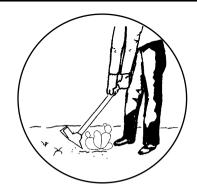
Brush Busters Top Removal Method

Cut the main root of pricklypear 2 to 4 inches below the soil surface with a grubbing hoe or shovel. Remove the detached plants from the area, or stack them on piles of brush.

Remember, any pricklypear pads in contact with the soil will likely root and grow new plants. Tasajillo and cholla are not controlled easily by hand grubbing because of their growth form and reinfestation from broken plant parts.



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 Texas A&M AgriLife Extension Service is implied.

Texas A&M AgriLife Extension Service

AgriLifeExtension.tamu.edu

More Extension publications can be found at AgriLifeBookstore.org

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

The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.

Texas A&M





How to Take Care of Pricklypear and Other Cacti

A safe and effective three-step way to control pricklypear, tasajillo (pencil cholla), tree cholla, dog cactus, and other cacti on small or large acreages

Individual Plant Treatment Series

Allan McGinty, Professor and Extension Range Specialist Darrell Ueckert, Regents Fellow and Professor, Rangeland Ecology and Management, Texas AgriLife Research The Texas A&M University System



ricklypear and other species of cacti may interfere with the movement and handling of livestock and with forage utilization, cause serious livestock health problems, and compete with desirable forage plants. These plants are extremely tolerant of drought and harsh conditions and are protected from grazing animals to some extent by their spines. Pricklypear and other species of cacti thrive across the western half of Texas in rural pastures and urban lots. They can grow and multiply very rapidly.

Here are two methods to control pricklypear and other cacti that are easy, inexpensive, environmentally responsible, and effective. One Brush Busters method involves spraying a small but potent concentration of herbicide directly on the pads or stems of individual plants. By following the simple three-step directions, you'll be able to selectively control pricklypear and other cacti without damaging your desirable trees, shrubs, forbs, or grasses. The second method uses no herbicide; it controls the plant by simple top removal.

Controlling pricklypear and cacti is not a one-time job. There are many viable seeds in the soil that may germinate in the future. Livestock and wildlife also spread the seeds and scatter the pads and joints over wide areas, so you'll need to go over your land occasionally to get rid of unwanted seedlings.

Remember that pricklypear may have value as a livestock feed during drought and as food and cover for wildlife, such as quail, deer and javelina. Keep these points in mind when deciding whether to control your pricklypear, how much you should kill, and where to target your control efforts. The Brush Busters methods are selective; they allow you to get rid of the pricklypear you don't want, and keep those you wish to keep.

Professionals with Texas AgriLife Research and the Texas AgriLife Extension Service, both agencies of The Texas A&M University System, have developed and approved these Brush Busters methods of pricklypear and cacti control. Your results may vary with weather and other conditions, but you should be able to knock out more than seven of ten of the pricklypear or cacti treated.

The Brush Busters methods are best suited for controlling relatively low densities of these spiny pests. Aerial broadcast herbicide applications, prescribed fire, or a combination of these two conventional control methods may be better suited for heavy infestations in areas where these methods are practical. The Brush Busters methods are ideally suited as follow-up treatments a few years after the conventional control methods have been used.

Brush Busters Pad or Stem Spray Method

Works Best: On relatively thin stands of pricklypear, tasajillo (pencil cholla), tree cholla, dog cactus and other species of cacti.

When to Apply: The Brush Busters pad or stem spray method can be applied throughout the year. The herbicide used in the Brush Busters method, Surmount™, is taken up through the pads and stems and through the roots after rains have moved the herbicide into the soil. The absence of rain for extended periods after spraying may reduce plant kill.



Prepare the Equipment

Small pump-up garden sprayers, backpack sprays, cattle sprayers, or sprayers mounted on four-wheel-drive allterrain vehicles (ATVs) work well. Garden sprayers are best for small acreages. Backpack sprayers may be more efficient in dense stands or where there are dense stands of brush. ATV sprayers become more efficient on very large acreages or where the plants are far apart. Make sure your sprayer has a nozzle that can deliver a coarse spray (large droplets). A fan-type nozzle may be more efficient for large pricklypear plants, but an adjustable cone nozzle, such as the Spraying Systems Co. Conejet® 5500-X6 or -X8 will be more efficient for smaller plants.



Mix the Herbicide Spray

You can achieve 76 to 100 percent rootkill of pricklypear and other cacti by spraying with the herbicide Surmount™. The ingredient in this product that kills pricklypear and other cacti is picloram.

To prepare the spray mix, add Surmount[™] at a 1percent concentration to water. To ensure a thorough coating of the waxy pads or stems, add either a non-ionic surfactant or liquid dishwashing detergent to the spray mix (see the table below). It will be helpful to add a spray marking dye, such as Hi-Lite™ Blue Dye, to mark plants that have been sprayed and to tell if you are getting enough spray on the green pads or stems.

Recommended spray mixture¹.

	Concentration	Tank size		
Ingredient	in spray solution	3 gal	14 gal	25 gal
Surmount™	1%	4 oz	18 oz	1 qt
Surfactant	1/4 %	1 oz	5 oz	8 oz
Hi-Light™ Blue Dye	1/4-1/2 %	1–2 oz	5–9 oz	8–16 oz

¹All spray solutions are mixed in water.



(3) Spray the Pricklypear or Other Cacti

The spray can be applied year-round, except during extremely cold weather. Apply the spray until the pads or stems are almost wet, but not to the point of runoff. Results will be faster and more consistent if you spray both sides of the pricklypear pads. The Hi-Lite™ Blue Dye is most effective when the grasses growing within the cacti are dormant due to dry or cold weather.

Keep these points in mind:

- To buy and use Surmount™ requires a Pesticide Applicator License from the Texas Department of Agriculture. See your county Extension agent for license information.
- Follow the herbicide label directions.
- Pricklypear dies very slowly after the application of pad or stem sprays. Total plant kill may take 2 or 3 years.
- Do not spray when the pads or stems are wet.
- Do not spray when the air temperature is below 60°F.
- Do not spray if you are working immediately upwind of desirable trees, shrubs, or susceptible crops.
- Do not spray within 100 feet of known sinkholes or fractures that would allow the herbicide to enter underground water aquifers.
- To avoid damage to desirable trees such as live oak or pecan, do not spray dense pricklypear or other cacti growing beneath these trees.
- · Cost of treatment increases rapidly as the density and size of pricklypear or other cacti increase.
- Do not spray within 20 yards of the habitat of endangered plants. Check with the U. S. Fish and Widlife Service if you need information about threatened or endangered plants in your area.
- Large pricklypear plants may be nesting sites for quail in areas where bunchgrasses are rare or heavily grazed. Pricklypear may also be of value as livestock feed during drought and as a food source for white-tailed deer or javelina in South Texas.

