

Invasive Exotic Plant Species: Autumn Olive (*Elaeagnus umbellata*)

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Autumn olive was introduced to the U.S. from Japan and China in 1830. It was originally planted for wildlife habitat, shelterbelts, and mine reclamation, but has escaped cultivation. It is dispersed most frequently by birds and other wildlife, which eat the berries.

It spreads rapidly in open and disturbed areas. Autumn olive's drought tolerance and ability to fix nitrogen allow it to colonize readily in dry, bare soil.

Identification

Leaves – The underside of the leaves, along with the fruit and twigs, are silver speckled. Leaves are 1 to 3 inches long by 1 to 1 1/2 inches wide and lanceolate (see Figure 1) in shape.

Fruit – Berry-like silver-speckled red fruit measuring 1/4 to 1/3 inch in diameter.

Twig – Slender and silver speckled. Lateral twigs sometimes resemble thorns.

Form – Grows to a large shrub, up to 20 feet.

Similar species

Russian olive and thorny olive, both of which are also non-native and invasive. Russian olive can be differentiated from autumn olive by yellow olive fruits maturing in the fall. Thorny olive has brown, hairy twigs.

Control

Imazapyr is one herbicide recommended for control of autumn olive, using a 1-percent solution in water with a surfactant. Apply as a foliar spray while the plant is actively growing. If foliage is difficult to reach, larger



Figure 1. Autumn olive twig and leaf



Figure 2. Autumn olive berries



Figure 3. Autumn olive

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Manufacturer	Product Name	Active Ingredient (ai)	Percent ai	Application Method*
Nufarm Turf and Specialty	Vanquish	Dicamba	56.8	F, C, B, S
Nufarm Turf and Specialty	Razor	Glyphosate	41	F, C
Nufarm Turf and Specialty	Razor Pro	Glyphosate	41	F, C
Dow AgroSciences	Accord Concentrate	Glyphosate	53.8	F, C
BASF	OneStep	Glyphosate + Imazapyr	69.51 + 8.36	F
BASF	Arsenal AC	Imazapyr	53.1	F, C
BASF	Chopper	Imazapyr	27.6	F, C, B
BASF	Stalker	Imazapyr	27.6	C, B
DuPont	Escort XP	Metsulfuron Methyl	60	F, S
Dow AgroSciences	Pathfinder II	Triclopyr	13.6	B, C

* F: Foliar, B: Basal bark, C: Cut stump, S: Basal soil

plants can be cut and stump treated with imazapyr in a 5-percent water solution.

Glyphosate has also shown effective results for treating autumn olive. A 20-percent solution in water is suggested for cut-stump treatments. Repeat applications in subsequent seasons may be necessary.

The following table displays many general-use chemical formulations labeled for control of autumn olive in a forested setting.

References

Jackson, David R. 2005. *Herbicides and forest vegetation management: Controlling unwanted trees, brush, and other competing forest vegetation*. University Park, Pa.: Penn State College of Agricultural Sciences – Agricultural Research and Cooperative Extension. 31 p.

Miller, James H. 2003. *Nonnative invasive plants of southern forests: a field guide for identification and control*. General Technical Report SRS-62. Asheville, N.C.: U.S. Department of Agriculture, Forest Service, Southern Research Station. 93 p.

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