

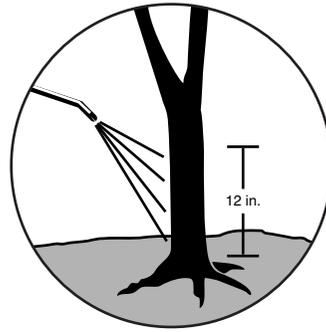
Brush Busters Stem Spray Method

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Works Best: For controlling relatively young trees or older ones with few basal stems.

The method has been known for years as the low-volume, basal-stem treatment technique. Research and demonstrations have shown excellent results using minimum amounts of herbicide.

When to Apply: Anytime during the year, although best results occur during the spring-summer growing season.



① Prepare Equipment

Almost any type of pump-up hand sprayer can be used, but the most efficient way to apply the stem spray to many trees is with a backpack sprayer. Make sure the sprayer's nozzle has a small orifice. One such nozzle, called the Conejet™ 5500-X1, is available from Spraying Systems Company. Compared to standard nozzles, this nozzle can reduce the amount of spray applied by 80 percent—making the use of chemicals much more cost-effective.

② Mix Herbicide with Diesel

A mixture of the herbicide Remedy™ and diesel fuel oil is very effective for this method. Diesel acts as a coating agent to ensure that the herbicide covers the plant and is absorbed well.

Recommended concentration of Remedy™ to mix with diesel fuel oil.

Huisache type	% Remedy™	Control Rating*	Amount/Gallon Mixed
*All sizes of stem	15%	H	19 oz.
	25%	VH	32 oz.

*H = High (56-75% of plants killed); VH - Very high (76-100% of plants killed)

Pour the required amount of herbicide into the mixing container, then add diesel fuel to bring the mixture to the total volume desired. Agitate the mixture vigorously.

Multi-stemmed huisache plants are much more difficult to control than younger trees or undisturbed plants.

③ Spray the Huisache

Stem applications are effective throughout the year, but the best time is during the growing season when temperatures are high.

Be sure to adjust the sprayer nozzle to deliver a narrow, cone-shaped mist. Spray the mixture lightly but evenly on the plant's stem or trunk from the ground line up to 12 inches. Apply the mixture to all sides of every stem, but don't wet it so much that it runs off the stem and puddles.

Keep these points in mind:

- Follow herbicide label directions.
- The cost of treatment escalates rapidly as the brush becomes more dense or the number of basal stems per plant increases.
- Multiple-stemmed plants or rough-barked plants are more difficult to control with this method.
- Do not spray when the basal stems are wet.
- After mixing the herbicide with diesel, shake or agitate the solution vigorously.
- This method is less efficient if there is dense grass around basal stems.

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How to Control Huisache

*Two safe, effective, three-step ways
to control huisache
on small or large acreages*

Individual Plant Treatment Series

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Huisache is a common plant on rangeland and pasture in the eastern half of Texas. It is a tough, aggressive invasive species that limits forage production and decreases the value of the wildlife habitat.

Here are two three-step methods to control huisache; both are easy, inexpensive and environmentally responsible. They involve spraying a small but potent concentration of herbicide directly on each plant. Using these Brush Busters methods, you'll be able to keep the huisache and other shrubs and trees you want and get rid of those you don't.

Keep in mind that controlling huisache is not a one-time job. Livestock and wildlife do an excellent job of spreading seeds, so you'll need to go over your land regularly to get rid of unwanted seedlings.

The three-step Brush Busters methods for huisache control were developed and approved by professionals with the Texas Agricultural Experiment Station and Texas Cooperative Extension, both agencies of the Texas A&M University System. Your results may vary with weather and other conditions, but you should usually be able to kill more than 7 of 10 plants you treat.

Brush Busters recommends two ways to control huisache, depending upon the tree shape. If most of your huisache have a few well-defined stems or trunks coming from the ground, use the Stem Spray Method. If your huisaches are bushy, have many stems at ground level, and are less than 8 feet tall, try the Leaf Spray Method. Whichever you choose, these simple directions will help you successfully control your huisache the 1-2-3 Brush Busters way.

Brush Busters Leaf Spray Method

Works Best: On huisache that are bushy, have many stems at ground level, and are less than 8 feet tall. This method is also known as high-volume foliar spraying.

When to Apply: Begin in September after any late-summer growth has stopped; then continue through November or until soil temperature drops below 75 degrees.

① Prepare Equipment

Small pump-up garden sprayers, backpack sprays, cattle sprayers, or sprayers mounted on 4-wheel all-terrain vehicles (ATV) work well. Garden sprayers are best for small acreages; backpack sprayers are usually the most efficient in dense huisache; and ATV sprayers become more efficient in large acreages or as the distance between plants increases. Make sure your sprayer has an adjustable nozzle that can deliver a coarse spray (large droplets) to the top of an 8-foot tree. 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 with Grazon P + D™, which is a restricted use pesticide. A certified applicators license is needed to buy or apply the product.

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

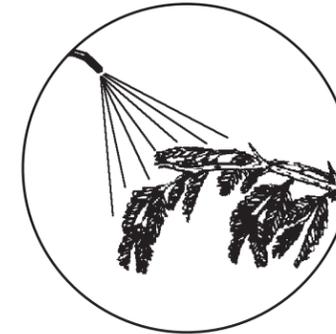
Recommended spray mixture using a surfactant or liquid dishwashing detergent.*

Ingredient	Concentration in spray solution	Tank size		
		3 gal.	14 gal.	25 gal.
Grazon P+D™	1%	4 oz.	18 oz.	1 qt.
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 Huisache

The best time to begin spraying is in the fall. Continue spraying until the soil temperature drops below 75 degrees. The spray period may last through November. Wet the foliage of each huisache plant until the leaves glisten, but not to the point of dripping.



Keep these points in mind:

- Follow herbicide label directions.
- For best results, don't spray when:
 - * rains have stimulated new growth in tree tops.
 - * leaves are wet.
 - * foliage shows damage from hail, insects or disease.
 - * you are working upwind of desirable trees, shrubs or crops.
- The cost of treatment rises rapidly as the brush becomes bigger and more dense. Also, controlling huisache is not a one-time job. You'll need to go over you land now and then to get rid of unwanted huisache sprouts.

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