

# GREEN GONE BAD

FEATURED ORNAMENTAL PLANT: *BERBERIS THUNBERGII* (JAPANESE BARBERRY)

Some exotic ornamental plants behave badly when they escape from the place they are planted. Infestations of these plants have negative impacts on nature. One of these plants is *Berberis thunbergii*; common name: Japanese Barberry.

*Berberis thunbergii* is a deciduous, spiny, dense growing woody shrub in the family Berberidaceae. The native range of *Berberis thunbergii* is Eastern Asia. It was introduced in New England as an ornamental plant in 1875. A number of cultivars now exist. It has escaped ornamental plantings and begun to spread in the upstate region of South Carolina. Heavy infestations can be seen in the North Carolina Mountains within the Pisgah National Forest.



*Berberis thunbergii* grows 2 to 8 feet tall with brown, deeply grooved branches that zig-zag in form and bear a single very sharp spine at each node.



The leaves are small, oval to spatula-shaped, green, bluish-green, or dark reddish purple. Small, pale yellow flowers hang in umbrella-shaped clusters of 2-4 flowers each along the length of the stems. Fruits are bright, shiny red oblong berries hanging along branches on narrow stalks. They mature during late summer and fall and persist through the winter.



The problem with *Berberis thunbergii* is that it can escape from planted landscapes into natural areas. It spreads rapidly by seed (birds eat the berries dispersing the seeds) and by vegetative expansion (branches touching the ground can root and root fragments

in the soil can sprout). *Berberis thunbergii* produces large numbers of seeds which have a high germination rate, estimated as high as 90%. Dense stands can form in many types of natural habitats. An infestation alters soil pH, nitrogen levels, and biological activity in the soil; and reduces the depth of the litter layer in forests. Once established, *Berberis thunbergii* displaces native plants; reducing biodiversity, wildlife habitat quality, available forage, and native insect life. *Berberis* species can also be alternate hosts for black stem rust which is a serious disease of small grains.

It may not be widely known among horticulturalists and landscapers that this plant can be harmful to natural habitats. Please consider removing this species from your inventory. There are many native shrubs that can be sold and planted in its place. These include *Lindera benzoin* (Spicebush), *Itea virginica* (Virginia Sweetspire/Virginia Willow), *Vaccinium corymbosum* (Highbush Blueberry), *Ilex verticillata* (Winterberry), *Viburnum dentatum* (Arrowwood), *Kalmia latifolia* (Mountain Laurel), *Physocarpus opulifolius* (ninebark), and *Euonymus americana* (Strawberry Bush).



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