Begonia cucullata Willd.



Common Name: Wax begonia; club begonia

Synonymy: *B. cucullata* var. *hookeri* (DC) A. DC., *B. semperflorens* Link & Otto, *B. semperflorens* var. *hookeri* A. DC.

Origin: Brazil and Argentina

Botanical Description: Glabrous, succulent, perennial herbs with reddish green, jointed stems to 50 cm (20 in) tall, rooting from nodes, roots fibrous. Leaves alternate, petiolate, simple, glossy, waxy, to 7 cm (2.7 in) long and almost as wide, broadly ovate; tips blunt, bases unequal sided, margins with minute, sharply pointed teeth; subtended by large (to 3 cm; 1.1 in), persistent, toothed stipules. Flowers showy, to 2 cm (0.8 in) long, in few-flowered, stalked clusters arising at stem tips or in leaf axils; tepals white, sheer; female flowers with 4-5 similar tepals and twisted, yellow stigmas, male flowers with 2 large and 2 small tepals and numerous, bright yellow stamens. Fruit a 3-winged capsule with one wing larger than the other two, to 1 cm (.4 in) long, with numerous tiny seeds.

Ecological Significance: Intensive hybridization by horticulturists resulted in commercial availability of the important "wax begonia" group, Semperflorens-Cultorum (including *B. cucullata*), in Europe around 1878 (Thompson and Thompson 1981). Probably introduced to the United States soon after. Noted as "naturalized in low ground" in south Florida by 1976 (Morton 1976). Escapes from cultivation into disturbed wet hammocks and floodplain forests (FLEPPC 2002). One hundred to 200 plants established along intermittent streams in Suwannee County, and scattered dense patches found in hardwood hammocks at Big Shoals Conservation area in Hamilton County (C. Sutter, Suwannee River Water Management District, 2001 pers. comm., FLEPPC 2002). Occurring regularly in wet ditches, freshwater wetlands, swamps, floodplains, and along spring runs and streams (A. Bard, Florida Department of Environmental Protection, Apopka FL, 1997 pers. comm., FLEPPC 2002). Known from 9 conservation areas in central and north Florida, including Devil's Millhopper, Payne's Prairie, Rainbow Springs, San Felasco Hammock, DeLeon Springs, Lake Louisa, and Suwannee River State Parks (A. Bard, Florida Department of Environmental Protection, Apopka FL, 1997 pers. comm., FLEPPC 2002). Naturalized in South Africa along riverbanks in "forest with partially open canopy on a substrate of loose boulders" and "growing in association with indigenous flora in a habitat with little human disturbance" (McLellan et al. 1994). If ingested, oxalates in rhizomes or roots can cause low toxicity, including burning of mouth and throat, swelling, and possible nausea and vomiting (Russell et al. 1997).

Distribution: Herbarium specimens documented from 16 counties in Florida (Wunderlin and Hansen 2002) and also recorded from Hamilton and Suwannee counties (FLEPPC 2002). Naturalized in Georgia, Hawaii, Puerto Rico (USDA NRCS 2002, Liogier and Martorell 2000), New Zealand (LRNZ 2001), and South Africa (McLellan et al. 1994). Widely naturalized in other tropical regions of the world (Smith et al. 1986).

Life History: Responds favorably to low light and temperatures above 27°C (80°F) (Kessler and Armitage 1993). Heat and drought tolerant except under stressful conditions (OSU 2000). Tolerates full sun or partial shade, and a variety of soil types including clay, sand, loamy, and acid soils (Gilman and Howe 1999). Flowers through the warm months until killed back by frost; reproduces vegetatively and from seed (Gilman and Howe 1999). Produces numerous seeds that are thick walled (West and Lott 1991), and this may allow prolonged exposure to water. Stem fragments and seeds can float downstream and establish new populations.