

EICHHORNIA CRASSIPES (MART.) SOLMS-LAUB.

Pontederiaceae/Pickerelweed Family

Common Names: Waterhyacinth, water-orchid
Synonymy: *Piaropus crassipes* (Mart.) Britt.
Origin: Amazon basin

Botanical Description: Floating aquatic herb, rooting in mud if stranded, usually in dense mats with new plantlets attached on floating green stolons. Submersed roots blue-black to dark purple, feathery, dense near root crown, tips with long dark root caps. Leaves formed in rosettes; petioles to 30 cm (12 in) or more, spongy, usually inflated or bulbous, especially near base; leaf blades roundish or broadly elliptic, glossy green, to 15 cm (6 in) wide. Inflorescence a showy spike above rosette, to 30 cm (12 in) long. Flowers lavender-blue with a yellow blotch, to 5 cm (2 in) wide, somewhat 2-lipped; 6 petals, 6 stamens. Fruit a 3-celled capsule with many seeds.

NOTE: May be confused with emergent form of the native frog's bit (*Limnobium spongia* (Bosc) Steud.), but its petioles not inflated and its flowers small, white, single in leaf axils.

Ecological Significance: Reported as a weed in 56 countries (Holm *et al.* 1979). Introduced to the United States in 1884 at an exposition in New Orleans, reaching Florida in 1890 (Gopal and Sharma 1981). By late 1950s, occupied about 51,000 ha (126,000 acres) of Florida's waterways (Schmitz *et al.* 1993). Grows at explosive rates exceeding any other tested vascular plant (Wolverton and McDonald 1979); doubles its populations in as little as 6-18 days (Mitchell 1976). In large mats, degrades water quality and dramatically alters native plant and animal communities (Gowanloch 1944, Penfound and Earle 1948).



Leaf rosettes, flowers

Distribution: Now occurs globally in the tropics and subtropics, and further north and south where it can escape severe cold (Holm *et al.* 1977). Found throughout Florida, north to Virginia (and New York) and west to California and Hawaii, 16 states in all (USDA 1997).

Life History: Reproduces both vegetatively and sexually (Penfound and Earle 1948, Gopal and Sharma 1981). Quickly forms new rosettes on floating stolons, with stolons easily broken; plants and mats transported by wind and water. Leaves killed back by moderate freezes, but quickly regrows from stem tip protected beneath water surface. Flowers year-round in mild climates, producing abundant seeds in developed mats (Penfound and Earle 1948). Numerous seedlings seen in conjunction with lake draw-downs (K. A. Langeland, University of Florida, personal observations).

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Crowding out bulrush community