

Leafy Spurge

Euphorbia esula



Plant Family: Euphorbiaceae

Other Names: None widely accepted

Similar Species:

Weed Classification: Priority 2B

Native to: Asia and Europe

Is This Weed Toxic? Yes, humans, cattle, and horses

Chris Evans, University of Illinois, Bugwood.org

Identification

Leafy spurge is an extremely aggressive, long-lived perennial. It has recognizable yellow-green leafy flowers cupped by rounded clover-like bracts. The leaves are slender and smooth as are the stems, and the entire plant contains milky white latex that is TOXIC to both humans and many animals. Growing between 2 – 4 feet tall, it can be found in rangeland, pastures, roadsides, and ditches, and can thrive in a variety of soil types. One large plant can produce upwards of 130,000 seeds that can remain viable for up to 7 years. When the seeds reach maturity they are launched from the plant explosively, allowing for the seeds to travel up to 15 feet away from the mother plant. Combined with the unpalatability, the weed's ability to spread its own seeds quite a distance from the mother plant each year, and the very early spring growth associated with this weed, many native plants are unable to compete and are quickly overrun by the spurge. It easily overtakes and dominates large areas, displacing desirable plant communities and reducing economic value and wildlife habitat.

Treatment

Physical methods of removal when used alone are mostly ineffective due to the weed's massive root system. Hand-pulling is largely unproductive and can also put workers at risk because contact with the milky sap produced by leafy spurge can cause irritation and blistering of the skin. Contact with eyes should be avoided at all costs. Strong emphasis should be placed on wearing gloves whenever coming into contact with this plant.

Mowing can reduce seed production when timed properly but will only suppress growth. The cut weeds must be bagged and removed to be effective because the flowers can mature into seeds after they have been cut (similar to dandelions). This method is best used combined with other means of weed control.

Burning is not recommended because this plant regenerates quickly from the root system. Fire is appropriate when utilized to remove debris prior to an herbicide application and followed by reseeding.

Treatment with herbicide alone on established large spurge stands is usually a long and drawn out endeavor. The waxy coating on spurge leaves and stems makes it more resistant to optimal herbicide absorption than other weeds unless paired with a surfactant. Some restricted use herbicides have been successful in longer control of this weed while other unrestricted herbicides have also shown to be successful to a lesser extent.

Grazing sheep or goats when combined with methods such as herbicide or biocontrol can both lower seed production and decrease the spread of established plants. Grazing should begin in spring when the plants are 2 – 6 inches tall and should be continued until all of the bright yellow bracts have been consumed. Sufficient regrowth needs to occur before applying herbicide to increase its effectiveness. Remember to QUARENTINE animals after removal to prevent seed distribution.

Integrated management must be utilized when working with this weed because any one method will not be as effective as combined methods.

"Leafy Spurge." *Washington State Noxious Weed Control Board*. NWCB, n.d. Web. 06 Mar. 2017.

Goodwin, Kim, and Dave Burch. "Watch Out for Leafy Spurge." (n.d.): n. pag. *Msuextension.org*. MSU Extension. Web. 7 Feb. 2017.

"Leafy Spurge." *CWMA*. Colorado Weed Management Association, n.d. Web. 07 Mar. 2017.

St John, Loren - Nrcs, Aberdeen, Id. "Leafy Spurge." *Plant Guide for Leafy Spurge (Euphorbia Esula)* (n.d.): n. pag. *Natural Resource Conservation Service*. USDA, Jan. 2014. Web. 7 Mar. 2017.



M. DiTomaso, University of California - Davis, Bugwood.org, Leslie J. Mehrhoff, University of Connecticut, Bugwood.org, Steve Dewey, Utah State University, Bugwood.org, Norman E. Rees, USDA Agricultural Research Service - Retired, Bugwood.org