



# Broadleaf watermilfoil

(*Myriophyllum heterophyllum*)

Originated in the South-East of the United States, introduced in Europe in the 1940s for ornamental pools and aquariums. The plant was first observed in the natural environment in France in the Adour River toward the end of the 1990s.

## Description

- Stem light green in colour, often tinted dark red, with rhizomes and branches along its entire length, measuring over one metre in some cases, occasionally above the water level
- Submerged leaves, whorled in groups of four or five, deeply indented, with leaflets having generally fewer than 15 segments, 2 to 5 cm long, making them look feathery
- Emergent leaves, full, thick, pointed, whorled in groups of four to six, up to 3 cm long
- Inflorescences on the stems above water, single-sex flowers whorled in groups of four. Male flowers on the upper part of the stem, comprising four stamens and four free petals up to a few millimetres long. Female flowers on the lower part of the stem, comprising four stigmates, bright pink, curved and covered with down
- Round fruit, dark brown, approximately 1 mm long, with four joined sections. On maturing, the fruit separates into four achenes, with bulging sides and two fine lines of bumps on the dorsal side
- Confusion with other watermilfoil species is possible

## Ecology and reproduction

- Amphibious plant, grows on fine sediment in stagnant or slowly-moving water (canals, lakes, ponds, ditches, former channels of rivers, etc.)
- Prefers nutrient-rich water and high luminosity. pH tolerant, but prefers acid waters. Can survive winters under ice
- Primarily vegetative multiplication in Europe, via fragmented stems and rhizomes
- Flowering from June to August, rare in France

## Documentation

- Anderson, L. 2015. Pest risk analysis for *Myriophyllum heterophyllum*. European and mediterranean plant protection organization. 31 pp.
- Lebreton, A. 2013. *Myriophyllum heterophyllum* Michaux [*Haloragaceae*] en Haute-Vienne (Limousin, France), et situation de cette plante invasive en France et en Europe. EPPO Bulletin, 43(1), 180–192.
- Global Invasive Species Database (2017) Species profile: *Myriophyllum heterophyllum*. [On line]. Document available at: <http://www.iucngisd.org/gisd/speciesname/Myriophyllum+heterophyllum>

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### Classification

Order	<i>Haloragidales</i>
Family	<i>Haloragaceae</i>
Genus	<i>Myriophyllum</i>
Species	<i>M. heterophyllum</i> (Michaux, 1803)



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