SULFUR CINQUEFOIL

Potentilla recta

CONTROL

Hand Pulling

Hand pulling is not an effective method of control for sulfur cinquefoil as above ground stems tend to break, leaving the root system intact and able to re-grow. However, if pulling is combined with multiple other control systems, it will be more effective than pulling alone. Be sure to remove the caudex for hand pulling to be effective.

Mowing

Mowing can significantly reduce the number of seeds produced if done at pre-flower. Mowing is not an effective method of control for sulfur cinquefoil as the massive root system acts as a food reserve system allowing the plants to re-grow immediately after mowing.

Biological control

N/A

Grazing

Recent research has shown that sheep and goats have been shown to reduce seed production of sulfur cinquefoil. However, most livestock tend to avoid consumption because of it's high tannin content.

Ideal Timing for Treatment Options		
Spring	Summer	Fall
Hand-pulling		
Grazing		
Foliar		Foliar

Herbicide

Sulfur cinquefoil can be controlled with a number of different chemicals at 2 to 4 year inter-vals. Seed that persists in the soil retains a high viability for well over 5 years, allowing sulfur cinquefoil to re-establish on sites that are not managed beyond an initial treatment. The herbicide chart on the back lists approved controls for sulfur cinquefoil. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.



Sulfur Cinquefoil Life Cycle

Life Cycle	Root	Leaves	Stems	Flower	Seed/Fruit
Perennial	Fibrous spreading roots	Palmately compound with 5 to 7 toothed leaflets and relatively few basal leaves. Leaf stalk length decreasing toward top.	One to several erect stems 1 to 2 feet tall, may be branched, have hairs at right angles to stem and leafstalks.	5 light yellow petals with deeply notched tips and a darker yellow center. Clustered at top of stems.	Comma-shaped, brownish-purple, covered with net-like ridges

Herbicides for Sulfur Cinquefoil, Potentilla recta

Active Ingredient	Rate	Efficacy	Comments
2,4-D	1-2 qt/ acre	Postemergence when plants are in the pre-bud stage	Broadleaf-selective and safe on most grasses. Minimal soil activity. Repeat application usually required.
Aminocyclo pyrachlor + chlorosulfuron	4.75-8 oz/acre	Postemergence when plants are in the pre-bud stage	Broad spectrum control of broadleaf species. May suppress or injure certain annual grass species. Avoid root zone, avoid applying more than 11oz product/acre per year. Use an adjuvant.
Aminopyralid	4-7 fl oz/ acre	Postemergence when plants are in spring rosette to pre-bud stage	Safe on most grasses, preemergence application at high rates can greatly suppress some annual grass-es. Using a non-ionic surfactant for postemergent applications.
Picloram	1pt./acre	Postemergence when plants are in the pre-bud stage or to fall regrowth.	Most broadleaf plants are susceptible to Picloram, relatively safe on established grasses. Long soil residual activity and some applicators note that it can injure young or germinating grasses.
Triclopyr	2pt/acre	Postemergence to rapidly growing plants	Broadleaf-selective, safe on most grasses. Low volatile ester until sprayed on hard surface in high temperature.
Glyphosate	1-2 qt/ acre	Postemergence when plants are in the pre-bud stage.	Glyphosate is nonselective and will kill any vege-tation it comes into contact with. Spray for uni-form coverage, not for runoff. No soil activity. Will injure seedlings during application. Use a surfactant.
Chlorosulfuron	1.5 oz/ acre	Postemergence rosette stage.	Mixed selectivity, generally safe on grasses. Fall application my injure bromes. Use surfactant. Can be used in late season applications to reduce seed production with long soil residual activity.
Metsulfuron	1-2 oz/ are	Postemergence in the ro-sette stage	Mixed selectivity, generally safe on grasses. Some soil residual activity. Use a surfactant. Can be tankmixed with 2,4-D and/or dicamba.

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

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