

Broad-leaf weeds in rice

Water lettuce (*Pistia stratiotes* L.)

Description

- Water lettuce is a free floating water weed that resembles the head of cultivated lettuce. It is usually found as a floating mass of light green leaves on the water surface.
- The leaves are pale green and grow up to 30cm long. They lack leaf stalk and grow in a cluster of several leaves (a rosette).
- Leaves are thick, hairy, spongy and ridged. The spongy tissue and air trapped by the hairs enable the leaves to float on water.
- Although not easily noticed, water lettuce produces small pale green/white flowers in the middle of the leaf clusters.
- The roots are numerous and feathery and may extend 50-80cm below the leaves.
- Water lettuce propagates by production of daughter plants attached to each other by stolons. The weed also propagates by seed.



Fig 1. Water lettuce rosette arranged leaves
Source: D. Thurairara

Geographical distribution

- Water lettuce is found in drainage canals and rice fields in all the irrigation schemes in East Africa.



Fig 2. Fibrous roots of water lettuce
Source: Susan, M.

<https://wimastergardener.org/article/water-lettuce-pistia-stratiotes/>

Crop losses and associated damage

- The water lettuce mats clog the drainage canals leading to difficulties in irrigating rice fields.
- Obstruction of the irrigation canals may lead to water deficiency resulting into losses associated with water deficiency in rice.
- Water lettuce competes for space, light and nutrients leading to poor rice crop establishment and low yields.

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