## **Individual Plant Leaf Spray Method**

**Works Best:** If you have only a few or scattered common broomweed plants to control or when you do not have a ground broadcast sprayer.

When to Apply: This treatment works best if used during spring to early summer while the plants are actively growing and before they have matured.

## 1 Prepare the Equipment

The only equipment you will need is a pump-up garden sprayer, backpack sprayer, high-pressure sprayer or a sprayer mounted on a 4-wheel, all-terrain vehicle (ATV). If you have many plants to spray, backpack sprayers and ATV sprayers are more efficient.

Make sure your sprayer has an adjustable cone nozzle (X6 to X8 orifice size) that can deliver a coarse spray (large droplets).

### **2** Prepare the Herbicide Mixture

You can expect very high (76 to 100 percent) control of common broomweed using 2,4-D, Grazon  $P+D^{\text{\tiny{IM}}}$ , Weedmaster or Range Star. All herbicides are mixed with water at a 1 percent concentration (see mixing table below).

#### To mix:

Fill the spray tank half full of water, add the required amount of herbicide, surfactant and dye, then continue to fill the tank to the desired level with water. Be sure to add a spray marking dye and add the surfactant at  $\frac{1}{4}$  to  $\frac{1}{2}$  percent.

#### Herbicide rates for individual plant leaf spray.

	Concentration in Spray	Amount of ingredient for varying spray tank sizes (gallons)		
Ingredient	Solution	3	14	25
Herbicide	1%	4 ounces	18 ounces	32 ounces
Surfactant	1/4%	1 ounce	5 ounces	8 ounces
Dye	1/4%	1 ounce	5 ounces	8 ounces

All spray solutions are mixed in water.

### Spray the Common Broomweed

Spray individual common broomweed plants in the spring or early summer before the plants have completed brooming. Do not spray when the wind is higher than 10 mph, the temperature is above 90 degrees F or the humidity is below 10 percent. Thoroughly wet all foliage of the plant until the leaves glisten but not to the point of dripping.

Do not mow or disturb the plants during the growing season in which they have been treated.

#### Keep these points in mind:

- Follow the directions on the herbicide label.
- The treatment cost escalates rapidly as the number of common broomweed plants per acre increases.
- Do not spray the plants when they are wet.
- Avoid contacting desirable plants and shrubs with spray.
- Controlling common broomweed is not a one-time job—you may need to treat again, depending upon the timing and amount of winter rainfall.

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# How to Control Common (Annual) Broomweed

Safe and effective three-step ways to control common broomweed

#### **Weed Treatment Series**

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Yommon broomweed, also called annual broomweed, is a native, warm-season, broadleaved plant of the sunflower family. It usually produces one erect stem (the broom "handle") arising from a taproot that grows to a height of 1 to 4 feet. It also makes a bushy head (the "broom"), which produces small yellow flowers that in turn provide numerous tiny brown seeds.

The seeds can be an important food source for quail and other wild birds. Also, the plant's canopy provides quail and other ground birds some protective cover from predators.

Common broomweed is a prolific seed producer. It can readily germinate and grow into thick stands that completely shade the ground and outcompete grasses and other desirable plants for soil moisture and nutrients. In a "broomweed year" of unusually heavy growth, a solid broomweed canopy can obstruct livestock access to grasses and cause eye irritations and eventually pinkeye infections.

To control common broomweed, two methods have been developed, tested and approved by professionals with Texas Cooperative Extension and the Texas Agricultural Experiment Station. These methods each have three steps and are easy to use, environmentally responsible and effective.

- · The ground broadcast spray method is for larger areas with heavy infestations.
- The individual plant leaf spray method can be used for scattered or smaller infestations.

Using these weed busters methods, you will be able to more selectively kill unwanted common broomweed plants and reduce damage to other, desirable vegetation.

Keep in mind that controlling common broomweed is not a one-time job. Seasonal rainfall patterns greatly influence the germination and growth of common broomweed, so you may need to treat again, especially in a prolific "broomweed year."

Your results may vary, but if correctly applied, these methods should kill at least seven of every ten plants treated.

## **Ground Broadcast Spray Method**

Works Best: When you wish to control common broomweed on larger or heavily infested areas.

When to Apply: For best results, apply during early through late spring (late March through May) when common broomweed plants are actively growing but less than 6 inches tall.

#### **Prepare the Equipment**

The herbicide can be applied with a boom or boomless broadcast sprayer able to deliver at least 10 gallons per acre total spray volume. Trailer-mounted sprayers or 4-wheel all-terrain vehicles (ATVs) may be used. For step-by-step instructions on how to calibrate a ground broadcast sprayer, see Extension publication L-5465, Weed Busters: Sprayer Calibration Guide.



#### Prepare the Herbicide Mix

Several herbicide mixtures may be used to effectively control common broomweed with the ground broadcast method (see table below). The rates of application are typically lower when treating earlier in the season when plants are immature; the rates increase as plants mature later in the spring.

#### To mix:

First, fill the spray tank half-full with water, then add the recommended amount of herbicide and surfactant to the spray tank. Finally, fill the spray tank with water to the desired volume, using agitation to mix.

Herbicide rates for ground broadcast applications.

	Herbicide/Acre		
Herbicide	Early (<6 inch tall)	Late (>6 inch tall)	
2,4-D	1 pint	2 pints	
Weedmaster™ or Range Star™	1 pint	2 pints	
Grazon P+D™	1 pint	3 pints	
Cimarron™, Ally™ or Escort™	0.1 ounce	no late rate	

Important: Add 1/4% to 1/2% surfactant to the spray tank when using any of the above treatments.



#### (3) Spray the Common Broomweed

For best control, apply the herbicide in March, April or May. If you are using a spray boom, use flat fan nozzles and elevate the boom at least 18 inches higher than the weeds being treated.

When making multiple passes to cover an area, use wire flags or wooden stakes to mark the center of each pass. It may help to block off larger areas into several smaller ones so that passes are not too long.

#### Keep these points in mind:

- Follow the directions on the herbicide label.
- The cost of treatment with this method remains constant regardless of number of broomweed plants per acre.
- Spray with a minimum total spray volume of 10 gallons per acre.
- Avoid herbicide "drift" onto sensitive or nontarget areas.
- Do not spray when winds are over 10 mph.
- Controlling common broomweed is not a one-time job—you may need to treat again when winter moisture sets the stage for a "broomweed year."

