



HOW TO TAKE OUT TALLOW TREES: Individual Plant Treatment Leaf and Stem Applications

Robert K. Lyons and Megan K. Clayton*

Chinese tallow trees have invaded and become dense on many upland and wetland sites in prairie and woodland communities of the Texas Coastal Prairie. Tallow trees establish easily, grow quickly, and produce large quantities of seed. The trees resprout quickly from crown and root buds when top-growth is mechanically removed.

Here are two three-step methods to control Chinese tallow trees; 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 trees. Remember, controlling Chinese tallow trees is not a one-time job. The plant produces thousands of seeds that are relatively long-lived and spread by water, birds, and other animals. A tremendous number of seeds build up under parent plants, so monitor your land regularly to find and remove 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 trees you treat.

Choose the Brush Busters method recommended for the number and size of plants you wish to control. If you have only a few plants, the stem spray method may work best. If you have many plants, but most are less than 6 feet tall, the leaf spray method may be a good option. Either method can be successful.

BRUSH BUSTERS LEAF SPRAY METHOD

Works well on: Chinese tallow trees 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 April or May after tallow tree leaves mature and continue through September or until the leaves begin to turn yellow to red.

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 trees. Larger places with lower densities may find ATV or UTV sprayers more efficient. Before you start spraying, make sure that 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 an herbicide containing picloram and 2,4:D (1:4; trade names Grazon P+D, Gunslinger, or Picloram+D) under ideal conditions. To prepare the spray mix, add the herbicide to water (see table on the next page). To make sure the foliage is coated thoroughly, add a high-quality (80 to 90 percent active ingredients) non-ionic surfactant to the spray mix. Add a dye, such as Hi-Light™ blue dye, to mark plants that have been sprayed and ensure proper coverage.

3. Spray the Tallow Trees

Adjust the nozzle to deliver a coarse spray in a wide pattern.

Wet ALL the leaves of each tallow tree 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 trees become bigger and denser. Download the Brush Busters Cost Calculator app to easily estimate treatment costs.
- ▶ Controlling Chinese tallow trees is not a one-time job. You need to monitor your land every year to check for new plants.

*Professors and Extension Range Specialists, The Texas A&M University System

RECOMMENDED LEAF SPRAY HERBICIDE MIX OPTIONS*

Ingredient	Concentration in Spray Solution	Tank Size			
		1 gal	3 gal	14 gal	25 gal
Picloram:2,4-D (1:4) herbicide	1%	1.28 oz	3.84 oz	18 oz	32 oz
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 leaf spray solutions are mixed in water.

BRUSH BUSTERS STEM SPRAY METHOD

Works well on: Young seedlings or older trees with three or fewer basal stems. Multi-stemmed tallow tree 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: Any time during the year, although the 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 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 cost-effective.

2. Prepare 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.

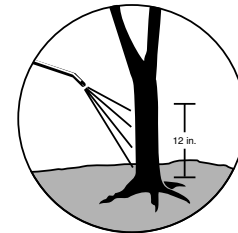
The herbicide concentration will depend on Chinese tallow tree bark roughness. Pour the correct amount of herbicide into the mixing container, then add diesel fuel (or basal bark oil) to bring the mixture to the total volume desired. Agitate the mixture vigorously.

RECOMMENDED STEM SPRAY HERBICIDE MIXES

	Tallow Tree Stem	Herbicide	Herbicide/ Gallon	Herbicide Carrier/Gallon
Option A	Smooth bark	Triclopyr ester, 15%	19 oz	109 oz diesel or basal bark oil
Option B	Rough bark	Triclopyr ester, 25%	32 oz	96 oz diesel or basal bark oil
Add to option A or B (optional)		Hi-Light™ blue dye	0.32–0.64 oz	

3. Spray the Chinese Tallow Trees

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 up to 12 inches. Apply the mixture to all sides of every stem, but do not wet to the point that it runs off the stem and puddles.



Keep These Points in Mind:

- ▶ Follow all 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.
- ▶ Rough-bark tallow trees (usually older trees) are much harder to kill than smooth-bark plants.
- ▶ Multi-stemmed plants are more difficult to control with this method. It is best to use on plants with three or fewer stems.
- ▶ Do not spray when basal stems are wet.
- ▶ Dense grass around basal stems makes this method more difficult to apply.
- ▶ With triclopyr ester, use herbicides that contain 4 pounds per gallon of triclopyr acid equivalent (ae).