

Tips for Perennial Pepperweed (Tall Whitetop) Management

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- Disking, burning, mowing, and grazing can temporarily suppress perennial pepperweed, but none of these methods kill established plants.
- Hand-pulling roots can control a couple plants, but patches with more than 50 stems are nearly impossible to control with hand-pulling.
- Herbicides are required to control established patches.
- Application time is the most important part of herbicide success. Apply herbicides at the flower-bud stage (late May- early June at most locations).
- Perennial pepperweed is a deep rooted perennial that requires repeat herbicide applications to kill the plant! Make sure to monitor sites every spring and re-treat areas if plants recover the year after treatment.
- Removing old growth and litter from heavily infested areas makes it easier to apply herbicides and promotes perennial grass recovery. Late fall or early spring burning, mowing, or intensive grazing can be used to remove old growth.
- Spring mowing followed by a fall herbicide application to re-sprouting plants provides good herbicide control (especially with glyphosate).
- Re-seeding and promoting vegetation recovery after herbicide control increases long term suppression and improves land productivity.

Herbicides for Perennial Pepperweed (Tall Whitetop) Control

- Chlorsulfuron (Telar), 2,4-D ester or amine, glyphosate (Roundup, Rodeo, and generics), imazapyr (Arsenal, Habitat, or Stalker), and triclopyr (Garlon or Renovate) are herbicides that effectively reduce tall whitetop density one year after treatment in UCCE trials.
- Telar, 2,4-D, and Garlon are selective herbicides that do not harm most grasses (read label for tolerant grass species).
- Roundup and imazapyr are non-selective herbicides that kill many broadleaf and grass species.
- Weedar 64, Rodeo, Habitat, and Renovate can be applied along waterways, ditchbanks, and aquatic sites.
- Telar and Arsenal are persistent in the soil and often provide pre-emergent control of weeds 1 year after treatment. ****Telar is more persistent on clay soils with a pH above 7.5**** Do not use Telar or Arsenal in areas you plan to plant sensitive crops in the future (read label for plant-back restrictions)

Recommended Herbicide Sites

- 2,4-D and Roundup can be used in many crops. (See label for crop use and restrictions)
- 2,4-D and Telar are good choices for use in permanent pasture or rangeland (2,4-D and Telar will injure clovers and alfalfa).
- 2,4-D and Roundup are good choices for control when you plan to re-seed perennial grasses or native forbs shortly after treatment.
- 2,4-D, Telar, Garlon, Roundup, and Arsenal are labeled for use in non-crop areas.
- Pursuit or Raptor suppresses perennial pepperweed growing in alfalfa (applied in early spring or fall after the last cutting).
- Do not apply Telar on soils prone to wind erosion or sites located near sensitive crops.

Herbicide Rates for Perennial Pepperweed Control

- 2,4-D amine or ester (4.0 lb ae/gal formulation)- 1.5 to 2.0 quarts per acre
 - add a non-ionic surfactant at 0.25 % v/v or 1 quart per 100 gallons of water
- Glyphosate (4.0 lb ai/gal formulation)- 2.0 to 4.0 quarts per acre
 - Add a non-ionic surfactant at 0.5 % v/v or 2 quart per 100 gallons (if surfactant is suggested on label)
 - Adding ammonium sulfate at 1 to 2 % by weight before adding glyphosate improves control
- Chlorsulfuron (Telar 75 % DF)- 1.0 to 2.0 ounces per acre (1 1/3 ounce per acre is maximum yearly rate on rangeland and pasture)
 - Add a non-ionic surfactant at 0.25 % v/v or 1 quart per 100 gallons of water
 - Make sure to agitate tank well before and during application
- Triclopyr (Garlon 3A or Renovate)- 3 to 4 quarts per acre
 - Add a non-ionic surfactant at 0.25 % v/v or 1 quart per 100 gallons of water
- Imazethapyr (Pursuit 2.0 lb ai/gal) or Imazamox (Raptor)- 6 ounces per acre
 - For whitetop treatment in alfalfa
 - Add a methylated seed oil at 1.5 to 2.0 pints per acre
 - Add a nitrogen source such as UAN 32 or ammonium sulfate (seed label for rates)