



Control Cholla Cactus

Guide B-804

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Cholla, often called tree cactus, walkingstick cholla, or cane cactus, is widely distributed throughout most areas of New Mexico. It is a tree-like plant growing to 8 ft tall with cylindrical joints 1 in. in diameter and 3–5 in. long. Spines are numerous and about 1 in. long. Cholla flowers are purple and mature into yellow fruit. The fruit drops to the ground when ripe, producing new plants. Cholla also can reproduce from terminal joints that fall to the ground and root when moisture is available.

Cholla often becomes a problem on rangeland when the grass cover is depleted by drought and over-utilization. After establishment, the cactus encroaches upon valuable range until dense thickets develop. These thickets hinder livestock operations and compete with needed forage for moisture and nutrients. Thick stands often result in livestock becoming “cholla eaters.”

MECHANICAL METHODS

Hand Grubbing

You can control cholla easily by “grubbing” with a pick mattock. Cut the main root 2–4 in. below the ground level and remove the plant from the area. If you clear the area carefully, regrowth should be confined to young plants not yet visible. Pile the grubbed plants and let them dry. Don’t scatter broken joints, as sprouting may occur. Prevent sprouting around the piled cholla by burning the piles when dry. Grubbing during winter or droughty years reduces reinfestation from scattered joints.

Mechanical Grubbing

You can mechanically uproot cholla plants by mounting a toothed fork on a front-end loader of a tractor. The fork is slipped under the plant and gently lifted until the cactus is uprooted. The bucket should be tilted to catch as many of the broken joints as possible. Two or three plants can be uprooted before dumping.

Mechanical grubbing is not always successful because heavy reinfestation may occur if the tractor operator is not careful. When lifting the cholla from the soil, don’t scatter the joints. Choose the best year for grubbing to allow the greatest chance for success. The cactus is more likely to dry if grubbed in December or January or in droughty summers.

CHEMICAL METHODS

Precautions

Follow directions on the USDA-approved labels on the container to prevent danger from chemical residue. Avoid drift to foliage of nearby susceptible crops. Do not spray when wind velocity is high. Do not use the same equipment to apply insecticides on crop plants, flowers, or vegetables.

Recommended Solutions

Foliage spray. Excellent results have been obtained from a solution of one part 2,4-DP, three parts diesel oil, and 20 parts water. Kills range from 95 to 100 percent. The number of gallons of mix varies with the density and size of the plants, but 1 gallon usually covers 14–20 plants.

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A spray mixture of 16 oz of picloram (Tordon® 22k), 4 oz of wetting agent, and 50 gallons of water also has given good results. Plants may not actually die for one or two years after spraying.

Basal treatment. Undiluted picloram² can be applied to the base of cholla near the ground line using 4–6 ml of product per 3 ft of plant height. Undiluted hexazone (Velpar®) at the same application rate will give similar control results.

Method of Application

Foliage spray. Hand application of herbicide solutions with knapsack, compression tank-type, and power sprayers is most effective for cholla control. Use a nozzle pressure of 25–35 lb for hand sprayers and 40 lb for power sprayers. A coarse spray (large droplets) is more desirable than mist-like fogs for covering cholla. Wet the plant thoroughly on all sides, joints, base, and trunk to the point of slight runoff for effective kill.

In dense stands, power sprayers have some added advantages over hand-sprayers: They can be pulled or carried by a truck or tractor, refilling the sprayer is not required as often, and several operators can work from one tank by attaching additional lead hoses and nozzles.

Power sprayers work well if the infested area is relatively smooth and not brushy. Hand-type sprayers can be used in any terrain and are often used to supplement power sprayers.

Basal treatment. Undiluted herbicide should be applied with a metered hand gun set to deliver 4–6 ml of product at the junction of the main stem near the ground surface. Herbicide is activated by moving the chemical into the soil to roots, and is very slow to show effects (2 to 3 years).

Time of Application

Apply spray solutions to cholla as soon as the growth becomes visible in May, and when temperatures are about 60°F. Plants in bloom are preferred for treatment. Allow two growing seasons for evaluation.

MANAGEMENT FOLLOWING CONTROL

Follow cholla control with good range management. Cholla control may not mean increased livestock numbers in the future, only an increase in usable forage supply for the livestock on hand. Don't expect large forage increases, but livestock handling should be easier.

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²Use of picloram is restricted. Ask the Extension agent in your county for information on current regulations.

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