Didymosphenia geminata

COMMON NAMES
didymo, rock snot

BIOSTATUS
Exotic

CONSERVATION STATUS
Not applicable

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Monocots

FLOWER COLOURS
No flowers

DETAILED DESCRIPTION
Didymo is a member of the group of single-celled aquatic plants (freshwater algae) known as diatoms. It is made up of cells that cannot be seen with the naked eye until large dense colonies have formed (algal blooms). Diatoms are unique in that their cell walls contain silica (silicon dioxide or sand), which is why Didymo feels gritty when touched. Didymo also contains chlorophyll, a pigment which enables it to make its own food by using energy from the sun. Under optimum growing conditions, Didymo cells ooze large amounts of a mucus-like substance (mucilage) which attaches Didymo firmly to underwater surfaces. The algae can form a thick brown layer that smothers rocks, submerged plants and other materials. It forms flowing “dreadlocks” that can turn white at their ends and look similar to tissue paper. Although appearing slimy to the touch it feels like wet cotton wool. More comprehensive information can be found in the NIWA report on BNZ website or on the Invasive Species website: http://issg.appfa.auckland.ac.nz/database/welcome/ and type in Didymosphenia

HABITAT
It can form massive blooms on the bottom of oligotrophic streams, river and occassionally lakes. Found naturally in northern Europe and North America. In New Zealand found in lower Waiau and Mararoa Rivers and Hawea River.

GENUS
Didymosphenia

FAMILY
Cymbellaceae

AUTHORITY
Didymosphenia geminata (Lyngbye) M.Schmidt

YEAR NATURALISED
2002

ORIGIN
Northern Europe and northern North America

REASON FOR INTRODUCTION
Unknown - accidental probably human transfer.



Didymo. Photographer: Ministry of Forestry, Licence: Public domain.



Didymo on branch. Photographer: Ministry of Forestry, Licence: Public domain.

LIFE CYCLE AND DISPERSAL

In flowing waters it replaces naturally complex communities of plants and invertebrates. It smothers the bed of the river and reduces food availability for fishes and some bird life. Fish spawning sites and juvenile fish are likely affected and adult fishes are affected (such as eels and trout). There are no human health risks known but it does affect the appearance of rivers particularly during blooms when a constant stream of lumps flow in the water column like masses of dirty loo paper.

ETYMOLOGY

geminata: Twinned

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/didymosphenia-geminata/

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