



# HOW TO BEAT HUISACHE: Individual Plant Treatment Leaf and Stem Applications

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Huisache is a common plant on rangeland and pasture in the southern half of Texas. It is a tough, aggressive, noxious species that limits forage production and decreases the value of 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 to selectively control unwanted huisache. Remember, controlling huisache is not a one-time job. Both livestock and wildlife spread seeds, so monitor your land regularly to control unwanted seedlings.

These Brush Busters control methods were developed and approved by professionals with Texas A&M AgriLife Extension Service and Texas A&M AgriLife Research, both agencies of the Texas A&M University System. Your results may vary with weather and other plant conditions, but you should usually be able to kill 76 to 100 percent of the trees you treat.

These Brush Busters control methods depend on the tree shape and size. For huisache with three or less smooth bark stems coming out of the ground, the stem spray method may be a good option. For bushy huisache less than 6 feet tall with many stems at ground level, the leaf spray method may be the best option. Either method can be successful.

## BRUSH BUSTERS LEAF SPRAY METHOD

**Works well on:** Huisache that have good leaf canopy and are less than 6 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, indicated by no new leaf growth at the end of stems. Good soil moisture and mature, healthy leaves are necessary for improved plant kill. Continue until November or when the soil temperature drops below 75°F at 12 inches deep.

### 1. Prepare the Equipment

Many types of sprayers work well for this method. Backpack sprayers are the most efficient for small acreage places or those with a high density of huisache trees. Larger places with lower

densities may find ATV or UTV sprayers more efficient. Before you start spraying, make sure you have an adjustable cone nozzle, such as the Conejet™ 5500-X6 or X8 nozzle that can deliver a coarse spray with larger droplets to the top of a 6-foot tree.

### 2. Mix the Herbicide Spray

You can achieve 76 to 100 percent mortality by spraying with one of several herbicide options (see options A, B, or C in the table on the next page) under ideal conditions. To prepare the spray mix, add the selected herbicide to water. To make sure the foliage is coated thoroughly, add a high-quality (80 to 90 percent active ingredient) non-ionic surfactant (see table on the next page) to the spray mix or crop oil, methylated seed oil (MSO), or MSO-OS (organosilicone) adjuvant at manufacturer specified rates. Add a dye, such as Hi-Light™ blue dye, to mark plants that have been sprayed and ensure proper coverage.

### 3. Spray the Huisache

Adjust the nozzle to deliver a coarse spray in a wide pattern. Wet ALL the leaves 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, do not spray when:
  - Rains have stimulated new growth at the end of the stems
  - Leaves are wet from rain or dew
  - Foliage shows damage from hail, insects, or disease
  - Working upwind of desirable trees, shrubs, or crops
- ▶ The cost of treatment rises rapidly as the brush becomes bigger and denser. Download the Brush Busters Cost Calculator app to easily estimate treatment costs.
- ▶ Controlling huisache is not a one-time job. You will need to monitor your land every year to check for new plants.

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RECOMMENDED LEAF SPRAY HERBICIDE MIX OPTIONS\*

	Ingredient	Concentration in Spray Solution	Tank Size			
			1 gal	3 gal	14 gal	25 gal
Option A	Grazon P+D, Gunslinger, Picloram+D, or Sendero	1%	1.28 oz	3.84 oz	18 oz	32 oz
Option B**	Invora**	1.5%	1.92 oz	5.76 oz	27 oz	48 oz
Option C	Graslan L	0.63%	0.8 oz	2.4 oz	11 oz	20 oz
Add to option A, B, and C	Non-ionic surfactant	0.25%	0.32 oz	1 oz	3 oz	8 oz
	Hi-Light™ blue dye	0.25 to 0.5%	0.32–0.64 oz	1–2 oz	3–6 oz	8–16 oz

\*All leaf spray solutions are mixed in water.

\*\*Invora is labeled for privately owned rangelands only (excludes hayfields) and requires Picolinic Acid Chemistry Training for all applicators.

## BRUSH BUSTERS STEM SPRAY METHOD

**Works well:** For controlling young seedlings or older trees with three or fewer basal stems. Multi-stemmed huisache plants are much more difficult to control than younger trees or undisturbed plants.

Research and demonstrations have shown excellent results while using minimum amounts of herbicide.

**When to apply:** Anytime during the year, although best results occur during the growing season.

### 1. Prepare the 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 is called the Conejet™ 5500-X1 (or X2). 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 the Herbicide Spray

A mixture of triclopyr ester (trade names: Remedy Ultra, Clear Pasture, Triclopyr R&P, and Triclopyr 4EC) and diesel fuel oil is very effective for this method. Diesel acts as a coating agent to ensure good absorption. A basal bark (vegetable) oil may be used instead of diesel if desired.

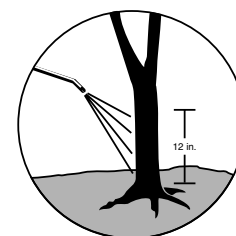
#### Recommended Herbicide Mix

Pour 25 percent triclopyr ester into the mixing container, then add diesel fuel to bring the mixture to the total volume desired. Agitate the mixture vigorously.

Huisache Type and Stem Diameter	% Triclopyr	Herbicide/ Gallon	Herbicide Carrier/Gallon
Smooth bark, stems up to 4 inches in diameter	25%	32 oz	96 oz diesel or basal bark oil
Add Hi-Light™ blue dye (optional)		0.32–0.64 oz	

### 3. Spray the Huisache

Adjust the sprayer nozzle to deliver a narrow, cone-shaped mist. Spray the mixture lightly but evenly on all the plant stems from the ground line up to 12 inches. Apply the mixture to all sides of every stem, but do not wet it so much that it runs off the stem and puddles.



#### Keep These Points in Mind:

- ▶ Follow the herbicide label directions.
- ▶ The cost of treatment escalates rapidly as brush becomes denser or the number of basal stems per plant increases. Download the Brush Busters Cost Calculator app to easily estimate treatment costs.
- ▶ Multi-stemmed 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 more difficult to apply if there is dense grass around the basal stems.