



Giant  
Salvinia

Small, floating aquatics with creeping stems, branched, bearing hairs on the leaf surface papillae but no true roots. Leaves are in trimerous whorls, with two leaves green, sessile or short-petioles, flat, entire and floating, and one leaf finely dissected, petiolate, rootlike and pendent. Submerged leaves bearing [sori](#) that are surrounded by basifixed membranous indusia ([sporocarps](#)).

They bear sporocarps of two types, either megasporangia that are few in number (approximately 10), each with single megaspore, or many microsporangia, each with 64 microspores. Spores are of two kinds and sizes, both globose, trilete. Megagametophytes and microgametophytes protruding through sporangium wall; megagametophytes floating on water surface with archegonia directed downward; microgametophytes remaining fixed to sporangium wall.

The small, hairlike growths, known as [trichomes](#) or microgametophylls, are not known to have any productive function, and are currently a biological mystery.



Water hyacinth





## Water Hyacinth Description

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Water hyacinth is a free-floating [perennial aquatic plant](#) (or hydrophyte) native to tropical and subtropical [South America](#). With broad, thick, glossy, ovate leaves, water hyacinth may rise above the surface of the water as much as 1 meter in height. The [leaves](#) are 10–20 cm across on a stem which is floating by means of buoyant bulb like nodules at its base above the water surface. They have long, spongy and bulbous stalks. The feathery, freely hanging roots are purple-black. An erect stalk supports a single spike of 8–15 conspicuously attractive [flowers](#), mostly lavender to pink in colour with six petals. When not in bloom, water hyacinth may be mistaken for frog's-bit ([Limnobiium spongia<sup>\(1\)</sup>](#)) or Amazon frogbit ([Limnobiium laevigatum](#)).

One of the fastest growing plants known, water hyacinth reproduces primarily by way of runners or [stolons](#), which eventually form daughter plants. Each plant additionally can produce thousands of

seeds each year, and these seeds can remain viable for more than 28 years.<sup>[2]</sup> Some water hyacinths were found to grow between 2 and 5 metres a day in some sites in [Southeast Asia](#). The common water hyacinth (*Eichhornia crassipes*) are vigorous growers and mats can double in size in two weeks.

In their native range these flowers are pollinated by long tongued bees and they can reproduce both sexually and clonally. The invasiveness of the hyacinth is related to its ability to clone itself and large patches are likely to all be part of the same genetic form.

Water hyacinth have three flower morphs and are termed "[tristylous](#)". The flower morphs are named for the length of their pistil: long, medium and short.<sup>[5]</sup> However, the short morph is restricted to the native range due to founder events during its distribution.