

GREEN GONE BAD

Featured Ornamental Plant: *Colocasia esculenta* (coco yam, wild taro)

Some exotic ornamental plants behave badly when they escape from the place they are planted. Infestations of these plants have negative impacts on natural environments. One of these plants is *Colocasia esculenta*; common names: coco yam or wild taro.



Colocasia esculenta is native to Africa and was first brought to the Americas as a food crop for slaves. "Coco yam" was also introduced to the United States in 1910 as a substitute crop for potatoes. Later, it was cultivated as an ornamental and numerous varieties continue to be sold. "Taro" is an ancient crop grown throughout the tropic and subtropics. It is believed to have originated in South East Asia including India and Malaysia. *Colocasia esculenta* is known by many common names including coco yam, wild taro, taro, elephant ear, dasheen, gabi, binata, callaloo, eddo, eddy root, and swamp taro.

Colocasia esculenta is a member of the Arum Family (Araceae). It is a perennial forb that originates from a large corm and can grow to 4 ft. (1.5 m) in height. Leaves, supported by 3 ft. (1 m) long petioles, are arrowhead shaped, up to 2 ft. (0.6 m) long and 1.6 ft. (0.5 m) wide, peltate and velvety on the upper surface. Flowering seldom occurs outside of the native range. Flowers, when present, are small and densely crowded at the apex of a fleshy stalk part of which is enveloped by a long yellow bract. Fruit are small berries in clusters on the fleshy stalk above.

Colocasia esculenta easily invades wetland areas, swamps, blackwater streams, and riverine forests; often colonizes lake banks and forms dense growth. It can tolerate a wide range of wet to dry sites. It will form dense stands along lakes and rivers where it completely eliminates native plant species. Infestations alter natural habitat and ecosystem processes; reducing biodiversity. *Colocasia esculenta* has very little wildlife habitat value.

Colocasia esculenta reproduces primarily vegetatively, via culm fragmentation and budding at the base of the plant. Some varieties spread through above-ground stolons. Disturbance greatly encourages its spread. Current distribution includes the southeastern U.S. west to southeast Texas, as well as Puerto Rico and Hawaii. It is very aggressive in wet swales and ditches, where it can obstruct flow and cause localized flooding. In SC, it is a major pest in the Goose Creek reservoir, along the Cooper River, and in many reservoirs and freshwater wetlands across the state. *Colocasia esculenta* is also a problem in Lake Waccamaw State Park, NC, where it covers much of the shoreline. It has presumably spread from ornamental plantings in residential areas around the lake. Park staff work hard to keep the infestation at bay.



Infestation at Lake Waccamaw State Park, NC (by Randy Westbrook)



Colocasia esculenta is extremely variable and many varieties have been recognized taxonomically with little of agreement on the application of names. Some familiar with the species name certain varieties as invasive and others as not. The wide variation is attributable to cultivation selections, escapes, naturalizations, and re-domestications. It has therefore been typically treated as a single species rather than formally recognized infraspecific taxa or segregate species. Investigation into the degree of invasiveness among horticultural varieties may ensue.

Many horticulturists, landscapers, and homeowners have noticed this species spreading. Please be cautious of planting potentially harmful invasive plants. Many native aquatic and wetland plants have beautiful large leaves and flowers and can be planted as alternatives: *Pontederia cordata* (Pickerelweed), *Peltandra virginica* (Green Arrow Arum), *Sagittaria latifolia* (Broadleaf Arrowhead/Duck Potato), *Iris virginica* (Blue Flag Iris), *Sparganium americanum* (American bur-reed), *Saururus cernuus* (Lizard's Tail), and *Canna flaccida* (Golden Canna/Bandanna of the Everglades).

Visit these web pages for more details: <http://www.invasive.org/weedus/subject.html?sub=5369>,
<http://invasive.btneq.org/oldcontent/invasivesinla/aquaticplants/wildtaro.aspx>,
http://wiki.bugwood.org/Colocasia_esculenta,
http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=200027262,
<http://subplantsci.org/SPSJ/v64%202012/SPS64-03%20MORAN%20GALLEY%20FINAL.pdf>

References: Texasinvasives.org, invasive.org, wikibugwood.org, Center for Aquatic and Invasive Plants (University of Florida), USDA, eFloras

See also: <http://www.se-eppc.org/southcarolina/> and <http://www.se-eppc.org/>

