



FRIGHTENING FACTS

South Carolina and North Carolina Exotic Plant Pest Councils



SCIENTIFIC NAME: *EUONYMUS ALATUS*
COMMON NAME: BURNING BUSH
KNOWN TO OCCUR IN NC

WHAT IS BURNING BUSH?

Plant Type: deciduous shrub

Family: Celastraceae (bittersweet)

Form/Size: multi-stemmed shrub, average height 1.5-3m, up to 6m

NOTE: sometimes called winged burning bush because of 4 ridges or "wings" present on stems

Leaves: simple, opposite, elliptic, finely serrate (toothed), 3-10cm long, dark green turning bright red in fall

Flowers: in pairs, yellowish-green, small (Inconspicuous), blooms in late spring

Fruit: dangling capsule, single or in pairs, reddish turning purple when ripe, each containing up to 4 orange seeds

Means of Spread: sexual reproduction by bird-dispersed seed; vegetative reproduction by root suckering

Similar Native Species: other species of euonymus including the native strawberry bush (*Euonymus americana*), which does not have winged stems; some species of blueberry (*Vaccinium* spp.), which have alternate leaves; stems may resemble winged elm (*Ulmus alata*), and/or sweetgum (*Liquidambar styraciflua*), both of which have 2 wings instead of 4



J. Miller, Bugwood

UGA0016053



J. Miller, Bugwood

UGA2307066

WHERE DID BURNING BUSH COME FROM?

Origin: northeast Asia

North American Introduction: 1860s

Reason: ornamental

NOTE: burning bush continues to be sold as an ornamental plant

WHERE AM I LIKELY TO FIND BURNING BUSH?

Habitat Type: many habitat types including pastures/fields, forest understories, roadsides, gardens; broad soil moisture, pH, and light tolerances (can survive in full shade)

Distribution in SC: unclear, listed on the USDA Plants Database, but not mapped in EDDMapS or the SC Plant Atlas



L. Mehrhoff, Bugwood

UGA5270091

Early Detection & Rapid Response (EDRR) Species



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Distribution in NC: Buncombe, Mitchell, Transylvania Cos.

Non-native Distribution: CT, DC, DE, GA, IA, IL, IN, KY, MA, MD, MI, MO, MT, NC, NH, NJ, NY, OH, PA, RI, SC, VA, VT, WI, WN, and Canadian Province ON

WHY IS BURNING BUSH A PROBLEM?

Environment: forms dense thickets that may inhibit native plants (crowd, block sunlight); threatens mature forests by outcompeting native species; seedling density may prevent regeneration of native shrub and tree species

Economy: no information; possible impacts to forest industry

WHAT SHOULD I DO IF I FIND BURNING BUSH?

Report: take a photo, report the observation to EDDMapS: <http://www.se-eppc.org/>

(location, size of infestation, etc.). **In SC:** Send digital photo to John Nelson at the USC Herbarium: plantman@herbarium.org for verification.

Control: cut, pull, or dig individual plants before they go to seed; cut stumps can be painted with glyphosate-based herbicide to prevent sprouting; foliar applications of glyphosate-based herbicide may be effective for large populations; long-term commitment required to deplete seedbank

NOTE: it is illegal to use a pesticide in any way that is not specified on the product label

Disposal: no information; if plants have seed, do not compost; plants without seed may be left on site to decompose, or composted



CURRENT LISTINGS:

Federal: none

State Weed Lists: CT, MA, NH

SC-EPPC Ranking: Watch B/shrubs

NC-EPPC Ranking: Rank 2 Significant Threat,

NCDOT: Watch List/shrubs



LEARN MORE!

- Invasive.org (images): <http://www.invasive.org/species/subject.cfm?sub=3023>
- USDA Plants Database: <http://plants.usda.gov/java/profile?symbol=EUAL13>
- Bugwood Wiki (Invasipedia): http://wiki.bugwood.org/Euonymus_alatus
- Pennsylvania Department of Conservation and Natural Resources: http://www.dcnr.state.pa.us/forestry/invasivetutorial/winged_euonymus.htm
- Plant Invaders of Mid-Atlantic Natural Areas (National Park Service): <http://www.nps.gov/plants/alien/pubs/midatlantic/eual.htm>

Prepared for SC-EPPC by Marika Godwin - December 2009

Early Detection & Rapid Response (EDRR) Species