

# Genus *Eichhornia* Kunth (Pontederiaceae)

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Photos by the authors, except when indicated. Produced by: Danilo José Lima de Sousa and Juliana Philipp. Support from Keller Science Action Center, Field Museum.  
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Seasonal swamp with *Eichhornia azurea*



Roadside ditch with *Eichhornia meyeri*



Rice field with *Eichhornia paniculata*



Stream with *Eichhornia crassipes*



Temporary pond with *Eichhornia paniculata*

Photo: Kelly Leite

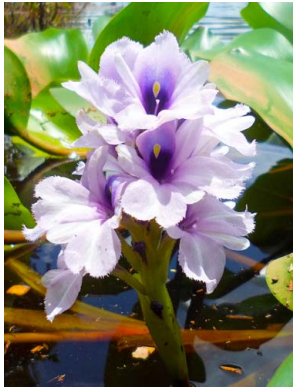
*Eichhornia* is a genus composed of eight species of aquatic herbs with free-floating, floating-leaved or emergent (erect or procumbent) growth forms. Some species (*E. crassipes* and *E. azurea*) possess the largest flowers in the Pontederiaceae, a family of approximately 35 species of freshwater macrophytes. Flowers of *Eichhornia* are weakly zygomorphic and possess tubular perianths, which can be blue, purple, lilac, mauve or sometimes white with conspicuous yellow nectar guides. The flowers are displayed in cymose inflorescences (simple cymes, thyrses or cincinnus), with numerous flowers, except for *E. diversifolia* and *E. natans*, which have 1-3 flowers per inflorescence. The androecium is composed of six stamens, inserted on the perianth in two groups of three, which usually vary in their length. The gynoecium has three carpels and is syncarpous with a trilobular ovary, axile placentation and numerous ovules per locule. The fruit is a loculicidal capsule and contains small oval-shaped seeds. *Eichhornia* flowers are primarily bee-pollinated and four species (*E. azurea*, *E. crassipes*, *E. paniculata* and *E. paradoxa*) exhibit the floral polymorphism tristily. Species vary in mating system from predominant outcrossing in tristylous populations to high levels of selfing in semi-homostylous populations (*E. heterosperma* and *E. diversifolia*). The genus is principally Neotropical, except for *E. natans*, which is restricted to tropical Africa. The free floating *Eichhornia crassipes* (water hyacinth) is a serious invasive aquatic and in the past century has been dispersed by human activities and now occurs throughout the New and Old World tropics and subtropics. *Eichhornia* species occupy a wide range of wetland habitats including lakes, rivers, streams, seasonal pools, drainage ditches, low lying pastures and rice fields.

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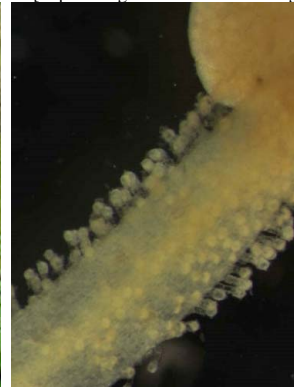
1 *Eichhornia azurea*



2 *Eichhornia azurea*



3 *Eichhornia azurea*



4 *Eichhornia azurea*  
(stamen)



5 *Eichhornia crassipes*



6 *Eichhornia crassipes*



7 *Eichhornia diversifolia*



8 *Eichhornia heterosperma*



9 *Eichhornia heterosperma*



10 *Eichhornia heterosperma*  
(stamen)



11 *Eichhornia meyeri*



12 *Eichhornia meyeri*



13 *Eichhornia meyeri*  
(fruits)



14 *Eichhornia natans*

Photo: Philippe Birnbaum



15 *Eichhornia paniculata*



16 *Eichhornia paniculata*



17 *Eichhornia paniculata*



18 *Eichhornia paradoxa*



19 *Eichhornia paradoxa*