



HOW TO TAME TEXAS PERSIMMON

Individual Plant Treatment Leaf and Stem Applications

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Texas persimmon is a common plant on rangeland and pastures in Central Texas, Edwards Plateau, Post Oak Savannah, South Texas Plains, and the Coastal Prairie. It is a deterrent to effective range management in some areas where densities become high.

Here are two three-step methods to control Texas persimmon that 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 can selectively control unwanted Texas persimmon. Remember, controlling Texas persimmon is not a one-time job, 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.

Additionally, these methods depend on the tree shape and size. For Texas persimmon with three or fewer well-defined, smooth-bark stems coming out of the ground, the stem spray method may be a good option. For bushy Texas persimmon 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: Texas persimmon plants 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 spring when leaves are mature. Most consistent results have been obtained before July 1st. Stop spraying if leaves fall off when the limbs are shaken. Good soil moisture and healthy leaves are necessary for improved plant kill.

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1. Prepare the Equipment

Many types of sprayers work well for this method. Backpack sprayers are the most efficient for small acreages with a high density of Texas persimmon 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 $^{\text{M}}$ 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 2 percent Invora herbicide under ideal conditions. To prepare the spray mix, add the appropriate amount of Invora 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 the table on next page) to the spray mix or MSO-OS (organo-silicone) adjuvant at manufacturer specified rates. Add a dye, such as Hi-Light™ blue dye, to mark the plants that have been sprayed and ensure proper coverage.

3. Spray the Texas Persimmon

Adjust the nozzle to deliver a coarse spray in a wide pattern. Wet ALL the leaves of each Texas persimmon plant until the leaves glisten but not to the point of dripping.

Keep These Points in Mind:

- ► Follow the 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 brush becomes bigger and denser. Download the Brush Busters Cost Calculator app to easily estimate treatment costs.
- Controlling Texas persimmon is not a one-time job. You will need to monitor your land every year to check for new plants.



RECOMMENDED LEAF SPRAY HERBICIDE MIX OPTIONS*							
		Tank Size					
Ingredient	Concentration in Spray Solution	1 gal	3 gal	14 gal	25 gal		
Invora**	2%	2.56 oz	8 oz	36 oz	64 oz		
Non-ionic surfactant	0.25%	0.32 oz	1 oz	4.5 oz	8 oz		
Hi-Light™ blue dye	0.25-0.5%	0.32-0.64 oz	1-2 oz	4.5-9 oz	8-16 oz		

^{*}All spray solutions are mixed in water.

BRUSH BUSTERS STEM SPRAY METHOD

Works well: For controlling young seedlings or older trees with three or fewer basal stems. Stems should be no larger than 4 inches in diameter. Multi-stemmed Texas persimmon plants are much more difficult to control than younger trees or undisturbed plants.

This method is known as the low-volume, basal-stem treatment technique. Research and demonstrations have shown excellent results using minimum amounts of herbicide.

When to apply: After leaves are mature and before June 15th.

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 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 costeffective.

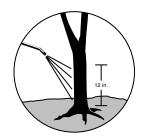
2. Mix the Herbicide Spray

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 that the herbicide covers the plant and is absorbed well.

Pour the required amount of triclopyr ester into the mixing container, then add diesel fuel to bring the mixture to the total volume desired. To identify plants already treated, add Hi-Light™ blue dye (0.25 to 0.5 percent). Agitate the mixture vigorously to ensure thorough mixing.

3. Spray the Texas Persimmon

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 increases as plant density and the number of stems per plant increases. Download the Brush Busters Cost Calculator app to easily estimate treatment costs.
- Multiple-stemmed plants or rough-barked Texas persimmon trees are more difficult to control with this method.
- ▶ Do not spray when the basal stems are wet.
- ► Dense grass around basal stems makes this method more difficult to apply.
- ► Use triclopyr ester herbicides that contain 4 pounds per gallon of triclopyr ester acid equivalent (ae).

RECOMMENDED STEM SPRAY HERBICIDE MIXES								
	Concentration in Spray Solution	Tank Size						
Ingredient		1 gal	5 gal	10 gal				
Remedy Ultra, Clear Pasture, Triclopyr 4EC	25%	32 oz	1.25 gal	2.5 gal				
Diesel or Basal oil	75%	96 oz	3.75 gal	7.5 gal				
Hi-Light™ blue dye (optional)	0.25-0.5%	0.32-0.64 oz	1.6-3.2 oz	3.2-6.4 oz				



^{**}Invora is labeled for privately owned rangeland only (excludes hayfields) and requires Picolinic Acid Chemistry Training for all applicators.