

Manage Pricklypear After Wildfire with Tordon® 22K

Making the Best of a “Burn-Out”

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Dow AgroSciences

Tordon® 22K

Specialty Herbicide

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Wildfire is never a good thing, at least in modern times.

You can tally the loss of dwellings, outbuildings, fencing, livestock, wildlife, forage and habitat from wildfires, as well as costs of manpower, equipment and supplies to fight them. But how do you put a value on the life of even one human being lost?

Naturally occurring catastrophic events still humble us. But our native landscapes evolved with wildfires, and with the help of Mother Nature, these landscapes eventually will recover. Land managers can take action to speed the recovery process and/or foster the type of landscape desired.

Is there an opportunity?

Ranchers have learned that herbicide application soon after a fire, whether prescribed or wild, provides a “one, two, knock-out punch” to pricklypear. The herbicide can be broadcast-applied by airplane, helicopter or even ground rigs. On smaller acreages, individual plant treatment (IPT) is practical with backpack sprayers or all-terrain vehicles (ATVs) properly equipped with spray tanks and spray guns.

Regardless of the herbicide application method, the keys to successful management after fire are:

1. Know your plants and how they respond to fire
2. Know how and when to use the proper tools to manipulate those plants
3. Follow proper grazing management to assist in plant recovery.

Know how pricklypear responds to fire.

Experience shows that pricklypear and other cacti species, although adversely affected by fire, usually resprout from the root and surviving live stems.

Even without fire, pricklypear can be controlled with Tordon® 22K herbicide at the labeled rate of 2 pints per acre (1/2 pound active ingredient). With fire, however, the application rate can be reduced and control accomplished at lower cost.

Fire reduces grass cover and the litter layer on the soil surface. It removes much of the vegetation barrier to soil interception of the herbicide. This allows the herbicide to reach the soil surface, move into the soil more readily and become available for root uptake with adequate rainfall. With many shallow, lateral roots near the soil surface, pricklypear can absorb the herbicide even with small amounts of rain.

Fire-damaged pricklypear pads (cladophylls) form a barrier to herbicide absorption. So, for adequate uptake of the herbicide into the plant parts above ground, it is necessary for pads and stems to resprout. However, if you wait too long – until the pad matures in size and develops its thick, waxy cuticle covering – then it requires the standard rate (non-burned rate) of herbicide. It also takes more time to get the necessary dose into the pad and translocated to the root zone to provide control.

It is the “one, two, knockout punch” provided by soil absorption and new regrowth absorption that gives fire the edge as a pricklypear management tool.



Tools and timing.

To maximize “bang for the buck” in pricklypear control, apply herbicide to the burned pasture:

1. After the majority of new resprout are at least the size of a half-dollar in diameter and still tender
2. Soon after rainfall or just before expected rain
3. Before the new pads mature and build up their waxy cuticle layer

Base your herbicide rate on the amount of pricklypear browned out and how most of the burned pear has responded. With most of the pricklypear browned out by fire, Tordon® 22K at the labeled rate of 1 pint per acre (¼ pound active ingredient/A) consistently has provided better than 75 percent control. Rates as low as ½ pint per acre also have been used with some success, but with less consistency.

If you have a very spotty burn with only mediocre browning of pricklypear pads after two weeks, then experience would point to a higher rate of 1.5 pints/acre of Tordon 22K (3/8 pound active ingredient/A).

If individual plant treatment is practical, use a 1 percent solution of Surmount® herbicide or Tordon 22K in water with ¼ to ½ percent surfactant. Thoroughly spray all pads and crowns that have survived the fire. Again, it's best to wait until new pad growth has attained at least half-dollar size.

Without fire, fall is the best time to spray pear due to the movement of herbicides with carbohydrates to the root system. But, whenever you get burned off, try to spray as soon as you have the right plant and moisture conditions.

What if you can't get the rain in time or if the pear pads are maturing and the cuticle is thickening and the grass cover is getting taller? Because sunlight breaks down the herbicide over time, you don't want it sitting on the pads for weeks. Wait for moisture. If all the desired conditions are past, wait until the fall or early winter, and spray with the standard recommended rate of herbicide (Tordon 22K at 2 pints per acre or Surmount at 4 pints per acre). Again, you need some soil moisture.

Some patience is required in this process. Following a thorough burn and decent spray application conditions, the pricklypear will be mostly gone in 18 months or less. Without a burn, expect adequate control to take two to three years.

Follow-up grazing management.

The tender green grass produced from the burn can be grazed once it has formed at least 4 to 6 major leaves. Young, growing cattle do well on this nutritious forage. Just remember to stock the pasture based on the burned acreage only because cattle will concentrate on it and not touch the unburned part. Once burned-up fences are replaced, you can begin deferring pastures as necessary.



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Always read and follow label directions.

