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## Multiflora Rose and Its Control

Multiflora rose is a serious problem in areas of Iowa with extensive pastures and other untilled areas. It is native to Japan and was introduced to the United States in 1866 as a rootstock for ornamental roses. Beginning in the 1930s, multiflora rose was widely planted for other purposes in many regions of the country. The plant has been promoted as a wildlife cover, fencerow beautifier, and as an aid to soil conservation. It has been used as a living fence, a highway safety barrier, and has been planted around prisons to prevent escapes.

Multiflora rose was recommended by many states for recreational and wildlife plantings until recently when problems with the rapid spread of multiflora rose into pastures and woodlots became more apparent. Today, multiflora rose is designated as a noxious weed in several states.

### Description

Multiflora rose is a vigorous, prickly bush with clumps of long, arching stems. Because of its hooked thorns and the drooping nature of the branches, people lightly brushing against a branch may find themselves firmly attached. Bushes may reach a height of 5 to 10 feet. It grows well in many soil types and tolerates a wide range of environmental conditions.

Leaves are pinnately compound with 5 to 11 leaflets. Leaflets are less than 1 1/2 inches long. Stipules are prominent and fringed. Flowers are white, sometimes pinkish, fragrant and 1/2 to 3/4 inch across. Flowering usually begins in June. Fruits are bright red, 1/4 inch in diameter, and often remain on the canes until spring. The fruit is used as food during the fall and winter months by wildlife.

Although new shoots can sprout from existing root systems, multiflora rose spreads primarily by seed.

The fruits are an excellent source of food for birds, but unfortunately the seeds are readily spread long distances following ingestion. Multiflora rose is not a problem in tilled areas such as corn and soybean fields, but can be a major problem in pastures, grazed woodlots, and other uncultivated areas.

### Cultural Control

Cultural practices that promote vigorous growth of the desired pasture species create an environment less favorable for establishment of the multiflora rose. Proper fertilization and avoiding overgrazing greatly reduce problems with multiflora rose in pastures.

Multiflora rose is common in ungrazed areas also, so good grazing management alone will not prevent infestations. Although mowing pastures or other noncrop areas several times a year will prevent multiflora rose seedlings from becoming established, mature plants usually are able to tolerate mowing. Repeated mowings for several years are necessary to clean heavily infested areas.

### Herbicidal Control

Multiflora rose can be effectively controlled with the proper use of herbicides. Care must be used to avoid injury to desirable species in and around infested areas. A variety of herbicide options are available to use against multiflora rose, providing land managers a wide window for application timing. Selection of a particular control strategy should be based on several factors including severity of infestation, intended use of the infested area, availability of equipment, terrain of infested area, and risk of herbicide injury to adjacent areas. Be sure to determine grazing restrictions following use of any herbicide in a pasture. A key to successful control is a follow-up evaluation the following growing

season and retreatment of any plants that survived the first application.

### **Dormant Applications**

Dormant season herbicide applications are made in late winter or early spring prior to the leafing out of multiflora rose. Certain herbicides are applied to the soil surface, while others are applied to the crown and lower portions of canes. The advantages of dormant season treatments include reduced risk of nontarget injury, lower volumes of carrier required, and timing, as time conflicts with field work are less likely.

**Soil Application.** Banvel or Spike may be applied to the soil near the crown of multiflora plants. Spike is slow acting and may damage or kill pasture grasses. Do not use Spike in the vicinity of desirable trees since small quantities of the herbicide may kill nearby plants.

**Basal Bark Applications.** Several herbicides are labeled for basal treatments of multiflora rose. The crown and lower 12 to 18 inches of stems should be thoroughly wetted with the spray. Generally, diesel fuel or oil is used as a carrier to improve herbicide penetration through the bark. Applications should be made to dormant plants with dry bark. The following products may be used as basal treatments: Banvel, Crossbow, Weedone 170, and Weedone CB. These treatments also are effective for treating crowns following mowing to prevent resprouting.

### **Foliar Applications**

Several products can be applied directly to the foliage of multiflora rose. Applications made in early summer when plants are flowering provide the most consistent control. Thorough coverage of the entire canopy is required, therefore requiring high volumes of water and high spray pressures. Care must be taken to avoid drift of the herbicide from the target site.

Banvel and 2,4-D are the most commonly used herbicides in pastures. These herbicides are effective on

younger roses, but may be inconsistent on larger plants. Crossbow, Weedone 170, and Ally generally are more effective on larger plants than 2,4-D or Banvel. Roundup also can be used to treat multiflora rose, but unlike the previous products, it will kill any grass contacted by the spray solution.

### **Biological Control**

Rose rosette is a disease found in Iowa that can kill multiflora rose plants. Symptoms of the disease include witches' broom and development of stunted, red shoots. Ongoing research at Iowa State University is evaluating factors that affect the spread of rose rosette disease in the field.

### **Developing an Integrated Management Program**

There are no quick solutions for eradicating multiflora rose infestations. The initial effort may be costly, but the longer treatment is delayed, the greater the expense will become. Initiating control programs while rose plants are small and widely scattered will prevent multiflora rose problems from becoming unmanageable. Integrated programs that rely on both cultural practices and herbicides are most effective.

Regardless of the site and severity of the problem, a continuous effort is required to prevent rapid reinfestation with multiflora rose. An integral part of a multiflora rose management program should be a follow-up effort to evaluate the effectiveness of control strategies. Any surviving or new plants should be controlled with cultural or chemical practices. Any gains in controlling the multiflora rose can be quickly lost if an area is not monitored and follow-up measures are neglected.

To simplify information, trade names of products have been used in this publication. No endorsement is intended, nor is criticism implied of similar products not named. Product labels continually change, thus some of the information presented here may be outdated. Carefully read the product label prior to purchasing and using any herbicide.

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