PERENNIAL PEPPERWEED

Lepidium latifolium

CONTROL

Hand Pulling

Hand pulling can be an effective method of control for small infestations if large portions of the root system are removed with the stems. Roots should be bagged and removed from the site to be dried and burned. Burning alone is not effective as the plants do not burn easily and underground roots are unaffected and recover rapidly.

Mowing

Mowing should be carried out at the first sign of flowering at a height of approximately 4 inches. The root carbohydrates are usually lowest around mid-June. Herbicide treatments may be necessary for re-sprouting plants. Care should be taken to only mow in areas where desirable plants can withstand repeated mowing. Mowing will reduce leaf area and seed set, but is limited in its long term effectiveness.

Biological control

Research is being done on Lasionosa deviata (stem-mining fly) as a potential biocontrol. There is often a risk of damage to valuable crops that are closely related taxonomically.

Grazing

Grazing is only recommended for infestations that have not yet established thick monocultures and have other forage plants growing with the perennial pepperweed. Seeds remain viable after passing through the systems of livestock animals, so care should be taken when moving animals to non-infested sites. They should be contained for five days and fed weed-seed free forage before moving them to non-infested sites.

Ideal Timing for Treatment Options

Spring	Summer	Fall
Hand pull small infestations: thoroughly remove roots Bag, dry and burn pulled plants.		
	Repeated mowing, late June	
Mowing		
Foliar spray		Foliar spray (moisture dependent)

Herbicide

There are a number of herbicides that can be used to control infestations of perennial pepperweed on a yearly basis, though repeated applications will be needed to decrease the size of infestations and/or eradicate perennial pepperweed. The herbicide chart on the back lists approved controls for perennial pepperweed. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.





Perennial Pepperweed Life Cycle

Life Cycle	Root	Leaves	Stems	Flower	Seed/Fruit
Perennial	Deep, spreading roots	Bright green to gray-green, broadest at base and tapering to pointed tip, with prominent whitish midvein. Basal leaves are up to 13 inches long and 4 inches wide with long stalks, and waxy. Stem leaves smaller with smaller stalks, alternate, and do not clasp stem.	Typically 1 to 3 feet tall, may reach 6 feet.	White with four petals, less than 1/8 inch wide and occur in dense, rounded clusters at end of branches.	Flat, rounded, 1/16 inch long capsule contains one reddish-brown seed per chamber.

Herbicides for Perennial Pepperweed, *Lepidium Latifolium*

Active Ingredient	Rate	Efficacy	Comments
Aminocyclo-pyrachlor + chlorosulfuron	4.5-8 oz of product	Actively growing plants in spring	Adjuvants can be used. An invert emulsion can be used instead of water. Low rates can kill non-target tree/shrub; avoid application within distance equal to the tree height of the sensitive species.
Metsulfuron	1-2 oz/acre	Rosette to bud stages, use non-ionic surfactant	Do not use near wells, surface water or shallow ground water
Imazapic	8-10 oz/acre	Use at bloom stage with a methylated seed oil surfactant. Fall rosette treatment can occur if moisture permits.	Note crop rotation before use.
Chlorosulfuron	1 oz/acre	Rosette to bud stages, use non-ionic surfactant	Do not let spray drift to sensitive crops. Use on pasture, range and non-cropland. Adding surfactant improves control.

Information on diagnostic identifying characteristics adapted from "Montana's Noxious Weeds" by Pokorny and Mangold, Montana State University Extension Bulletin EB0159.

2825 Santa Fe Court | Missoula, MT 59808
406-258-4200 | www.missoulaeduplace.org

MISSOULA COUNTY
WEED DISTRICT