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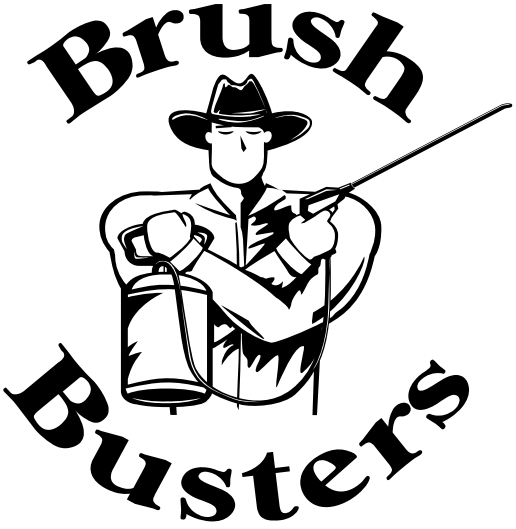

How to Take Out Tallowtrees

Two safe and effective ways to manage Chinese Tallowtrees

Individual Plant Treatment Series

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Chinese tallowtrees have invaded and become dense on many upland and wetland sites in prairie and woodland communities of the Texas Coastal Prairie. Introduced from the Orient, this plant now infests more than 234,000 acres in southeast Texas. Tallowtree infestations are problems in rice canals, irrigation systems, drainage ditches, rights-of-way, vacant lots, fence lines, pastures and rangelands. Tallowtrees establish easily, grow quickly, and produce large quantities of seed. Tallowtrees resprout quickly from crown and root buds when topgrowth is mechanically removed.

Here are two 3-step ways to control Chinese tallowtrees that are easy, environmentally responsible and effective. Each involves spraying a small but potent concentration of herbicide directly on each plant. With these Brush Busters methods you will be able to kill tallowtrees with little damage to desirable vegetation.

Keep in mind that tallowtree management is not a one-time job. The plant produces thousands of seeds that are relatively long-lived and spread by water, birds and animals. A tremendous number of seeds builds up under parent plants. You will need to check your land regularly to find and remove seedlings.

Professionals with Texas Cooperative Extension and the Texas Agricultural Experiment Station have developed, tested and approved these methods for Chinese tallowtree control. Your results may vary, but you should be able to kill more than seven of ten tallowtree plants treated.

Choose the Brush Busters method recommended for the number and size of plants you wish to control. If you have only a few plants, you will find the Stem Spray Method works best. If you have many plants, but most are less than 6 to 8 feet tall, the Leaf Spray Method may be more suitable. Whichever method you choose, with these simple directions you will be able to control tallowtrees the 1-2-3 Brush Busters way.

Brush Busters Leaf Spray Method

Works Best: On tallowtrees that 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 April or May after tallowtree leaves mature, and continue through September or until leaves begin to turn yellow to red.

① Prepare Equipment

Small pump-up garden sprayers, backpack sprayers, 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 most efficient in denser stands; ATV sprayers are best for large acreages or when there is more distance between plants. Make sure your sprayer has an adjustable nozzle that can deliver a coarse spray (large droplets) to the top of an 8-foot-tall tree. Conejet® 5500 X-6 or X-8 adjustable cone nozzles work well.

② Mix Herbicide Spray

You can kill 76 to 100 percent of roots by spraying with Grazon P+D™, a restricted use pesticide. To buy and use the product you will need a Texas certified applicator's license.

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

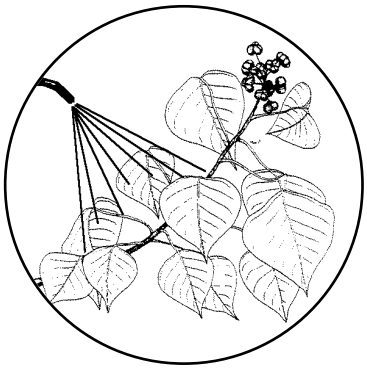
Recommended Leaf Spray Mixture Using a Surfactant or Liquid Dishwashing Detergent.*

Ingredient	Concentration in spray solution	Tank size		
		3-gallon	14-gallon	25-gallon
Grazon P+D™	1%	4 oz.	18 oz.	1 qt.
Surfactant	1/4%	1 oz.	4-6 oz.	8 oz.
Hi-Light™ Blue Dye	1/4 - 1/2%	1-2 oz.	4-9 oz.	8-16 oz.

*All spray solutions are mixed in water.

③ Spray the Tallowtree

The best time to spray is July through September, as long as the leaves have not begun to turn yellow. For effective control, each plant must be thoroughly sprayed, almost to the point of dripping. Be sure to wet the terminal ends of all branches.



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 taller and more dense. Also, controlling tallowtree is not a one-time job. You'll need to go over your land regularly to locate and treat unwanted tallowtree seedlings and plants that are missed or only partially damaged by the initial spray treatment.

Brush Busters Stem Spray Method

Works Best: For relatively young trees or older ones with few basal stems in sparse stands. This method is also known as the low-volume, basal-stem treatment technique. Research and demonstrations have shown excellent results using minimum amounts of herbicide.

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

① Prepare Equipment

Almost any type of pump-up hand sprayer can be used, but the most efficient way to treat large numbers of trees is with a backpack sprayer. Make sure the sprayer's nozzle has a small orifice (such as a Conejet™ 5500-X1 adjustable cone nozzle). 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 is a coating and penetrating agent; it ensures that the herbicide covers the plant and is readily absorbed. Remedy™ is not a restricted-use pesticide, thus no license is required to purchase it.

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

Multi-stemmed tallowtree plants are much more difficult to control by this method than younger trees or undisturbed plants.

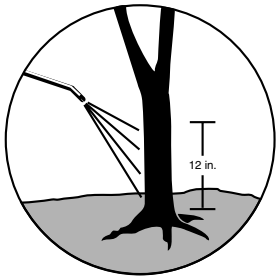
Recommended Stem Spray Mixture Using Diesel Fuel Oil as the Carrier.

Stem	% Remedy™	Amount/gallon mixed
Smooth bark	15%	19 oz.
Rough bark	25%	32 oz.

③ Spray the Tallowtree

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 to 12 inches above the ground. Apply the mixture to all sides of every stem, but not to the extent that the spray 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 and 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.
- The 15 percent mixture of Remedy™ and diesel fuel also can be used as a "cut stump" treatment. Cut off the tallowtree stems and spray the stumps immediately. Wet the cut surface and the bark thoroughly with the herbicide mixture.

For additional range management information see: *http://texnat.tamu.edu*

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