



PUNCTUREVINE

Best management practices for homeowners

Tribulus terrestris

History and Identification



Puncturevine was introduced from southern Europe and is now widely scattered over much of the United States. The summer annual plant thrives in hot, dry conditions.

The plant has a small yellow flower and produces spiny seeds from July to early October. A single plant can produce 200-5000 seeds and are viable for up to five years. Puncturevine grows quickly forming dense mats with trailing stems that can extend up to five feet long.

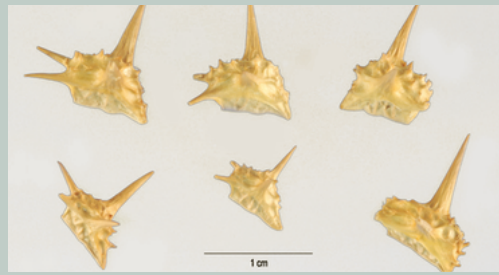
The plant is cold sensitive, but seeds are cold tolerant. It has a deep taproot which enables it to extract soil moisture from great depths.

What is the problem?

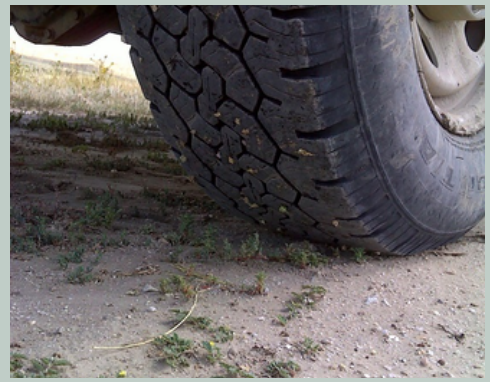
If left unchecked, Puncturevine grows quickly. While early stages may not cause an immediate problem, the resulting large mats are difficult to control.



The plant contains chemical compounds which can cause injury to livestock, with sheep being particularly vulnerable. The seeds can also cause damages to barefeet and tires. Responding to concerns, some of Wyoming's counties have added the plant to their declared invasive species list.



Is it worth controlling?



Puncturevine is easily spread long distances by animals and vehicles due to its hitchhiking sharp seeds. Although controlling established plant communities is challenging, results are rewarding. It is in the landowners interest to treat puncturevine sooner rather than later. Late state infestations where native plants have been replaced require re-establishing through reseeding.

Benefits of Removal:

- Enhanced property value.
- Prevent injury to animals and people.
- Prevent damage to tires and equipment.
- Increased physical access.
- Protect native plant communities.
- Encourage biodiversity.



Prevention

The cheapest method of control is prevention.

- Learn to recognize the plant in each of its growth stages.
- Search hot, dry areas with little vegetation. Pay special attention to edges, driveways, between rows in the garden, or bare ground.
- Mulch in ornamental beds helps discourage development.
- Healthy lawns reduce areas available for establishment. Bare ground cover consistently increases abundance, emergence, and persistence
- Research suggests that areas with low temperatures, low light intensities, and wet soil can decrease seed germination.
- As much as possible avoid parking in areas with puncturevine present. If unavoidable, remove seeds before leaving the area.
- Play, Clean, Go!

Mechanical

Mechanical removal can be successful, but you must ensure that you remove all parts of the plant, leaving no seeds or cuttings behind.

- Hand removal for smaller infestations is highly effective.
- Fold back the sprawling growth and dig up the taproot, removing the entire plant and sweeping up seeds.
- When hand pulling, be careful if thorns are present, they usually develop quickly after the yellow flower.
- Hoeing or shoveling to cut the tap root prior to seed set. If the plant has vined out and set seed, you will need to carefully collect the vines and seeds and dispose of them to reduce the seed bank.
- Dragging a piece of carpet over the ground or sweeping can pick up seeds.

Herbicides

Sometimes the scale of the problem constitutes the use of herbicides.

- Post-emergent options like 2,4-D, glyphosate, and dicamba for active growth, and pre-emergent products containing oryzalin, benefin, or trifluralin to prevent germination may be available at local hardware stores.
- Remember that glyphosate products (Roundup) is not selective and will control grass along with weeds.
- Beware of pollinators and spray drift.
- Be sure to read the LABEL. The LABEL is the law.
- Fremont County Weed and Pest has cost share available for select chemicals controlling this species. Contact your local weed and pest office for further recommendations.

Where can I find help?

Contact your local Weed and Pest District for technical assistance relating to methods of treatment.

Weed and Pest
[\(307\) 332-1052](tel:(307)332-1052)



Conservation District
[\(307\) 463-0636](tel:(307)463-0636)



City of Riverton
[\(307\) 857-7749](tel:(307)857-7749)

