

How to Manage Macartney Rose

*A safe, effective, three-step way
to control Macartney Rose
on small or large acreages*

Individual Plant Treatment Series

C. Wayne Hanselka, Professor and Extension Range Specialist
The Texas A&M University System

Macartney rose, also known as "Cherokee rose," "hedge" and "rose hedge," presents severe management problems for livestock producers in Southeast Texas to the Middle Coastal Prairie. Imported from the Orient in the late 1800s as a hedge for fencing purposes, the plant has escaped and naturalized. It now occupies more than 500,000 acres of Texas rangeland.

This rose species forms dense stands that eliminate forage production and hinder livestock management. Macartney rose has some use as browse and for wildlife cover, but if it is allowed to establish excessive cover, the disadvantages greatly outweigh its limited merits.

Dense stands can be controlled somewhat by using herbicides, mechanical methods and prescribed burning, but no single method has been totally effective. The most successful approach to control Macartney rose is to implement an integrated system using several methods applied sequentially.

The plant is easiest to manage when there are low densities of single, small plants (disturbed or undisturbed). Here is a three-step method to control Macartney rose that is easy, inexpensive and environmentally responsible. It involves spraying a small but potent concentration of herbicide directly on each plant.

Using this Brush Busters method, you'll be able to kill more than 7 of 10 plants you treat. Your results may vary with weather and other conditions.

This method for Macartney rose control was developed and approved by professionals with the Texas Agricultural Experiment Station and Texas Cooperative Extension, both agencies of The Texas A&M University System.

Brush Busters Leaf Spray Method

Works Best: On individual disturbed or undisturbed Macartney rose clumps:

- **Undisturbed** – Undisturbed plants that are 5 feet or less in height and diameter.
- **Disturbed** – Mowed or otherwise disturbed plants should be treated within 3 years of disturbance. However, avoid spraying them earlier than 9 to 12 months after mowing or when the plants have a high percentage of new growth. Expect poor control if plants are less than 3 feet tall when sprayed.

When to Apply: Begin in the spring under good growing conditions when the soil temperature reaches 75 degrees F at 12 to 18 inches deep. Stop in late spring during flowering and hip ("apple" or fruit) formation. Begin again in late summer or early fall under good growing conditions, and continue until soil temperatures drop below 75 degrees F.

① Prepare Equipment

Small pump-up garden sprayers, backpack sprays, cattle sprayers or sprayers mounted on 4-wheel all-terrain vehicles (ATV) work well. For a few plants, garden sprayers are best; in denser stands, backpack sprayers are usually the most efficient; and in large acreages or as the distance between plants increases, ATV sprayers become more efficient.

Larger plants require higher sprayer pressures. Make sure your sprayer has an adjustable nozzle that can deliver a coarse spray (large droplets) to the top of a 5-foot clump. Conejet 550 x -6 or x -8 adjustable cone nozzles work well.

② Mix Herbicide Spray

You can achieve 76 to 100 percent rootkill by spraying Macartney rose with Grazon P+D™, which is a restricted use pesticide. A Texas Department of Agriculture (TDA) Pesticide Applicators License is required to buy or apply this product.

To prepare the spray mix, add Grazon P+D™ at a concentration of 1 percent to water. To make sure that the spray sticks to the waxy foliage, add either liquid dishwashing detergent or a commercial surfactant to the spray mix (see table below). It may be helpful to add a dye, such as Hi-Light™ Blue Dye, to mark the plants that have been sprayed.

Recommended spray mixture using a surfactant or liquid dishwashing detergent*

Ingredient	Concentration in spray solution	Gallons Mixed		
		3 gal	14 gal	25 gal
Grazon P+D™	1%	4 oz	18 oz	1qt
Surfactant	¼%	1 oz	3 oz	8 oz
Hi-Light™ Blue Dye	¼-½%	1-2 oz	3-6 oz	8-16 oz

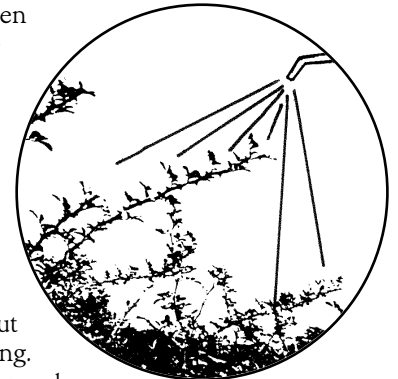
*All spray solutions are mixed in water.

③ Spray the Macartney Rose

Macartney rose can be sprayed in either the spring or fall under good growing conditions.

You should not spray when flowers or fruits are present or when the soil temperature is below 75 degrees. The spray period may last through late October.

Wet the entire foliage in the canopy of each Macartney rose plant until the leaves glisten, but not to the point of dripping. The spray pressures may need to be high to penetrate larger plants with heavier canopies (300 psi or higher).



Keep these points in mind:

- Follow herbicide label directions.
- For best results, don't spray when:
 - * rains have stimulated new growth.
 - * leaves are wet.
 - * plants are less than 3 feet tall after mowing.
 - * foliage shows damage from hail, insects or disease.
 - * soil temperatures are below 75 degrees F.
 - * you are working immediately upwind of desirable trees, shrubs or crops.
 - * flowers or fruits are present.
- Treat only what can be managed in a year. Control measures may suffer if too much is taken all at once.
- The cost of treatment increases rapidly as the rose hedge becomes larger and more dense. Also, controlling Macartney rose is not a one-time job. You'll need to go over your land now and then to eliminate unwanted rose hedge sprouts.
- Macartney rose generally grows on soils with a high clay content. Soil-applied herbicides generally should not be used on such soils and are generally ineffective for controlling rose hedge.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas AgriLife Extension Service is implied.

Produced by AgriLife Communications and Marketing, Texas A&M System
Extension publications can be found on the Web at: <http://AgriLifebookstore.org>

Visit the Texas AgriLife Extension Service at <http://texasextension.tamu.edu>

Educational programs of the Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Edward G. Smith, Director, Texas AgriLife Extension Service, Texas A&M System.