Saltcedar is one of the most invasive, hard-to-control woody plants in the world. Introduced from Eurasia into the western United States in the early 1800s, this plant rapidly spreads along rivers, lakes and streams. Once established, it quickly chokes out desirable vegetation. Most important, saltcedar can draw water from underground aquifers—as much as 200 gallons per plant per day.

Here are two three-step ways to control saltcedar. They 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 saltcedar with little damage to desirable vegetation.

Keep in mind that controlling saltcedar is not a one-time job. Seeds are easily spread by wind and water, so you will need to check your land regularly to find and get rid of unwanted seedlings.

Professionals with the Texas Agricultural Extension Service and the Texas Agricultural Experiment Station have developed, tested and approved these methods for saltcedar control. Your results may vary, but you should be able to kill more than seven of ten saltcedar 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, and they are smooth-barked, you will find the Stem Spray Method works best. If you have denser growths of saltcedar, but most are less than 8 feet tall, the Leaf Spray Method may be more suitable. Neither of these methods is recommended for very dense growths of plants more than 8 feet tall. Whichever method you choose, with these simple directions you will be able to control your saltcedar the 1-2-3 Brush Busters way.
Brush Busters Leaf Spray Method

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

**When to Apply:** July through September, or until leaves begin to turn yellow.

1. **Prepare Equipment**
   You may use a pump-up garden sprayer, backpack sprayer, cattle sprayer, or sprayer mounted on a 4-wheel, all-terrain vehicle (ATV). Backpack sprayers and ATV sprayers will be more efficient if there are many plants to spray. Make sure your sprayer has an adjustable cone nozzle (X6 to X8 ori-fice size) that can deliver a coarse spray (large droplets).

2. **Mix Herbicides**
   You can kill 76 to 100 percent of roots by spraying saltcedar with a mixture of the herbicides Arsenal® and glyphosate.

   To prepare the spray mix, add 1/2 percent concentrations of Arsenal® and glyphosate to water (see table below). To ensure a thorough coating of the leaves, add a commercial surfactant or liquid dishwashing detergent to the spray mix. It is a good idea to add a dye, such as Hi-Light Blue Dye®, to mark plants that have been sprayed.

   **Recommended Leaf Spray for Saltcedar:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration in spray solution</th>
<th>Tank size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenal®</td>
<td>1/2%</td>
<td>2 oz.</td>
</tr>
<tr>
<td>Glyphosate®</td>
<td>1/2%</td>
<td>2 oz.</td>
</tr>
<tr>
<td>Surfactant</td>
<td>1/4%</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Hi-Light Blue Dye®</td>
<td>1/4 - 1/2%</td>
<td>1-2 oz.</td>
</tr>
</tbody>
</table>

   *All spray solutions are mixed in water.
   *Glyphosate is sold under several trade names including Roundup®, Rodeo®, Glypro® and Glypho.*

3. **Spray the Saltcedar**
   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.
   - Do not spray if leaves have turned yellow.
   - Do not spray if leaves are wet.
   - Arsenal® is labeled for saltcedar control only in the western half of Texas (check with the Texas Department of Agriculture if you are in doubt).
   - Where spray may contact aquatic environments, use glyphosate and surfactant with appropriate aquatic labels.
   - Check Arsenal® label for restrictions on use related to endangered species and livestock grazing.
   - If the leaf spray contacts desirable grasses, forbs and trees it will damage those plants.
   - Cost of treatment increases rapidly as density and size of the saltcedar increase.
   - Controlling saltcedar is not a one-time job. You will need to go over your land now and then to get rid of unwanted saltcedar re-sprouts and seedlings.
**Works Best:** On low densities of saltcedar and larger, tree-type plants. Known in the past as low-volume basal application, this method does not work well for multi-stemmed plants.

**When to Apply:** Anytime during the year, although best results occur when plants are treated during the 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 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. This nozzle is cost effective because it can reduce the quantity of spray applied by 80 percent over standard nozzles.

2 **Mix Herbicide with Diesel**
A mixture of the herbicide Remedy® and diesel fuel is very effective for this application method. Diesel fuel ensures good coverage and herbicide absorption through the saltcedar bark. The recommended concentration of Remedy® is 25 percent (see mixing table below). To mix, pour the required quantity of herbicide into a 1-gallon container, then bring to total volume with diesel fuel. Agitate the mixture vigorously.

### Recommended Stem Spray for Saltcedar.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
<th>Amount/gallon mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remedy®</td>
<td>25%</td>
<td>1 qt.</td>
</tr>
<tr>
<td>Diesel</td>
<td>75%</td>
<td>3 qts.</td>
</tr>
</tbody>
</table>

3 **Spray the Saltcedar**
Stem applications are effective anytime of the year, although 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 up to 12 inches from the ground. Apply the mixture to all sides of every basal stem, but not to the extent that runoff and puddling occur.

**Keep These Points in Mind:**
- Follow herbicide label directions.
- Cost of treatment escalates rapidly as density of saltcedar increases or number of basal stems per plant increases.
- Multiple-stemmed plants are more difficult to control with this method.
- After mixing herbicide with diesel fuel, shake or agitate the mixture vigorously.
- Controlling saltcedar is not a one-time job. You will need to go over your land now and then to get rid of unwanted saltcedar re-sprouts and seedlings.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service or Texas Agricultural Experiment Station is implied.

Produced by AgriLife Communications and Marketing, The Texas A&M University System
Texas AgriLife Extension publications can be found on the Web at: http://AgriLifebookstore.org

*Educational programs of the Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.*

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture.
Edward G. Smith, Director, Texas AgriLife Extension Service, The Texas A&M University System.
5M, New