Antigonon leptopus Hook. & Arn.




Common Name: Coral vine; corallina; chain of love; queen's jewels

Synonymy: *Corculum leptopus* (Hook & Arn.) Stuntz

Origin: Mexico

Botanical Description: Perennial, herbaceous vine climbing to 12 m (40 ft) from a slightly woody base and tuberous roots. Stems with tendrils, often hairy, appearing jointed with a zigzag growth pattern. Leaves alternate, simple, to 15 cm (6 in) long and 10 cm (4 in) wide, with conspicuous veins, broadly heart shaped, arrowhead shaped, or triangular; margins wavy, tips pointed; petioles to 4 cm (2 in) long. Flowers showy, pink to purplish red, to 2.5 cm (1 in) long, borne on long, tendril-bearing stalks; tepals 5 (3 outer petals larger than inner 2), papery. Fruit a small, 3-angled achene. A white-flowered horticultural variety also exists.

Ecological Significance: Introduced to Florida before 1916 as an ornamental (Simpson 1916), and by 1976 commonly escaped in south Florida "draping neglected lots and climbing trees, growing from seeds and tubers" (Morton 1976). Now found in 22 conservation areas across south Florida (Gann et al. 2001). Occurs in a variety of habitats including pine rocklands and rockland hammocks (Gann et al. 2001), tropical hardwood hammocks, scrub, maritime forests, and swamps, with populations often forming dense monocultures (FLEPPC 2002). Invades coastal and inland bush in South Africa, where it is considered a special effect weed due to its competitive nature and high visual impact (Henderson 2001). Naturalizes on the back side of beach dunes in Queensland (Batianoff and Franks 1998a) and in other warm regions of Australia, where it is considered an environmental weed (Keighery 1995). A serious weed in Guam, where it has overgrown many vegetation types (McConnell and Muniappan 1991), and a major environmental weed on Christmas Island (Swarbrick and Hart 2001). Ranks as one of Hawaii's most invasive horticultural plants (DOFAW 2001). Flowers contain anthocyanins (Tiwari and Minocha 1980) and possess high antibiotic activity (Naqvi et al. 1985). Dried plant residues inhibit root and shoot growth of wheat (Alam and Azmi 1989).

Distribution: Herbarium specimens documented from 26 counties across Florida (Wunderlin and Hansen 2002). Escaped in 10 US states, west to Texas and north to South Carolina (USDA NRCS 2002). Naturalized in warm, tropical climates around the world, including Guam (McConnell and Muniappan 1991), the Hawaiian Islands, throughout the Pacific Islands in dry to moist lowland areas, Tahiti, the Galapagos (PIER 2002), the Virgin Islands (Austin 1993a), and across the Caribbean (Correll and Correll 1982, Liogier 2000). Escaped on Reunion Island (Tassin and Riviere 1999) and in India (Chaubal and Kotmire 1984), South Africa (Henderson 2001), and Australia (Keighery 1995). Also collected in Brazil, Paraguay, and Ecuador (NYBG).

Life History: Fast growing with a dense, spreading habit, tolerant of many soil types, highly drought-tolerant, but intolerant of salt (Gilman 1999a). Favors limestone (alkaline) soils (PIER 2002). Can develop large, tuberous roots (Simpson 1916) and "will quickly cover trellises, arbors, and fences or will spread up a tree trunk and into the branches…bountiful volunteer seedlings appear under the old vines" (Gilman 1999a). Tops die back at temperatures just below freezing and the roots die if the soil freezes (PIER 2002). Flowers throughout the year in warm climates, produces a prolific amount of viable seed and tubers that allow it to thrive by vegetative reproduction (Graham and Wood 1965). This dual reproductive behavior aids its survival as a successful weed (Raju et al. 2001). Flowers are visited by bees, wasps, flies, butterflies, and thrips, with bees being the most important pollinators (Raju et al. 2001). Seeds float on water and are consumed and dispersed by animals such as birds and pigs (PIER 2002).