

## Water hyacinth (455)

### Summary

- Widespread. Asia, Africa, North, South and Central America, Caribbean, Oceania. In many Pacific islands.
- Invasive weed of slow-flowing water: rivers, swamps, ponds, lakes, dams, lagoons. Growth extremely rapid, forming dense mats, reducing flow, preventing transport, destroying natural wetlands, waterways, indirectly killing native fish, plants and birds (oxygen starvation), and forming breeding sites for mosquitoes. High nutrient levels affect growth.
- Free-floating, up to 65 cm tall. Stems just on or under water produce daughter plants. Leaves, dark green, rounded leaf blades, up to 15 cm wide. Leaf stalks swollen when uncrowded, unswollen when crowded. Flowers (5-20), on erect stalk, about 15 cm long, each with six parts, lilac to blue with yellow spot. Fruit capsule beneath each flower with up to 300 seeds. Seeds germinate on shorelines. Roots up to 1 m, feathery:
- Spread: rapid vegetative reproduction; seed, by wind, boats; use as aquatic ornamental.
- Biosecurity: high risk of introduction via aquarium trade. In Australia, 'restricted invasive plant': *do not release into environment, give away or sell*. Among 100 of World's Worst Invasive Alien Species (IUCN, 2020). Noxious weed in Fiji. Available on internet.
- Biocontrol: two weevils, *Neochetina eichhorniae* and *Neochetina bruchi*; three moths, *Niphograptus (Epipagis) albiguttalis*, *Xubida (Acigona) infusellus* and *Bellura densa*; a mirid, *Ecritotarsus catariensis*; a mite *Orthogalumna terebrantis*, and several fungi.
- Cultural control: check nutrient levels (important); floating booms; manual removal (rakes), or mechanical harvesting and crushing.
- Chemical control: in Australia: 2,4-D; glyphosate; metsulfuron-methyl. In Fiji, MCPA.

### Common Name

Water hyacinth

### Scientific Name

*Eichhornia crassipes*. It was known previously as *Eichhornia speciosa*. It is a member of the Pontederiaceae.



Photo 1. Dense mass of water hyacinth, *Eichhornia crassipes*.



Photo 2. Dense mass of water hyacinth, *Eichhornia crassipes*, some in flower (lilac-blue).



Photo 3. Typical mass of water hyacinth, *Eichhornia crassipes*, at edge of fast flowing river.



Photo 4. Short stem, on top or just under water, linking mother and daughter plants, water hyacinth, *Eichhornia crassipes*.



Photo 5. Rosette of rounded leaves with swollen leaf stalks, water hyacinth, *Eichhornia crassipes*.



Photo 6. Flower, long slender leaf stalks, and round leaf blades, water hyacinth, *Eichhornia crassipes*.



Photo 7. Flower of water hyacinth, *Eichhornia crassipes*.



Photo 8. Close-up of flower, water hyacinth, *Eichhornia crassipes*.



Photo 9. Close-up of flower, water hyacinth, *Eichhornia crassipes*.

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Adapted from Water hyacinth (*Eichhornia crassipes*) (2018) Weeds of SE Qld and Northern NSW. Lucidcentral. (<https://www.lucidcentral.org/editors-pick-animal-and-plant-identification-keys/key-to-weeds-of-se-qld-and-northern-nsw>); and additional information from Water hyacinth *Eichhornia crassipes* Department of Agriculture and Fisheries Biosecurity Queensland ([https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0005/54680/water-hyacinth.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0005/54680/water-hyacinth.pdf)); and CABI (2019) *Eichhornia crassipes* (water hyacinth). Invasive Species Compendium (<https://www.cabi.org/isc/datasheet/20544>); and from Waterhouse DF, Norris KR (1987) *Biological Control Pacific Prospects*. Inkata Press, Melbourne. Photo 1 Karen Brown, University of Florida, Bugwood.org. Photo 2 Chris Evans, University of Illinois, Bugwood.org. Photo 3&4 Leslie J. Mehrhoff, University of Connecticut, Bugwood.org. Photo 5 Ted D. Center, USDA Agricultural Research Service, Bugwood.org. Photo 6 Graves Lovell, Alabama Department of Conservation and Natural Resources, Bugwood.org. Photo 7 Josh Hillman, FloridaNature.org, Bugwood.org.

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