

Brush Busters Top Removal Method

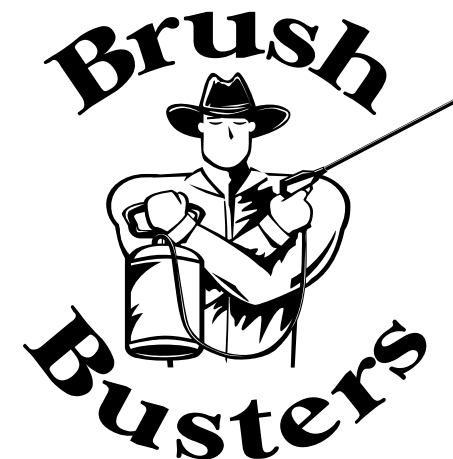
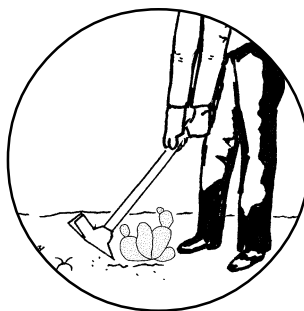
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Cut the main root of pricklypear 2 to 4 inches below the soil surface with a grubbing hoe or shovel. Remove the detached plants from the area, or stack them on piles of brush. Remember, any pricklypear pads in contact with the soil will likely root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



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.

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Individual Plant Treatment Series

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Brush Busters Pad or Stem Spray Method

Pricklypear and other species of cacti may interfere with 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 have the ability to grow and to increase in abundance 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, and 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 the Texas Agricultural Experiment Station and the Texas Agricultural 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.

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, Tordon 22K™, 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.

① Prepare Equipment

Small pump-up garden sprayers, backpack sprays, cattle sprayers, or sprayers mounted on 4-wheel all-terrain 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 capable of delivering 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.

② Mix Herbicide Spray

You can achieve 76 to 100 percent rootkill of pricklypear and other cacti by spraying with the herbicide Tordon 22K™. The ingredient in this product that kills pricklypear and other cacti is picloram.

To prepare the spray mix, add Tordon 22K™ at a 1% 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 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 an adequate amount of spray on the green pads or stems.

Recommended spray mixture¹.

Ingredient	Concentration in spray solution	Tank size		
		3-gal.	14-gal.	25-gal.
Tordon 22K™	1 %	4 oz.	18 oz.	1 qt.
Surfactant	1/4 %	1 oz.	5 oz.	8 oz.
Hi-Lite™ Blue Dye	1/4 - 1/2 %	1 - 2 oz.	5 - 9 oz.	8 - 16 oz.

¹ All 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 both sides of the pricklypear pads are sprayed. The Hi-Lite™ Blue Dye will be most effective when the grasses growing within the cacti are dormant due to dry or cold weather.

Keep these points in mind:

- The purchase and use of Tordon 22K™ requires a Pesticide Applicator License from the Texas Department of Agriculture. See your county Extension agent for license information.
- Follow herbicide label directions.
- Pricklypear dies very slowly following 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 air temperatures are very low.
- 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 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 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 Wildlife 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.
- Mechanical injury that bruises or punctures the surface of pricklypear pads or stems immediately before spraying will speed up and improve plant kill.

