

Multiflora Rose



Figure 1. Multiflora rose flower clusters and foliage.



Figure 2. Stems of roses often misidentified as multiflora rose.



Figure 3. Hips (fruit) of multiflora, Cherokee, and McCartney roses.

Problem

Multiflora rose or Japanese rose (*Rosa multiflora* Thunb. ex Murr.) [Syn. *Rosa cathayensis* (Rehd. & Wilson) Bailey] is a shrub native to Japan and Korea. It was introduced into the U.S. in 1868. It has been used for “living fences” and wildlife habitat.

It can be problematic in all Midsouth states, especially in pastures. Once established, multiflora rose is difficult to control. In pastures, it can significantly reduce the area available for grazing as livestock avoid the sharp prickles.

The four common escaped roses are Cherokee rose (*Rosa laevigata* Michx.), McCartney rose (*Rosa bracteata* Wendland), memorial rose (*Rosa wichuraiana* Crepin), and multiflora rose.

Regulations

Multiflora rose is noxious in Alabama, Iowa, Kentucky, Missouri, Pennsylvania, and West Virginia, and it is banned or prohibited in other states.

Description

Vegetative Growth

Multiflora rose is an erect, arching, deciduous shrub that can reach 15 feet high by 15 feet wide, but it is usually much smaller. Stems and leaves have short, recurved prickles. Leaves are alternate and odd-pinnate with seven to nine leaflets (Figure 1). Leaflets tend to be hairless above and hairy beneath. Each leaflet is obovate to elliptic, 0.5 to 2 inches long by 0.5 to just over 1 inch wide. Leaf margins are generally serrate.

Other roses are often confused with multiflora. Memorial rose foliage most closely resembles multiflora rose, but Cherokee and McCartney rose foliage is quite different (Figure 2).

Flowering

Flowers are clustered (Figure 1) with bracts (leaflike structures) that fall off at flowering. Flowering occurs May to June and then sparingly from September to October. Flowers have five smooth to hairy, lance-shaped, white petals that are 1.5 to 2.5 inches long. The hip (fruit) is green, then red at maturity, ellipsoid to ovoid in shape, and ¼-inch long.

Hips of multiflora rose occur in clusters, compared to solitary hips of Cherokee and McCartney roses (Figure 3). Inside the hips are typically seven achenes (true fruit that contain a seed), which are about 0.1 inch long and densely pubescent.

Dispersal

Individual plants may produce up to 500,000 seeds (or achenes) per year. Most seedlings emerge near the parent plant. However, many species of birds and mammals feed on the hips, widely dispersing the seeds. Despite this dispersal mechanism, wildlife food value is low to minor.

Stems that come into contact with soil can root. The impact of its use as a rootstock for cultivated roses upon its spread in the U.S. is not clear. Its use for ornament, wildlife, and hedges has most likely been the primary path of invasion in much of the U.S.

Multiflora rose is spread primarily by humans, birds, and mammals.

Habitat

Multiflora rose is a problem in pastures, fence rows, prairies, forest and roadside margins, and open woodlands. It can form dense thickets, replacing native vegetation. These thickets may provide habitat for certain wildlife.

Distribution

United States

Multiflora rose is widespread in the United States but apparently not escaped in some western plains and Rocky Mountain states. It occurs in states along the West Coast and from Minnesota to New Mexico east. It also occurs in most eastern states.

Midsouth

Multiflora rose has escaped in all Midsouth states.

Control Methods

Biological

There are no effective biological control methods for multiflora rose. While there may be occasional browsing, thorns deter animal grazing.

Cultural

There are no effective cultural control methods for multiflora rose.

Mechanical

Roses are generally shallow-rooted and can be easily uprooted by bulldozing. Uprooted plants should be destroyed by burning.

Chemical

There are several chemical control options for multiflora rose (Table 1). While most are applied to foliage, some can be applied to the soil around plants. Refer to the product label to determine the rate that can be applied for rose control as well as application sites. Herbicide treatments should be applied when environmental conditions are favorable for plant growth and after leaves have fully expanded.

Nonionic surfactant at 1 quart per 100 gallons spray solution should be used with foliar treatments. Soil-applied treatments must have rainfall to activate the herbicide. Rose response to soil-applied herbicides is longer than that of foliar treatments because soil-applied herbicides must be absorbed through the roots. Aminocyclopyrachlor, hexazinone, imazapyr, and picloram herbicides are more active in soil compared to other products, and these may provide superior residual control of new plants from seed in the soil seedbank.

Table 1. Chemical control for multiflora rose.

Herbicide	Concentration	Trade name	Method
aminocyclopyrachlor + metsulfuron	52.1%	Streamline	foliar
aminocyclopyrachlor + imazapyr + metsulfuron	61.7%	Viewpoint	foliar or soil
aminopyralid + metsulfuron	71.6%	Chaparral, Opensight	foliar
dicamba	4 lb ae/gal	Banvel, Clarity, Diablo, Rifle, Vanquish, etc.	foliar
dicamba + 2,4-d	1 + 2.87 lb ae/gal	Brash, Weedmaster, etc.	foliar
glyphosate	3 lb ae/gal	Roundup, Accord, etc.	foliar
glyphosate + imazapyr	1.5 + 0.6 lb ae/gal	OneStep	foliar
hexazinone	2 lb/gal	Velpar, Hexar, etc.	foliar or soil
imazapyr	2 lb ae/gal	Arsenal, Chopper, Ecomazapyr, Polaris, etc.	foliar or soil
imazapyr + metsulfuron	72.7%	Lineage Clearstand	foliar
imazapyr + metsulfuron + sulfometuron	74%	LineagePrep	foliar or soil
metsulfuron	60DF	Escort, Cimarron, MSM, etc.	foliar
metsulfuron + dicamba + 2,4-d	60% with 1 + 2.87 lb ae/gal	Cimarron Max	foliar
metsulfuron + nicosulfuron	71.2%	Pastora	foliar
picloram	2 lb ae/gal	Tordon	foliar or soil
picloram + 2,4-d	0.54 + 2 lb ae/gal	Grazon P+D, Gunslinger, Hirehand, Trooper, Tordon 101, etc.	foliar
picloram + fluroxypyr	0.67 + 0.67 lb ae/gal	Surmount	foliar
triclopyr	4 lb ae/gal	Garlon, Remedy, Trycera, etc.	foliar
triclopyr + fluroxypyr	1.5 + 1 lb ae/gal	Pasturegard	foliar

References

- Dirr, M. A. (1998). *Manual of woody landscape plants: Their identification, ornamental characteristics, culture, propagation, and uses* (5th ed.). Champaign, IL: Stipes Publishing LLC.
- Miller, J. H. (2003). *Nonnative invasive plants of southern forests: A field guide for identification and control*. Asheville, NC: Southern Research Station.
- USDA, NRCS. (2007). *The PLANTS Database*, 6 August 2007 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

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