



# Disease and Insect Resistant Ornamental Plants

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## EUONYMUS

# Euonymus

*Euonymus* is a genus of more than 100 species, mostly native to East Asia, which includes deciduous and evergreen groundcovers, shrubs and small trees.

Popular in North American landscapes, they are fast growing\* and often grown as hedges. Foliage color includes green, gold and white as well as many variegated types. Some deciduous species exhibit brilliant red fall color.

Euonymus scale is a common insect pest on some species. Diseases include anthracnose, powdery mildew and crown gall.



## INSECTS

**Euonymus Scale**, *Unaspis euonymi*, is a pest of many ornamentals and one of the most damaging on evergreen species of *Euonymus*. Early feeding damage is indicated by yellow or white spots on leaves which may be pink on variegated types. In heavy infestations, stems become white with a coating of encrusted scales resulting in premature leaf drop, reduced growth and branch dieback. Variegated types are more susceptible than nonvariegated (8).

Euonymus Scale				
Species	Cultivar	Reference		
		Resistant	Intermediate	Susceptible
<i>Euonymus alatus</i>		1, 3, 4, 7, 8		
<i>Euonymus americanus</i>		4		1, 2
<i>Euonymus bungeanus</i>				1, 2
<i>Euonymus europaeus</i>				1, 2, 4, 7
<i>Euonymus fortunei</i>		6		1, 2, 4

\*Some *Euonymus* species are invasive in parts of the US. In New York State, *E. alatus* and *E. fortunei* are considered regulated plants by the Dept. of Agriculture and Markets Invasive Species Regulations ([dec.ny.gov/docs/lands\\_forests\\_pdf/isprohibitedplants2.pdf](https://dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf)). Regulated plants may be sold but must have a warning label indicating the potential for invasive spread. Find alternatives to invasive regulated plants at: [nysipm.cornell.edu/agriculture/ornamental-crops/greenhouse-resources/alternatives-ornamental-invasive-plants-sustainable-solution-new-york-state](https://nysipm.cornell.edu/agriculture/ornamental-crops/greenhouse-resources/alternatives-ornamental-invasive-plants-sustainable-solution-new-york-state)

Euonymus Scale				
Species	Cultivar	Reference		
		Resistant	Intermediate	Susceptible
<i>Euonymus fortunei</i>	Coloratus			1
	Vegetus			1, 8
<i>Euonymus hamiltonianus</i> var. <i>sieboldianus</i>				1
<i>Euonymus japonicus</i>		6		1, 2, 3, 4, 7
<i>Euonymus japonicus</i>	Albo-marginatus			6
	Microphyllus			6
<i>Euonymus kiautschovica</i>		4, 7, 8	3	2
<i>Euonymus kiautschovica</i>	Manhattan	6		
	Sieboldiana		1	
<i>Euonymus sachalinensis</i>		7		
<i>Euonymus sanguinea</i>		7		

**Japanese Beetle**, *Popillia japonica*, is a common foliage feeder of many landscape plants. Some resistance is reported for *E. alatus*, with only occasional feeding observed, and *E. fortunei* is resistant (5).

## DISEASES

**Anthracnose**, caused by *Colletotrichum gloeosporioides*, is a fungal disease of euonymus in landscapes and nursery production favored by warm temperatures and prolonged wet periods. *E. fortunei* and *E. japonicus* are the most common hosts (9, 10), and severe infections cause defoliation and stem dieback. Highly susceptible cultivars of *E. fortunei* include ‘Canadale Gold’, ‘Emerald Gaiety’ and ‘Emerald ‘n Gold’ (10).

**Powdery Mildew**, caused by *Microsphaera euonymi-japonici*, is a fungal disease favored by warm temperatures, high humidity, shade and poor air circulation. Variegated cultivars of euonymus tend to be more resistant than nonvariegated (3).

**Crown Gall**, caused by the soil-borne bacterium *Agrobacterium tumefaciens*, is a common disease on certain woody ornamentals and fruit trees. Galls form on roots and stems and are most damaging when located at the root crown, interfering with transport of water and nutrients. *E. fortunei* is highly susceptible (11).

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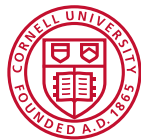
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## OTHER RESOURCES

“Missouri Botanical Garden.” [missouribotanicalgarden.org](http://missouribotanicalgarden.org)

“Woody Plants Database.” *Urban Horticulture Institute*, Cornell University. [woodyplants.cals.cornell.edu/plant/search](http://woodyplants.cals.cornell.edu/plant/search)



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