



Common Name: AMERICAN BARBERRY

Scientific Name: *Berberis canadensis* Miller

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Berberidaceae (barberry)

Rarity Ranks: G3/S1

State Legal Status: Endangered

Federal Legal Status: none

Federal Wetland Status: none

Description: Deciduous **shrub** 1½ - 6½ feet (0.4 - 2 m) tall, forming colonies from underground stems; outer bark of 2-year old branches brownish-red, inner bark yellow. **Thorns** 3-pronged. **Leaves** ¾ - 3 inches (1.8 - 7.5 cm) long and ¼ - 1¼ inches (0.8 - 3.3 cm) wide, clustered on short shoots that branch from the main stems, oval with a rounded tip and tapering base; leaf margins toothed, each tooth with a short bristle. **Flower clusters** drooping, with 3 - 12 yellow flowers. **Flowers** with 6 sepals, 6 petals with notched tips, and 6 stamens. **Fruit** ⅜ inch (1 cm) long, round or oval, red, juicy.

Similar Species: Japanese barberry (*Berberis thunbergii*), an exotic pest plant, has leaves with smooth edges, with no teeth or bristles; its thorns have only one prong (rarely 3), and the flowers are usually single (occasionally in flat-topped clusters). European barberry (*B. vulgaris*) was once widely planted but has been largely eradicated; bark on 2-year old branches is gray, leaves have prominent veins, flower clusters have 10 - 20 flowers, and petals are rounded, not notched, at the tip.

Related Rare Species: None in Georgia.

Habitat: Sunny patches in dry, open woods, often over limestone, shale, or mafic rock.

Life History: American barberry spreads vegetatively by underground stems (rhizomes), sometimes forming large colonies. It also reproduces sexually, producing berries in the fall. Seeds are dispersed by both birds and mammals. All barberry species are alternate hosts for the black stem rust fungus (*Puccinia graminis*) that kills wheat, barley, oats, rye, and other cultivated grasses; the fungus spends part of its life cycle on these grasses and part of it on barberries. In an effort to control the fungus, U.S. government agricultural officials initiated a barberry eradication program in the 1920s that has nearly extirpated the once common American barberry from the eastern U.S.

Survey Recommendations: Surveys are best conducted during flowering (April–May) and fruiting (September–October).

Range: Once widespread throughout the eastern U.S., only 50 populations remain in 10 states: Georgia, Tennessee, South Carolina, North Carolina, Virginia, West Virginia, Kentucky, Missouri, Illinois, and Indiana.

Threats: Government eradication programs, invasion by exotic pest plants, lack of fire in dry woodlands.

Georgia Conservation Status: One population has been observed in the last 60 years; it occurs on private land in Bartow County.

Conservation and Management Recommendations: Use prescribed fire or hand-clearing to create sunny openings. Control exotic pest plants. Research alternatives to barberry eradication programs for control of wheat rust fungus.

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.

Foote, L.E. and S.B. Jones, Jr. 1989. Native shrubs and woody vines of the southeast. Timber Press, Portland, Oregon.

Gleason, H.A. and A. Cronquist. 1991. Manual of vascular plants of northeastern United States and adjacent Canada, 2nd edition. New York Botanical Garden, New York.

Hill, S.R. 2003. Conservation assessment for American barberry (*Berberis canadensis*). U.S. Forest Service, Threatened and Endangered Species Program. Milwaukee, Wisconsin.
http://www.fs.fed.us/r9/wildlife/tes/caoverview/docs/plant_Berberis_canadensis-AmericanBarberry.pdf

NatureServe. 2007. NatureServe Explorer. Arlington, Virginia.
<http://www.natureserve.org/explorer>

Radford, A.E., H.E. Ahles, and C.R. Bell. 1968. Manual of the vascular flora of the Carolinas. University of North Carolina Press, Chapel Hill.

Weakley, A.S. 2007. Flora of the Carolinas, Virginia, Georgia, and surrounding areas. University of North Carolina Herbarium, Chapel Hill.

Wikipedia. 2007. Stem rust. http://en.wikipedia.org/wiki/Stem_rust

Author of species account: Linda G. Chafin

Date Compiled or Updated:

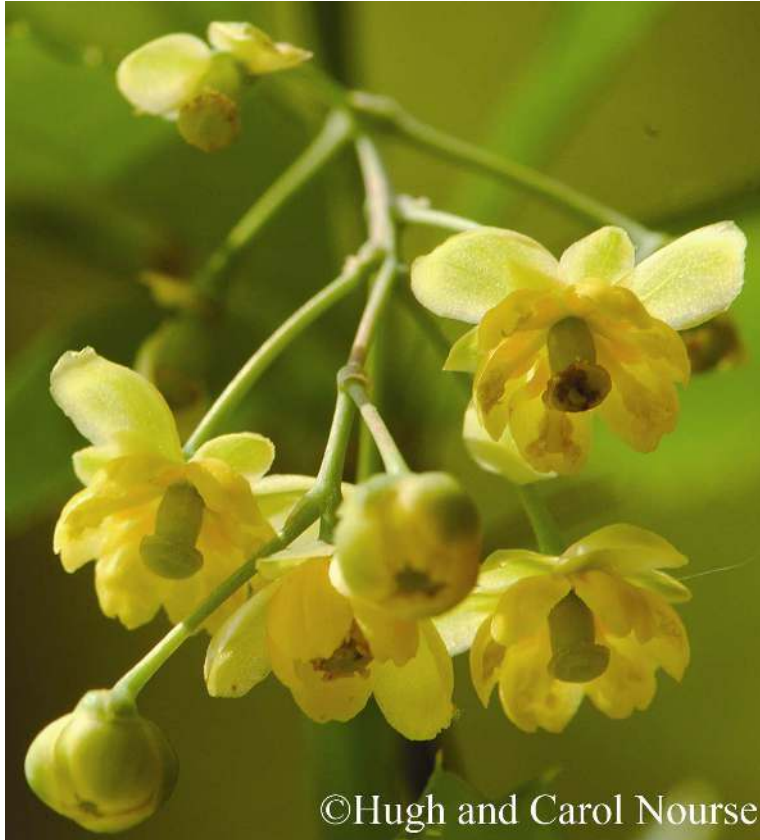
L. Chafin, Feb. 2007: original account

K. Owers, Jan. 2010: updated status and ranks, added pictures

AMERICAN BARBERRY

Berberis canadensis





©Hugh and Carol Nourse

Inflorescence



©Hugh and Carol Nourse

Thorn