# Callitriche heterophylla

### **FAMILY**

Plantaginaceae

### **AUTHORITY**

Callitriche heterophylla Pursh

### **FLORA CATEGORY**

Vascular - Exotic

### STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

### **CONSERVATION STATUS**

Not applicable

### **BRIEF DESCRIPTION**

An erect amphibious, slender-stemmed perennial, growing up to 1m tall in shallow freshwater or creeping, prostrate and mat-like on damp ground. Apical rosettes of leaves frequently float on the water surface, submerged leaves narrow. The flowers are small, green and inconspicuous.

### **DISTRIBUTION**

Waikato River

### **HABITAT**

Shallow water lake margins and slow flowing streams.

### WETLAND PLANT INDICATOR STATUS RATING

**OBL: Obligate Wetland** 

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

# **DETAILED DESCRIPTION**

The stems are threadlike and branched, up to ca 50 cm long. The leaves are opposite and may be submerged or floating. Submerged leaves are narrow 0.5 to 2.5cm long with 2 rounded leaf tip lobes. The floating leaves are oval (ca 1 cm wide), and may form rosettes on the water surface. The leaf bases are joined by a wing-like ridge. The flowers are small, without petals and sepal, but have 2 small white bracts (that act as petals). The flowers occur in the leaf bases. There are 4 tiny fruits per flower that are heart shaped ca. up to 1mm in size, and do not have a narrow winged margin.

### **SIMILAR TAXA**

All Callitriche species are superficially similar and have variable vegetative parts. Differs from C. stagnalis by its submerged leaves being narrower than floating leaves. The fruit are less than 1 mm in diameter and winged only at the top.

### **FLOWERING**

Spring/summer

# **FLOWER COLOURS**

Green

### LIFE CYCLE

Reproduces from plant fragments and seed.

### YEAR NATURALISED

1959

### **ORIGIN**

N. America

# **REASON FOR INTRODUCTION**

Probably a soil seed contaminant or contaminant of ornamental pond plants.



### **CONTROL TECHNIQUES**

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

# **TOLERANCES**

The taxonomy of the four introduced Northern Hemisphere Callitriche requires further investigation in New Zealand.

#### **ETYMOLOGY**

callitriche: From the Greek kalli 'beautiful' and thrix 'hair', referring to the beautiful stems

heterophylla: Varied leaves; from the Greek heteros and phullon

### **ATTRIBUTION**

Factsheet prepared by Paul Champion and Deborah Hofstra (NIWA).

# REFERENCES AND FURTHER READING

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

Aston, H (1977). Aquatic plants of Australia. Melbourne University Press, 367pp.

Lansdown, R.V. (2008). Water-starworts (Callitriche of Europe) BSBI Handbook 2, London. 180 pp.

### **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/callitriche-heterophylla/