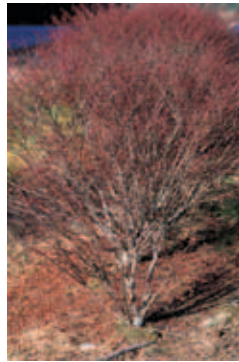
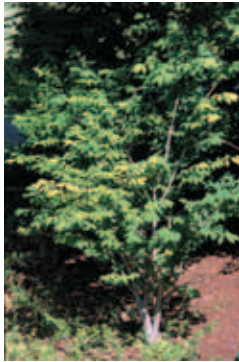


Winged Burning Bush



Jane Hargreaves



Winged burning bush or burningbush [*Euonymus alatus* (Thunb.) Siebold] is a deciduous, wing-stemmed, bushy shrub to 12 feet (4 m) in height. Leaves are opposite, obovate, and thin, with both surfaces smooth and hairless. Young stems have four corky wings that run lengthwise. Plants are densely branched with a broad leafy canopy. Leaves are small, obovate and opposite, green in summer and turn bright scarlet-to-purplish red in the fall. Abundant tiny orange fruit appear in late summer as stemmed pairs in leaf axils and turn purple in the fall. Extensively used as an ornamental in the Northeast United States and northern tier of States in the South, with many cultivars. Spreads from plantings and infestations by animal-dispersed seeds, and colonizes by root suckers. Resembles the threatened and endangered native burningbush (*E. atropurpureus* Jacq.), which has erect hairy lower leaf surfaces.

Management strategies:

- Do not plant. Remove prior plantings, and control sprouts and seedlings. Bag and dispose of fruit in a dumpster or burn.
- Treat when new plants are young to prevent seed formation.
- Pull, cut, and treat when fruit are not present.
- Minimize disturbance within miles of where this plant occurs, and anticipate wider occupation when plants are present before disturbance.
- Repeated cutting to groundline commonly recommended for control.
- Manually pull new seedlings and tree wrench saplings when soil is moist, ensuring removal of all roots.

Recommended control procedures:

- Thoroughly wet all leaves with Arsenal AC* or Vanquish* as a 1-percent solution in water (4 ounces per 3-gallon mix) with a surfactant (April to October). When safety to surrounding vegetation is desired, use Garlon 3A or Garlon 4 as a 3-percent solution (12 ounces per 3-gallon mix).
- For stems too tall for foliar sprays, apply Garlon 4 as a 20-percent solution (5 pints per 3-gallon mix) in a labeled basal oil product, vegetable oil, kerosene, or diesel fuel (where permitted) to young bark as a basal spray (January to February or May to October); or undiluted Pathfinder II may be used. Or cut large stems and immediately treat the stump tops with one of the following herbicides in water with a surfactant: Arsenal AC* as a 5-percent solution (20 ounces per 3-gallon mix) or when safety to surrounding vegetation is desired, a glyphosate herbicide as a 20-percent solution (5 pints per 3-gallon mix). ORTHO Brush-B-Gon, Enforcer Brush Killer, and Vine-X are effective undiluted for treating cut-stumps and available in retail garden stores (safe to surrounding plants).

* Nontarget plants may be killed or injured by root uptake.