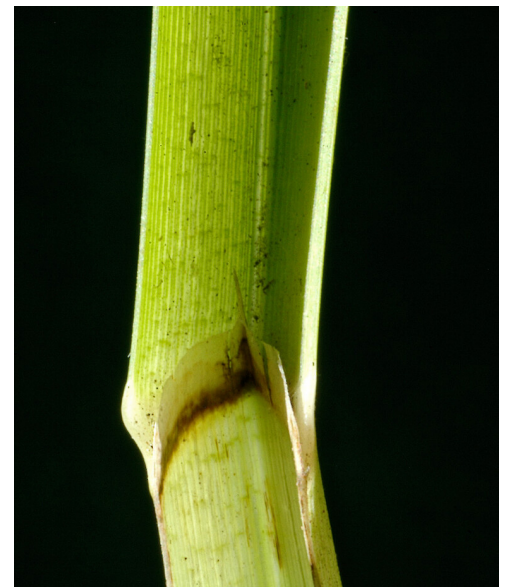
Spring–summer.

FLOWER COLOURS

Green



Habitat, Waiari. Photographer: Rohan Wells, Date taken: 04/03/2010, Licence: All rights reserved.



Ligule. Foxton Loop. Feb 2011. Photographer: Colin C. Ogle, Licence: CC BY-NC.

FRUITING

Late spring–autumn

LIFE CYCLE

Perennial. Spread by seed and rhizomes. Prolific seed production. Seeds and rhizome via water flow. Contaminated diggers, livestock, soil movement, dumped vegetation, eel nets, boats and trailers all spread seed and fragments into new catchments.

YEAR NATURALISED

1906

ORIGIN

Europe

REASON FOR INTRODUCTION

Pasture species

CONTROL TECHNIQUES

Can be controlled manually, mechanically or herbicidally depending on situation.

TOLERANCES

Tolerant to physical damage, grazing and pollutants. Intolerant of heavy frost and shade.

ETYMOLOGY

glyceria: From the Greek glykos 'sweet'.

ATTRIBUTION

Prepared by Paul Champion and Deborah Hofstra (NIWA)

REFERENCES AND FURTHER READING

Champion P. et al. 2020. Freshwater Invasive Species of New Zealand 2020. NIWA publication.

<https://docs.niwa.co.nz/library/public/FreInSpec.pdf>

Coffey BT, Clayton JS. 1988. New Zealand water plants: a guide to plants found in New Zealand freshwaters. Ruakura Agricultural Centre. 65 p.

Johnson PN, Brooke PA. 1989. Wetland plants in New Zealand. DSIR Field Guide, DSIR Publishing, Wellington. 319 p.

Champion P, James T, Popay I, Ford K. 2012. An illustrated guide to common grasses, sedges and rushes of New Zealand. NZ Plant Protection Society Inc, Christchurch, NZ. 182 p.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/glyceria-maxima/>