

Individual Plant Leaf Spray Method

Works Best: For controlling low densities of Drummond's or common goldenweed plants or if a ground broadcast sprayer is unavailable.

When to Apply: This treatment works best if used during the spring after rainfall and after at least 2 inches of new terminal growth has occurred.

① Prepare the Equipment

The leaf spray can be applied with a pump-up garden sprayer, backpack sprayer, cattle sprayer or a sprayer mounted on an ATV. If many plants need to be sprayed, backpack and ATV sprayers are more efficient.

Make sure your sprayer has an adjustable cone nozzle (ConeJet 5500 - X6 to X8 orifice size) that can deliver a coarse spray (large droplets).

② Prepare the Herbicide Mixture

You can expect greater than 76 percent control of goldenweed by spraying with Grazon P+ D™, Weedmaster™ or Range Star™ in water with a surfactant.

To prepare the spray mixture, fill the spray tank half full of water, then add the desired amount of herbicides and surfactant. Continue to fill the tank to the desired level with water. It is also advisable to add a color dye to the mixture to mark the plants that have been sprayed, which will help you make sure the plant foliage is covered completely.

The following table of recommended spray mixtures gives the proper amounts of ingredients for typical spray tank sizes.

Mixing table for leaf spray applications

| Ingredient | Concentration in Spray Solution | Amount of ingredient for varying spray tank sizes (gallons) | | |
|---|---------------------------------|---|-----------|-----------|
| | | 3 | 15 | 25 |
| Grazon P + D™ or Weedmaster™ or Range Star™ | 2% | 8 ounces | 39 ounces | 64 ounces |
| Surfactant | ¼% | 1 ounce | 5 ounces | 8 ounces |
| Dye | ¼% | 1 ounce | 5 ounces | 8 ounces |

All spray solutions are mixed in water.

③ Spray the Goldenweeds

Spray individual goldenweed plants in the spring after terminal growth has occurred. Wet all foliage of the plant thoroughly until the leaves glisten, but not to the point of dripping.

Do not mow or disturb the plants for one growing season after treatment. Do not spray when wind speed exceeds 10 mph or when temperatures are extreme (90 to 100 degrees F) or humidity is below 30 percent.



Keep these points in mind:

- Follow the herbicide label directions.
- The cost of treatment escalates rapidly as number of plants per acre increases.
- Do not spray when the plants are wet.
- Avoid contacting desirable plants and shrubs with spray.
- Controlling Drummond's and common goldenrod is not a one-time job. You may need to re-treat from time to time.



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How to Get Drummond's and Common Goldenweed

*Safe and effective
three-step ways
to control the goldenweeds*

Weed Treatment Series

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Ground Broadcast Spray Method

Two species of goldenweed—common and Drummond’s—are well adapted to soils and range sites in South Texas. Drummond’s goldenweed occurs mainly in a narrow band along the Coastal Prairie. Common goldenweed inhabits the Rio Grande Plain north and west to Maverick and Kinney counties.

Both are many-branched multi-stemmed perennial subshrubs with woody bases and rounded canopies that grow to 2 to 3 feet tall. Their resinous, aromatic leaves are about 1 inch long and vary in shape from simple and linear to toothed or even compound.

Bright yellow flowers develop in late fall. Flowers may occur singly or in clusters, with as many as 20 at the stem tips. The seeds are small, hairy and bristled.

Both species contain tremetol, a compound poisonous to animals. Young animals may be affected through the mother’s milk. Fortunately, goldenweeds are not usually browsed by either livestock or deer, and few cases of poisoning are documented. A close relative, rayless goldenrod, causes significant livestock losses annually in West Texas. (See Extension publication L-5464, *Weed Busters: How to Repel Rayless Goldenrod*.)

In recent decades, goldenweeds have become more dense and abundant in South Texas. They often occur as scattered individuals in the understory of woody plant communities. However, when the brush cover is removed and the soil disturbed, goldenweeds often develop dense stands and dominate range sites of moderate to high potential productivity. Stands of 3,000 plants per acre are common.

Professionals with Texas Cooperative Extension and the Texas Agricultural Experiment Station have developed, tested and approved two three-step ways to control goldenweeds. These control methods are effective, easy to use and environmentally friendly.

The ground broadcast method is ideal for treating large, dense areas of infestation. The individual plant foliar leaf spray is best for treating sparse infestations.

Using these Weed Busters methods, you will be able to selectively kill unwanted goldenweed plants with little or no damage to desirable vegetation. Your results may vary, but you should be able to kill at least seven of every 10 plants treated.

Works Best: To control the goldenweeds on larger or heavily infested areas.

When to Apply: This method works best if used in the spring during good growing conditions and after rainfall when at least 2 inches of new terminal growth has occurred.

① Prepare the Equipment

Use a boom or boomless broadcast sprayer that can deliver a total spray volume of at least 10 gallons per acre. Many types of broadcast sprayers are available, including trailer-mounted sprayers and four-wheel all-terrain vehicles (ATVs).

Always check the sprayers for consistency of application and calibrate them before use. For step-by-step instructions on calibrating ground broadcast sprayers, see Extension publication L-5465, *Weed Busters Sprayer Calibration Guide*.

② Prepare the Herbicide Mix

Three herbicides can effectively control common and Drummond’s goldenweed with the ground broadcast method: Grazon P+ D™, Weedmaster™ and Range Star™ (the latter two contain the same active ingredient). All are applied in a water carrier with a 90 percent active non-ionic surfactant.

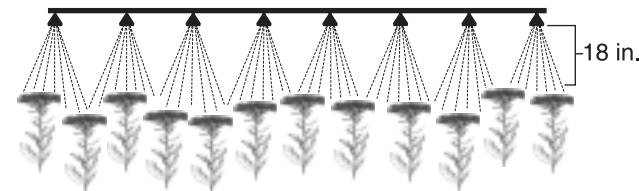
To mix, first fill the spray tank half full of water, then measure and add the appropriate amounts of herbicide and surfactant. Continue filling the spray tank with water to the proper level with agitation. The application rate for all the herbicides is 3 pints of active ingredient per acre. Refer to the Weed Busters calibrating guide for proper mixing of herbicides.

| Herbicide | Rate/Acre | Surfactant |
|-------------|-----------|------------|
| Weedmaster™ | 3 pints | ¼% |
| Range Star™ | 3 pints | ¼% |
| Grazon P+D™ | 3 pints | ¼% |

③ Spray the Goldenweeds

Apply broadcast sprays during the spring, typically during April and early May for most of South Texas. We recommend that boom sprayers be equipped with flat fan spray nozzles, with the boom elevated about 18 inches higher than the goldenweed canopies.

When making multiple passes to cover an area, you may be able to cover it more uniformly if you use wire flags or wooden stakes placed a boom-width apart on each end of the spray area. To keep swath runs from becoming too long when making ground broadcast applications, it may help to block off larger areas into several smaller ones.



Keep these points in mind:

- Follow the herbicide label directions.
- The cost of treatment with this method remains constant regardless of number of plants per acre.
- Use at least 10 gallons per acre.
- Do not spray when the plants are wet.
- Spray only during the spring.
- Take care not to let the spray “drift” onto sensitive or nontarget areas.
- Do not spray when wind speeds are greater than 10 mph.
- Controlling the goldenweed is not a one-time job. You may need to re-treat from time to time.