

DESERT PRICKLY PEAR CACTUS

(*Opuntia sp.*)

Background/ Description

Desert prickly pear cactus (*Opuntia sp.*) is native to the United States' southwestern regions, lower Great Plains, and northern Mexico. It naturally occurs in sandy or rocky hills as well as in valleys, flats, and canyons. It uses very little water and tolerates heat very well.

Growing to 3—6 feet in height, and branching out in clumps as much as 10 feet in diameter. Each pad can measure about 8 inches wide, and 12 inches long containing clusters of sharp spines and tiny barbed hairs called glochids that are difficult to remove from the skin.

The plant produces flowers about 2 inches in diameter of various mixed colors ranging from yellow, orange, pink, and red. Blooming takes place during the spring through summer months, allowing for the fruit to form once pollinated. Seeds are intact within the fruit of the plant and can reproduce through this method. Prickly pear also reproduces when pads detach from the parent plant and takes root.

Biological Control

Currently, there are no approved biological control methods to manage prickly pear cactus.



Picture courtesy of Emilio Carrillo, Rangeland Management Specialist, Tucson, AZ



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Cultural Control

Prevention is critical to the management of prickly pear cactus. Seeding with desirable and competitive plants can help reduce the chances of new infestations. Prescribed burning can reduce populations, but only when fires reach high enough temperatures to rupture plant cells. Surviving plants from fire takes only 3 to 5 years to return to the original size before the fire. Grazing is not suggested as this can further spread populations to other areas.

Mechanical Control

Heavy mechanical brush control such as chaining, disking, roller chopping, and root plowing are not effective in controlling prickly pear cactus. This process can increase the density. Individual plant removal such as grubbing can have the same effect but not as dramatically.

When mulching is added into a plant removal practice, it has had better success. Piles of discarded plant material should be removed or burned to prevent regrowth.

Chemical Control

A piece of prickly pear cactus can form a new plant in one year, while germinating from the seed takes only one week. Using an herbicide to control this plant can be more time-efficient and successful than other management practices. A combination of methods has the highest success rate for control.

Treating *Opuntia* sp. during the peak bloom period will produce the highest chance of success. However, this plant species can be treated throughout the year using various chemical compounds and label recommendations. The following table lists a few herbicides that have qualities to manage or control prickly pear cactus. Repeat applications may be necessary for consecutive years to eliminate the entire plant properly.



Use precautions when using any herbicide treatment. Following and reading the label will give you the best safety and instructions results. Remember, the label is the law!

HERBICIDE	RATE PER ACRE	APPLICATION TIMING/ NOTES
Fluroxypyr (Vista XRT) *	23 oz. (Max. per year)	Broadcast or spot spray application. Can be applied in the spring or fall. Mix with basal oil for best results.
**Picloram (Tordon 22 K) *	1/2 to 1 pint	Spot spray during peak flowering stage. Use an oil-water emulsion spray mixture to improve control.
(**Picloram) + 2,4-D Amine (Cornbelt 4 lb. Amine) *	2 to 4 pints	Treat during bloom stages. Avoid wind to reduce drift. Spray in temperatures below 80 degrees. Keep stored above 40 degrees.

*Add a methylated seed oil (MSO) surfactant (Locktite, etc.) to herbicide for better surface contact.

**Use the suggested rate of picloram in the table. Picloram is a Restricted Use herbicide and requires a certified pesticide applicator to make applications.

References

- Lady Bird Johnson Wildflower Center. "Plant Database: *Opuntia phaeacantha*." https://www.wildflower.org/plants/result.php?id_plant=opph. 2021
- Courtney Darling- Institute of Food and Agriculture Sciences and University of Florida. "UF IFS University of Florida: Topic Tuesday: Prickly Pear Cactus... More Like Pesky Pear Cactus." <http://blogs.ifas.ufl.edu/suwanneeco/2020/03/31/topic-tuesday-prickly-pear-cactus-more-like-pesky-pear-cactus/#:~:text=For%20broadcast%20applications%2C%20fluroxypyr%20herbicides,8%20months%20after%20the%20application.> March 2020
- United States Department of Agriculture. (2014). Field Guide for Managing Prickly Pear in the Southwest [Fact Sheet]. U.S. Forest Service. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5410122.pdf

