

Common Name: BAY STAR-VINE

Scientific Name: Schisandra glabra (Brickell) Rehder

Other Commonly Used Names: climbing-magnolia, magnolia-vine

Previously Used Scientific Names: Schisandra coccinea Michaux

Family: Schisandraceae (star-vine)

Rarity Ranks: G3/S2

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: none

Description: Woody **vine**, twining up trees and forming low thickets on the ground; **bark** is gray and bumpy on older vines. **Leaves** ¾ - 5 inches (2 - 13 cm) long and ¾ - 3 inches (1 - 8 cm) wide, oval with tapering leaf bases, pointed tips, and widely spaced teeth along the margins; spicy-smelling when crushed. **Leaf stalks** up to ¾ - 2¾ inches (1 - 7 cm) long. **Female and male flowers** are on the same plant, drooping on delicate stalks 1 - 2 inches (2.5 - 5 cm) long; both female and male flowers with 9 - 12 rounded, red and green tepals (petals + sepals). **Female**

flowers with 6 - 12 pistils, **male flowers** with stamens embedded in a small, flattened disk. **Fruit** a round or oval, red berry, up to $\frac{3}{8}$ inch (4 - 8 mm) wide and $\frac{1}{2}$ inch (0.5 - 1.5 cm) long, dangling in small, loose bunches.

Similar Species: Climbing hydrangea (*Decumaria barbara*) attaches to trees with many, hairy roots; its leaves are opposite, and its white flowers are in flat-topped clusters.

Related Rare Species: None in Georgia.

Habitat: Moist, deciduous hardwood forests, often with beech, usually on lower slopes, stream terraces, and floodplains.

Life History: Bay starvine reproduces vegetatively – by rooting at the nodes of vines sprawling across the ground – and sexually. It is monoecious – male and female reproductive parts are in different flowers on the same plant. Female flowers are probably pollinated by flies and flying beetles, which are attracted to the pollen offered by male flowers and to the similar coloration of the female flowers. Female flowers do not offer any pollen or nectar rewards, but are pollinated when insects, carrying pollen from a previously visited male flower, are attracted by the similar color of the female flowers and search for pollen among its numerous pistils. Female flowers are produced higher on the vines than staminate flowers and are more abundant than male flowers on larger, older vines. Smaller, younger vines tend to produce only male flowers.

Survey Recommendations: Surveys are best conducted during flowering (May–June) and fruiting (July–August).

Range: Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, Kentucky, Tennessee, South Carolina, and North Carolina; the Sierra Madre of Mexico.

Threats: Logging and clearing of habitat; conversion of habitat to pine plantations and developments. Invasion by exotic pest plants such as Japanese honeysuckle and English ivy.

Georgia Conservation Status: Approximately 50 populations are known, 14 on conservation land.

Conservation and Management Recommendations: Avoid logging or other clearing near streams. Eradicate exotic pest plants such as Japanese honeysuckle and English ivv.

Selected References:

Chafin, L.G. 2007. Field guide to the rare plants of Georgia. State Botanical Garden of Georgia and University of Georgia Press, Athens.

FNA. 1997. Flora of North America, Vol. 3, Magnoliophyta: Magnoliidae and Hamamelidae. Oxford University Press, New York.

Godfrey, R.K. 1988. Trees, shrubs, and woody vines of northern Florida and adjacent Georgia and Alabama. University of Georgia Press, Athens.

Kral, R. 1983. A report on some rare, threatened, or endangered forest-related vascular plants of the South. Technical Publication R8-TP2. United States Forest Service, Atlanta.

NatureServe. 2008. NatureServe Explorer. Arlington, Virginia. http://www.natureserve.org/explorer

Panero, J.L. and P.D. Aranda. 1998. The family Schisandraceae: a new record for the flora of Mexico. *Brittonia* 50:87–90.

Patrick, T.S., J.R. Allison, and G.A. Krakow. 1995. Protected plants of Georgia. Georgia Department of Natural Resources, Natural Heritage Program, Social Circle.

Taylor, D. 2005. Bay starvine. The Lady-Slipper (Kentucky Native Plant Society newsletter) 20(3): 4-6. http://www.knps.org/newsletters/Fall%202005.pdf

Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. University of North Carolina Herbarium, Chapel Hill. http://www.herbarium.unc.edu/flora.htm

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Date Compiled or Updated:

L.Chafin, Aug. 2008: original account D.Weiler Jan. 2010: added pictures Z. Abouhamdan, April 2016: updated link





