

Where does it grow?

Puncturevine is often found on dry or gravelly sites, like roadsides, waste places and railroad yards. It also grows in agricultural areas such as pastures, rangelands, orchards and vineyards.

Though more commonly found in eastern Washington, puncturevine grows on both the east and west sides of the state.



Noxious Weeds in Washington

“Noxious weed” means a plant that when established is highly destructive, competitive, or difficult to control by cultural or chemical practices. RCW 17.10.10

Noxious weeds reduce crop yields, destroy native plant and animal habitat, damage recreational opportunities, clog waterways, lower land values, and poison or harm people and livestock.

Puncturevine is a Class B noxious weed in Washington State. Check with your local county noxious weed control board or go to our website to find out if control is required where you live.

Contact Us

If you have questions about puncturevine control, identification or about other noxious weeds, we can help. Please contact us at:

WA State Noxious Weed Control Board
P.O. Box 42560; Olympia, WA 98504
360-725-5764
<http://www.nwcb.wa.gov>

Or contact your local county noxious weed control board:

For information on biological control of puncturevine, contact:

WSU Integrated Weed Control Project, WSU Extension
2606 W Pioneer; Puyallup WA 98371
253-445-4657
<http://invasives.wsu.edu>



Information adapted from Lincoln County Noxious Weed Control Board Brochure “Puncturevine: Options for Control”



Control Puncturevine

a noxious weed in Washington



Identification

Puncturevine (*Tribulus terrestris*) is an annual native to Southern Europe that spreads along the ground forming mats of stems.

- Branching stems grow up to 6 feet long.
- Leaves are opposite each other on stems and are divided into leaflets, each with hairs and about ¼ inch long.
- Small, yellow, 5-petaled flowers are borne on short stalks at leaf nodes.
- Its circular, spiny burrs separate into 5 sections when ripe.



Growth & Spread

Puncturevine reproduces by seeds. Seeds germinate in late spring and early summer. Flowers may form within three weeks and continue forming for several months. Sharp-spined burrs are produced through summer and fall and are dispersed by sticking into tires, shoes, clothing, fur, feathers and animal feet. Seeds can remain dormant in the soil for many years.

Why invasive?

Puncturevine can quickly form large infestations in the right conditions. Its foliage is **toxic** to livestock, especially sheep when consumed in quantity. It is a serious weed in pastures, roadsides, waste places and cultivated fields. The hard, spiny burrs damage wool and are undesirable in hay. The spines of the fruit can injure the feet of animals and people as well as damage property such as puncturing bicycle tires, making it a problem in recreational areas.



Puncturevine Control

Puncturevine spreads by seed so controlling plants prior to seed production will prevent further seed entering the seedbank. When working in puncturevine infestations, make sure to clean shoes, clothing and tires to prevent spreading seeds to other areas. **After puncturevine control, plant areas with site appropriate plants to provide competition and reduce further puncturevine invasion.**

Mechanical:

Puncturevine can be hand-pulled or controlled by hoeing, ideally prior to seed formation in the spring. If plants have already produced seeds, make sure to remove all possible spiny burrs from the ground. Make sure to wear gloves when removing puncturevine and be careful of the sharp spines. Shallow tilling can also be used in the spring to control the plant prior to flower and seed development. Mowing is ineffective due to the plant's low growth form.



Chemical: Appropriate herbicide use can provide effective control of puncturevine. After the plants have emerged from the soil, postemergent, products are effective. The smaller or younger the plant, the better the postemergent herbicides work. When choosing a soil applied chemical for puncturevine control, consider whether a selective or non-selective product is needed. Always read the label instructions before applying any herbicides for proper rate and timing. Use chemicals that are compatible with your goals. Check with your local county noxious weed board for specific herbicide recommendations.



Biocontrol: Puncturevine seed weevil (*Microlarinus lareynii*) and puncturevine stem weevil (*Microlarinus lypriformis*) larvae and adults both attack puncturevine. Contact the WSU Integrated Weed Control Project for further information or your local county noxious weed board.