

SPECIES: *PISTIA STRATIOTES*

COMMON NAME: WATER LETTUCE / SHELLFLOWER /
WATER CABBAGE

FAMILY: ARACEAE

Plant Description

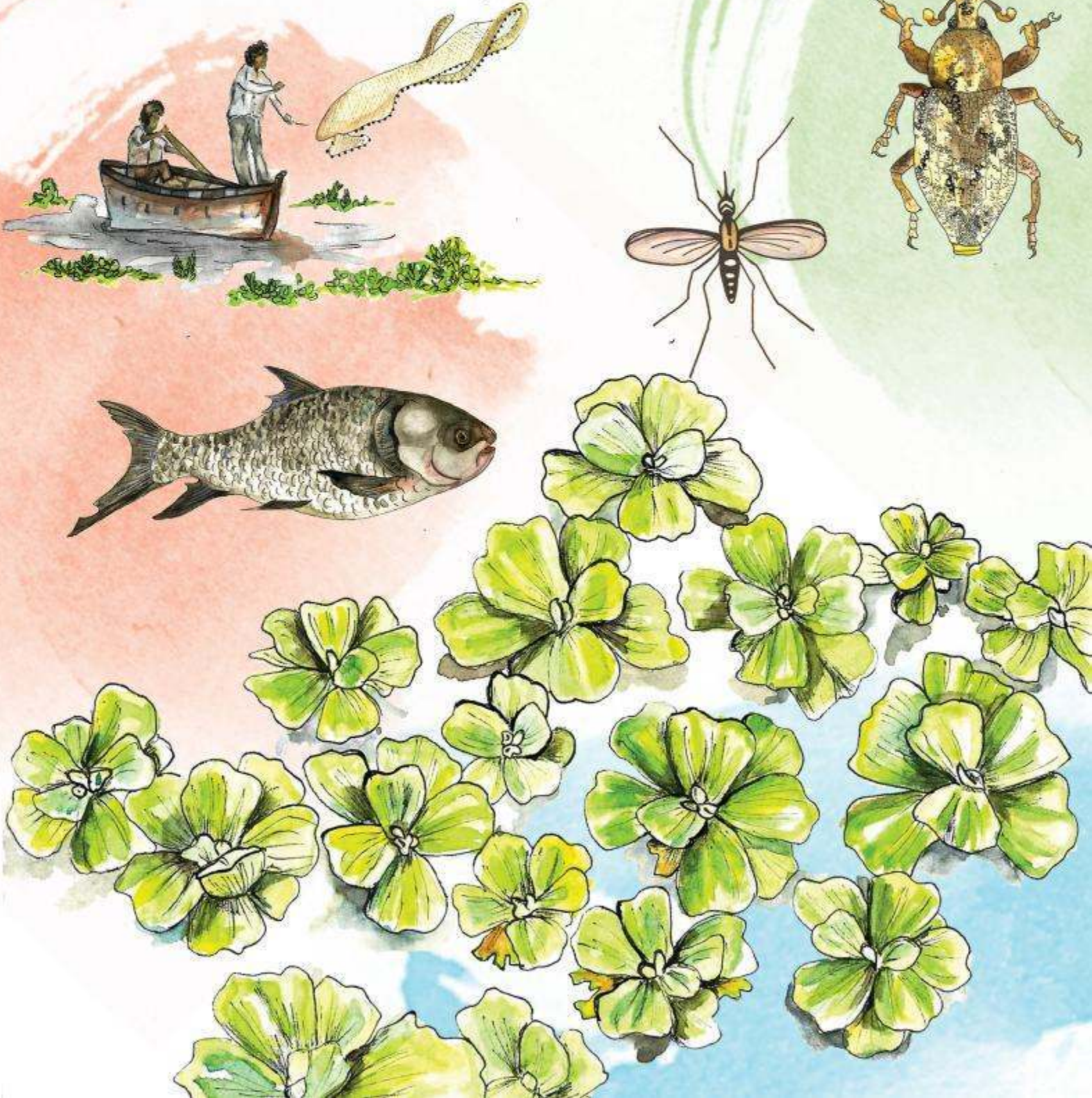
A perennial floating herb with pale green leaves in rosettes. Leaves can grow up to 25 cm in diameter.

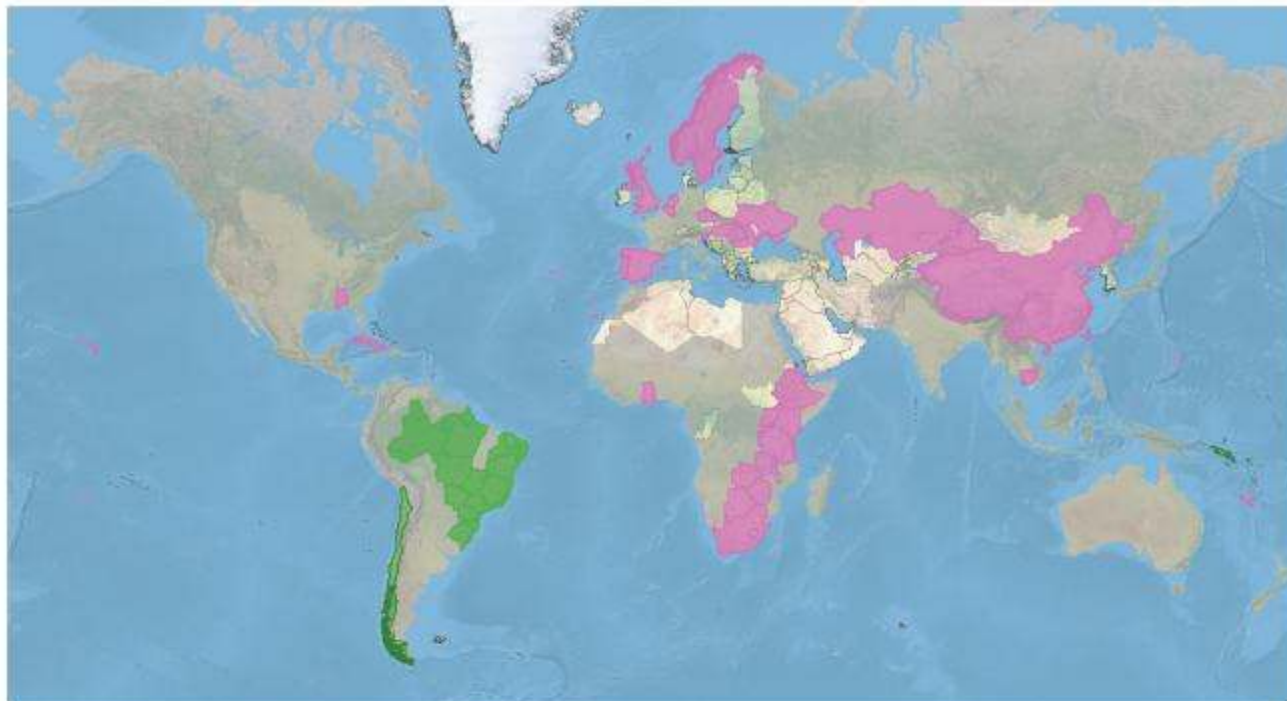
The plant has horizontal stolons along the water surface, and produces fibrous underwater roots.

The flowers bloom in summer and the plant fruits after the rains.

The flowers have a white spathe, and are found at the base of the rosette of leaves.

The fruits are ellipsoid with several seeds.





CABI, 2022. *Pistia stratiotes*. In: Invasive Species Compendium. Wallingford, UK: CAB International. <https://www.cabi.org/isc/datasheet/41496#toDistributionMaps> [accessed: 25/01/2022]

■ Introduced
■ Native
■ Origin not recorded

Note: Although not depicted on this map, the plant is considered invasive in India.

***Pistia stratiotes* ARACEAE**

Origin: Tropical America

Introduction: The timing and reason for introduction of the plant to India is not known. It may have been introduced unintentionally.

Impacts: The rapid spread of the plant negatively affects the quality of water by reducing dissolved oxygen, and altering nutrient cycling. The plant reduces food resources for birds and fishes. It causes damage to paddy, and also provides a breeding ground for mosquitos that are vectors for disease-causing parasites. The plant changes the structure of aquatic habitats, interfering with navigation and diminishing the value of water bodies for tourism and other recreational uses.

P. stratiotes is reported to be used for phytoremediation of waterbodies polluted by heavy metals like chromium and cobalt. The ash produced by burning the plant is also used as a biofertilizer. Pharmacological studies suggest that the plant has antimicrobial and antifungal properties.

Management: Mechanical control is not effective, given the plant's ability to spread rapidly. Biological control is seen as the only viable option (e.g., as in South Africa, using the weevil *Neohydronomous affinis*)