

Kidneyleaf mud-plantain

(Heteranthera reniformis)



1. floating leaves and spreading underwater stems habit. 2. delicate flowers. 3. close-up of kidney-shaped leaves. 4. plant habit with roots occurring at each node.

Kidneyleaf mud-plantain *(Heteranthera reniformis)*

AQUATIC

Introduced

Declared Pest, Prohibited - s12

C1 Exclusion/Prohibited

Heteranthera reniformis belongs to the water hyacinth (*Eichhornia crassipes*) family Pontederiaceae. It is superficially similar to water hyacinths when not in flower, but water hyacinths have swollen leaf stalks, and much larger flowers. This plant is commonly known as the Kidneyleaf mud-plantain, sometime called 'water bean' or 'floating leaf mud plantain'. *H. reniformis* is native to eastern USA, Mexico, Central America and some parts of South America.

Distribution

In May 2018, Kidneyleaf mud-plantain was discovered for the first time in the Perth Region within the City of Armadale. Specimens were collected for detailed investigation and it was officially identified in April 2019. The Kidneyleaf mud-plantain has successfully naturalised in areas of Queensland and New South Wales, where it appears to dominate other native wetland vegetation, as well as stormwater drainage lines.

Description

The Kidneyleaf mud-plantain is a submerged and floating plant that grows 15-20 cm tall above the water's surface and on damp soil at the water's edge. The stems can grow along the mud under the water, with leaves and stems emerging. Roots occur at nodes along the stems. The plant prefers open, sunny sites with nutrient rich soils. It will quickly colonise open sunny areas but does not grow well in shaded areas, or amongst taller growing vegetation. It is most commonly found along roadside ditches, streams, ponds, drains, freshwater tidal mudflats and riverbeds.

 Leaves are kidney-shaped, bright green and glossy, up to 5 cm wide and arranged alternately along the stem. They are attached to a fleshy stalk (petiole) 2-13 cm long and are either floating or emerging above the water. Occasionally, a cluster of basal leaves may occur without a stalk.

 Flowering stems are a spike 1-9 cm long containing 2-8 small flowers. Each flower has six white-to-pale blue petals. Flowers open a few hours after sunrise, wilting by early afternoon. Flowering occurs during summer and autumn in temperate to subtropical areas. Fruits are capsules less than 1 mm long and contain 8-14 winged seeds.

Kidneyleaf mud-plantain

(Heteranthera reniformis)

weed
ALERT

Growing THREAT

It's history as a pest elsewhere is perhaps the most robust indicator of pest potential. It is reported as a global rice weed and has already proved to be an economically problematic species in many countries. According to Sydney, Queensland and international information, this weed has the potential to become an abundant and troublesome pest in the Perth Region.

This fast growing anchored aquatic weed can quickly invade any shallow water systems, obstructing drainage networks, stream flow and stormwater infrastructure. The weed species can form dense mats that choke native aquatic plants and impact the wetland ecosystem and food webs. It also could provide a good habitat for mosquitoes, increase vector mosquito populations and mosquito borne disease risk.

Dispersal

The Kidneyleaf mud-plantain reproduces by seed and vegetatively. Any stem fragment with a node is capable of producing a new plant. Stem fragments can be washed downstream or moved to a new location in mud stuck to shoes, animals or vehicles. Seeds are winged and small, allowing them to be dispersed by wind and water.



Top. infestation at Champion Drive main drain, May 2018.
Bottom. vegetative growth on damp muddy areas, April 2019.

Dont get confused with...

Kidneyleaf mud-plantain is superficially similar to water hyacinths when not in flower, but water hyacinths have swollen leaf stalks and much larger flowers. It is a free-floating plant which does not root to the substrate.



Left. water hyacinths large purple flowers
Right. water hyacinths leaf structure with swollen stalks

How can I help?

- Prevention and early detection are key. If you see a plant in a waterway you do not recognise, getting it properly identified is important. Take a photo and send it to the website or app 'MyPestGuide'.
- Do not empty aquarium or pond water into the stormwater network or waterways.
- Aquatic plants no longer wanted can be put into a black plastic bag and left in the sun to solarise. They can then be composted or put into a rubbish bin.
- If you notice Kidneyleaf mud-plantain being sold, report it through the website or app 'MyPestGuide'.

For more information contact:

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<https://www.sercul.org.au/wp-content/uploads/2021/03/Report-of-New-Weed.pdf>
weeds.dpi.nsw.gov.au/Weeds/KidneyleafMudPlantain
www.daf.qld.gov.au/_data/assets/pdf_file/0010/55468/IPA-Kidneyleaf-Risk-Assessment.pdf

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