

# Nandina domestica Thunb.



**Common Name:** Heavenly bamboo, nandina

**Synonymy:** None

**Origin:** India to east Asia

**Botanical Description:** Evergreen glabrous shrub to 1.8 m (6 ft) tall, growing in multistemmed clumps and perennating by rhizomes. Leaves alternate, large, 2-3 times odd pinnately compound, i.e., usually with 3 primary divisions from petiole, having a somewhat lacy appearance and turning red in cool season. Leaflets 2-6 cm (1-2 in) long, narrowly ovate to lanceolate, tips with long acute taper, upper surfaces dark green (in growing season), sublustrous. Inflorescence a large, erect, stalked panicle, to 30 cm (1 ft) tall, from uppermost leaf axil of season; panicle branches usually purplish red. Flowers small, bisexual, with petaloid parts pinkish white and anthers yellow. Fruit a bright red, 2-seeded globose berry, 6-12 mm in diameter.

**Ecological Significance:** Introduced to the United States for ornament in 1804 (Manks 1968). First noted as naturalized in woodlands of 3 counties in North Carolina (Radford et al. 1964). Noted for Florida in later works: in floodplains and secondary woods of Gadsden and Leon counties (Clewell 1985), in woodlands of northern Florida and adjacent Georgia and Alabama (Godfrey 1988). Reported for conservation areas in Jackson, Gadsden, Leon, Wakulla, and Citrus counties (FLEPPC 2002). Forms dense groves in habitats of Florida Caverns State Park, displacing native vegetation, including the Florida-endangered red columbine, *Aquilegia canadensis* L., and the rare (in the wild) oak-leaf hydrangea, *Hydrangea quercifolia* Bartr. (Ludlow 1995). Nandina reduced light availability in temperate hardwood and broad-leaf forests in North Florida by up to 44% (Cherry 2002). Still available for cultivation, but newer cultivars being offered that do not produce the bird-dispersed fruit (Kellum 1997).

**Distribution:** Native to central China and Japan and west to India (Chongxi and Foster 1992). Introduced in the southeastern United States, with seedlings frequent near plantings and mature plants found far from areas of current cultivation (Whetstone et al. 1997). In Florida, documented as invading scrub, sandhill, upland pines, hardwood hammocks, and ruderal communities. Documented by herbarium specimens from Escambia, Jackson, Gadsden, Leon, Jefferson, Alachua, and Marion counties (Wunderlin and Hansen 2004). Has also been reported from natural areas in Wakulla, Putnam, Citrus, and Lee counties (FLEPPC 2005).

**Life History:** Can survive temperatures throughout the Panhandle and peninsular Florida (Broschat and Meerow 1991). Grows in full sun to shade; Nandina has a very high physiological acclimation potential and can survive in a variety of light conditions, therefore habitats such as pine flatwoods and tropical hardwood forests may be susceptible to invasion (Cherry 2002). Propagated by division of clumps and by seed (Hunt 1977, Bailey and Bailey 1976). Seeds may take many months to germinate (M. Zeller, Florida Department of Environmental Protection, 1997 pers. comm.) or 2 seasons, and inducing germination under artificial conditions is difficult (R. Newton, Hillsborough County Cooperative Extension Service, 1998 pers. comm.). Flowers in late spring; fruits in fall and winter. Fruits dispersed by birds, including mockingbirds, cedar waxwings, robins (Kellum 1997), and cardinals (B. McCurnin, Tallahassee, 1997 pers. comm.); may be dispersed by small mammals as well, such as opossums and raccoons (Ludlow 1995). Cultivars Nana, Harbour Dwarf, and Firepower do not produce seed in nursery environment (S. Kent, Tree of Life Nursery, 1998 pers. comm.).