

# Giant Salvinia

## Species Description

**Scientific name:** *Salvinia molesta*

**AKA:** Kariba Weed, Rhedynen-y-dŵr Salfinia (Welsh)

**Native to:** Brazil

**Habitat:** Lakes, ponds, slow-moving watercourses and wetlands

*Salvinia* species are free-floating aquatic plants of slow-moving, nutrient-rich, freshwater, which can grow rapidly in warmer climates, out-competing other species. They can be dispersed long distances within a waterbody by the water currents, and between water bodies, e.g. by animals and contaminated equipment, boats or vehicles. Brought into the UK as ornamental plants for water gardens, they are spread by release from ponds. *Salvinia* species have been recorded at only a few sites in the UK but have not been observed to persist over winter due to their sensitivity to frost.

The two species most commonly sold as aquatic plants are giant salvinia and floating water-moss.

Invasive *Salvinia* species may form dense vegetation mats that reduce water-flow and lower the light and oxygen levels in water. This stagnant dark environment can negatively affect the biodiversity and abundance of freshwater species, including fish and submerged aquatic plants. In other parts of the world, it can alter wetland ecosystems and pose a severe threat to socio-economic activities dependent on open, flowing and/or high quality water bodies, including drainage function, hydro-electricity generation, fishing and boat transport.

Giant salvinia is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England, Wales and Scotland. As such, it is an offence to plant or otherwise allow this species to grow in the wild.

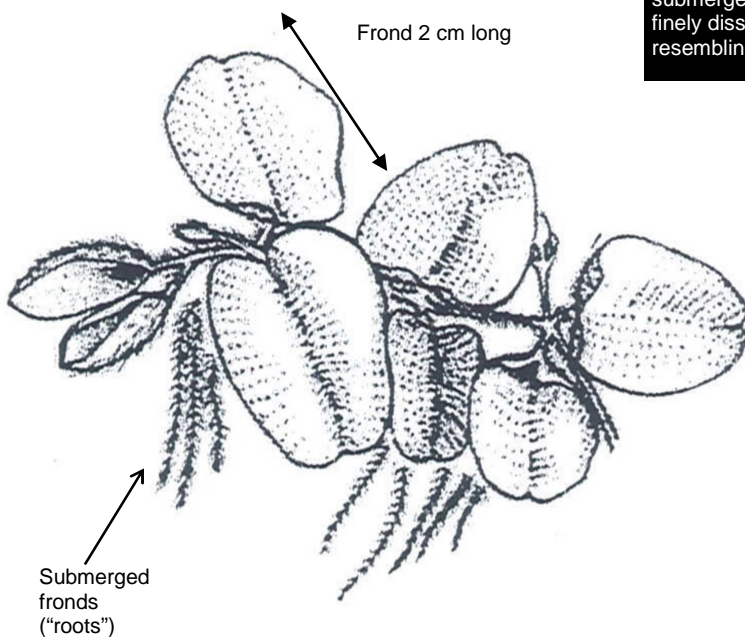
For details of legislation go to [www.nonnativespecies.org/legislation](http://www.nonnativespecies.org/legislation).



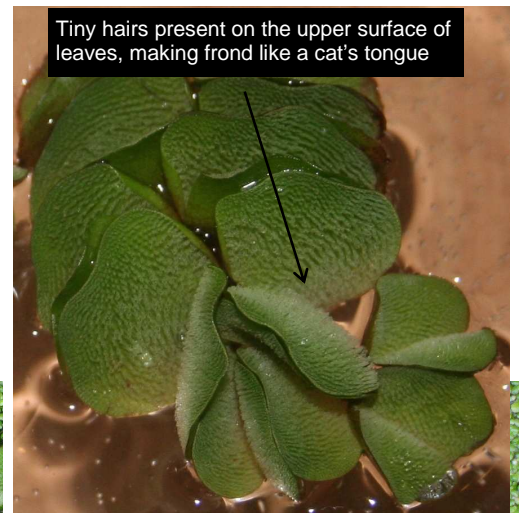
## Key ID Features

Floating fronds in whorls of three, two floating and one submerged, the latter being finely dissected and dangling, resembling roots

Tiny hairs present on the upper surface of leaves, making frond like a cat's tongue



Fronds can have a reddish-purple tinge





# Identification throughout the year

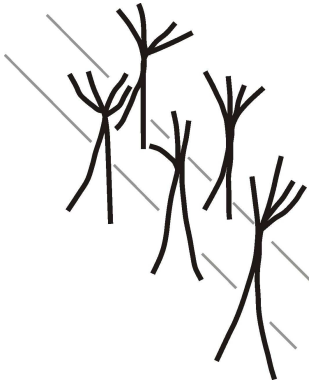
In Britain *Salvinia* species are annual, dying off in winter. Some species are known to tolerate some frost and are likely to persist in larger water bodies in which temperature extremes are moderated. Early in the year, fronds that have survived the winter can be hard to see in amongst other floating and emergent vegetation. As the plants multiply vegetatively and aggregate into floating mats, leaves become folded and compressed into upright chains.

# Distribution

Giant salvinia has not yet been formally recorded in the wild in Great Britain but may be present in some areas.

## Similar Species

Salvinias are a distinctive group of species and are unlikely to be confused with other native species of floating aquatic plants. Superficially there is a resemblance to Water Fern, but the fronds are very different. There are several species of salvinia which are all non-native. They can be usefully divided into two groups. One group is known as the *Salvinia auriculata* complex, identification of which is based on the presence of eggbeater shaped hairs on the upper surface of floating leaves (a hand lens is needed to observe them). This group includes giant salvinia *Salvinia molesta*, the only species in the group sold as an ornamental. The other group comprises species such as floating water-moss and have terminal hairs that are separated at the apex like little hands (a hand lens is needed to observe them). Floating water-moss *Salvinia natans*, also used as an ornamental plant, has been found in the wild in the UK.



Tiny hairs on upper surface of fronds split at the tips but the branches remain free like little hands.

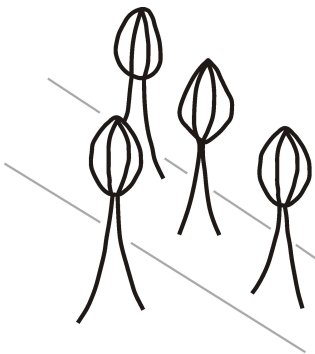
**Floating Water-moss**



**Floating Water-moss (Eared Water-moss)**  
Non-native (*Salvinia natans*)

Frond 1 cm long

### Giant Salvinia

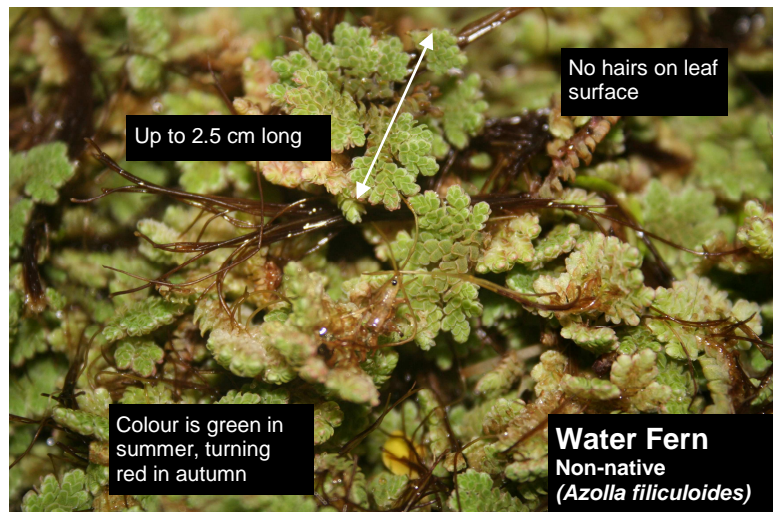


Tiny hairs on upper surface of frond split at the tips but rejoin to form a basket looking, like mini eggbeaters.



Frond 2 cm long

**Giant Salvinia**  
Non-native (*Salvinia molesta*)



Up to 2.5 cm long

No hairs on leaf surface

Colour is green in summer, turning red in autumn

**Water Fern**  
Non-native (*Azolla filiculoides*)

### References and further reading:

*Salvinia molesta*. Global invasive species database. [www.issg.org](http://www.issg.org)