

Sulfur Cinquefoil

Aka Rough-fruited cinquefoil

Potentilla recta

Provincial Designation: Nuisance

Description:

A long-lived perennial that reproduces by seed, but also re-sprouts annually from woody rootstocks. It grows in a wide variety of soil types and climates, but does best in semi-arid regions. It will grow under open forest canopy but is intolerant of complete shade.

Stems are upright with some branching in upper portions and grow 30-70 cm tall. There may be one or several stems per plant.

Leaves are numerous, alternate and compound with 5-7 leaflets having toothed edges. Perpendicular hairs cover the leaves and stems.

Flowers are light yellow (sulfur-colored) with 5 heart-shaped petals. Stamens are numerous.

Control

Sulfur cinquefoil can very difficult to distinguish from some of the many native cinquefoils – even for the experienced. The following table contrasts this invader's characteristics with those of the similar native Graceful cinquefoil (*Potentilla gracilis*).

Graceful/Slender cinquefoil	Sulfur cinquefoil
short, spreading hairs on leafstalk and stem	longer hairs perpendicular to leafstalk and stem
few stem leaves; mostly basal leaves	numerous stem leaves; fewer basal leaves
smooth seed coat	net-like pattern on seed coat
most have a dense, woolly underleaf	sparse, stiff hairs; both sides of leaf are similar
short rhizomes	woody taproot with short branch roots
flowers brighter yellow	flowers paler yellow
leaves are green to gray	leaves more yellowish
about 20 stamens	25 or more stamens
leaflet serrations sometimes deep	leaflet serrations halfway to mid-vein

http://www.fs.fed.us/database/feis/plants/forb/potrec/botanical_and_ecological_characteristics.html



Sulfur cinquefoil can self-pollinate, and seedlings quickly mature into blooming plants. Over time, the annual re-sprouting from the main root becomes several closely spaced individual plants circling the old, decaying root. Some plants in long-term infestations have been estimated to be nearly 20 years old. Sulfur cinquefoil has been observed to be co-dominant in Spotted knapweed stands, and in some cases out-competes knapweed.

Mowing is not effective, as new shoots will replace the cut stems. Digging up plants before seed set and when the soil is moist can effectively control this weed, removing as much of the root system as possible – root fragments can produce new plants. Repeated cultivation can also be effective over time. Several herbicides are effective on Sulfur cinquefoil.

Sulfur cinquefoil is unpalatable to all grazers except goats, so overgrazing will allow infestations to rapidly spread. By far, the best control method for Sulfur cinquefoil is to not get it in the first place – prevention. At this time, 2005, Sulfur cinquefoil infestations are only known to exist in southwestern Alberta. Be aware of this invader.