**Callitriche stagnalis**

**COMMON NAME**
water starwort

**FAMILY**
Plantaginaceae

**AUTHORITY**
Callitriche stagnalis Scop.

**FLORA CATEGORY**
Vascular – Exotic

**STRUCTURAL CLASS**
Herbs - Dicotyledons other than Composites

**NVS CODE**
CALSTA

**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 broad. The flowers are small, green and inconspicuous.

**DISTRIBUTION**
Widespread and locally abundant throughout NZ.

**HABITAT**
Damp swampy water margins, drains and streams, shallow water margins.

**FEATURES**
C. stagnalis has slender stems, 10 to 50 cm or more long, with opposite, linear to narrow-lanceolate leaves separated by elongated internodes. Towards the apex, the leaves are typically crowded, obovate or spatulate-oblanceolate and may form floating rosettes. In floating rosettes of apical close-set leaves, the stems are often just/shortly above the water. The upper most leaves are up to 10 mm long by 6 mm wide, while the lower leaves (in pairs) are narrower (but never as narrow as in the native C. petriei). Leaves have 3, 5 or 7 veins. The male and female flowers are separate, on the same plant. The flowers are green and tiny, without petals or sepals, and occur either in pairs or solitary at the base of the leaves. The fruit are ca 1.5 mm in diameter, pale, round and narrowly winged.

**SIMILAR TAXA**
All Callitriche species are superficially similar and have variable vegetative parts (Lansdown 2008). Species are distinguished by the venation of leaves and shape of their fruit. Leaves obovate and fruit narrowly winged. Submerged leaves wider than those of the native C. petriei.

**FLOWERING**
December to February

**FLOWER COLOURS**
Green

**FRUITING**
Summer to autumn.
**LIFE CYCLE**
Reproduces sexually with seeds and spreads vegetatively by creeping stems.

**YEAR NATURALISED**
1912

**ORIGIN**
Europe and North Africa

**REASON FOR INTRODUCTION**
Probably a soil seed contaminant or contaminant of ornamental pond plants, possibly native.

**CONTROL TECHNIQUES**
Dense growths of starwort are often a conspicuous feature in drains and can impede waterflow. Can be sprayed or mechanically removed from flowing water channels.

**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
stagnalis: From the Latin stagnum ‘pond, standing water, pool’, meaning growing in standing water

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

**REFERENCES AND FURTHER READING**

**MORE INFORMATION**