How to Take the Green Out of Greenbriar

A safe and effective three-step way to control greenbriar

Individual Plant Treatment Series

J. F. Cadenhead, III, Assistant Professor and Extension Range Specialist
The Texas A&M University System
Greenbriar is a native, perennial, woody vine of the Smilax family. Individual plants may vary in leaf shape and color, and in the number of spines they contain. Greenbriar may have underground stems and/or tubers. The canes or aboveground stems are soft and fleshy in early stages of growth, but quickly mature into stout, woody vines with tendrils for climbing trees, fences and other structures.

The small, mostly yellowish-green flowers are borne in umbrella-shaped clusters from April through June and produce many small clusters of reddish to purplish to black berries.

Greenbriar, whether spined or spineless, often becomes a problem by forming large, almost impenetrable thickets that can prevent access by people and livestock.

There are no ground or aerial broadcast recommendations for effectively controlling greenbriar. Broadcast applications of various herbicides have not provided consistent control of this tough, woody vine. However, the following 3-step method is easy to use, environmentally responsible and effective. This method treats individual plants with a mixture of herbicide and diesel or vegetable oil applied to the basal stems.

Keep in mind that controlling greenbriar is not a one-time job. The plant produces many seeds that, along with the hard-to-kill tubers, will eventually produce new plants. New plants also must be treated. The 3-step method was developed and tested by professionals with Texas Cooperative Extension and the Texas Agricultural Experiment Station. Your results may vary, but if correctly used, this method should kill at least 7 of 10 plants treated.

**Works Best:** On greenbriar that is growing on fencelines or where the basal stems are easy to access for spraying.

**When to Apply:** This method works best during the winter when most of the leaves are gone and the basal stems can be covered more readily with the spray mix.

1. **Prepare Equipment**
   The herbicide can be applied with a pump-up garden sprayer, backpack sprayer, or sprayer mounted on an ATV (all-terrain vehicle). Make sure the sprayer has an adjustable cone nozzle with a small orifice such as the Conejet 5500 X-1, available from spraying Systems Company. The smaller orifice can reduce the volume of spray used by as much as 80 percent over standard nozzles.

2. **Prepare the Herbicide Mix**
   Use Remedy® herbicide in a mixture with diesel fuel oil at a concentration of 25 percent Remedy® and 75 percent diesel. For example, to make 1 gallon of mix: Use 1 quart of Remedy® in 3 quarts of diesel fuel oil. Agitate the mixture vigorously before application. A commercial vegetable oil carrier can be substituted for diesel if desired.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration of total mix</th>
<th>Amount/gallon mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remedy®</td>
<td>25%</td>
<td>1 quart</td>
</tr>
<tr>
<td>Diesel</td>
<td>75%</td>
<td>3 quarts</td>
</tr>
</tbody>
</table>

**Spray the Greenbriar**

Be sure to adjust the sprayer nozzle to deliver a narrow, cone-shaped mist. Spray the mixture lightly but evenly on every basal stem from the ground level up to about 12 inches high. Spray to coat each stem all the way around, but not to the point that the mixture runs off or puddles.

**Keep these points in mind:**
- Follow directions on the herbicide label.
- The cost of treatment escalates rapidly as the density of greenbriar increases or the number of basal stems increases.
- Use an adjustable cone nozzle with a small orifice, such as an X-1, to reduce volume and waste.
- Do not spray when greenbriar stems are wet.
- Best results occur during the winter when more basal stems are exposed.
- After mixing herbicide with diesel fuel or vegetable oil, shake or agitate the mixture vigorously before application.
- Controlling greenbriar is not a one-time job and re-treatment may be necessary.