

# Monochoria vaginalis

## Recognize the problem

Family: Pontederiaceae (pickerel weed family).

Common names: Pickerel weed, monochoria, heartshape false pickerelweed.

**Thai:** ขาเขียด Kha khiat, ผักเขียด Phak khiat, นิลบล Ninlabon (Central); ผักเบ็ด Phak pet (Chon Buri), ผักเฟ็ด Phak phet (Nakhon Ratchasima); ผักริน Phak rin (Peninsular); ผักฮิ้น Phak hin (Northern, Ubon Ratchathani); ผักฮิ้นน้ำ Phak hin nam (Northern);  
**Burmese:** Ka-dauk-sat, Pa-dauk-sat; **Vietnamese:** Rau mác lá thon, rau mác bao.

Annual or perennial aquatic herb, 10-50 cm tall; fleshy and shiny in appearance, forming rosettes but stemless and with short rhizomes.

Leaves: Size and shape is highly variable (2-12.5 cm long x 0.5-10 cm wide); shiny, deep-green in colour with longitudinal veins and rigid, hollow petioles.

Flowers: Inflorescence 3-6 cm long, bearing 3 to 25 flowers which open underwater; each flower with six purple-blue tepals, which are the outer parts of the flower.

Fruit: A capsule (1cm long) containing many tiny winged seeds.

Seeds: Straw coloured to dark beige, tiny (1 mm long), oblong and longitudinally ribbed.

## Background

Origin: Native to Asia.

Introduced as: Used as a vegetable and cattle fodder.

Habitat: A plant of subaquatic to aquatic conditions; typically found in sunny sites in swamps, marshes, open wet places and along ditches.

Spread: By short stolons and by seed.

Invades: A serious weed in rice fields in east and southern Asia.

Impacts: *Monochoria vaginalis* is a major weed in paddy rice. It grows rapidly and has discontinuous germination, which makes it difficult to control. At high densities of the weed, yield losses of up to 82% have been reported in rice. *Monochoria vaginalis* is also a secondary host for the rice grassy stunt virus transmitted by the brown planthopper, *Nilaparvata lugens*, and the rice ragged stunt oryzavirus, as well as for the rice sheath rot pathogen *Sarocladium oryzae*.

*M. vaginalis* inflorescence.



Dense infestation of *M. vaginalis*. (Photo by © Siriporn Zungsontiporn)



Scientific name(s) > *Monochoria vaginalis* (syn. *Pontederia vaginalis*, *Boottia mairei*, *Gomphima vaginalis*)

The recommendations in this factsheet are relevant to: All Countries



Authors: CABI. Edited by participants from Thailand, Myanmar and Vietnam at a workshop in Thailand, March 2016  
 CABI  
 tel: +60 (0)3 894329321 email: cabisea@cabi.org

Edited by Plantwise