

SPECIES FACT SHEET

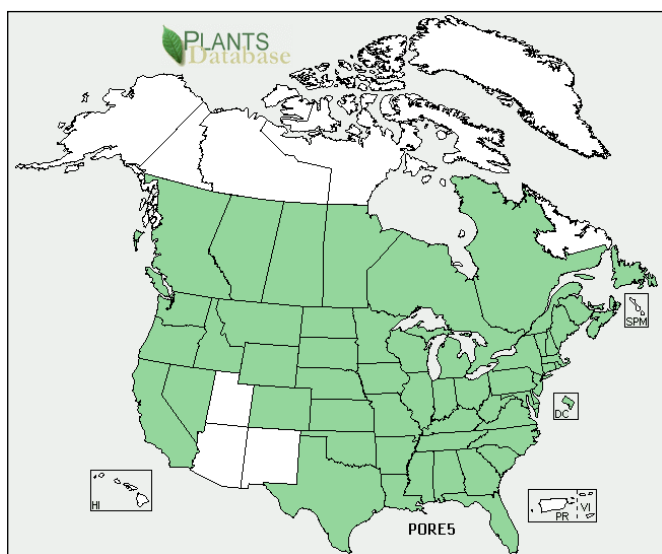
Rosaceae (Rose family)

Sulfur Cinquefoil*Potentilla recta***At a Glance**

- Perennial
- 8 to 30 stems per plant
- Shiny, erect hairs arise at right angles to the stems.
- Leaves alternate and palmately compound
- Pale yellow flowers occur in branched inflorescences at the ends of the stems.
- Fruit is an achene with a netted pattern covering the surface.

Habitat and Ecology

Native to the eastern Mediterranean, sulfur cinquefoil (*Potentilla recta*) was introduced to North America before 1900 and is now well established throughout much of the United States and Canada, particularly in the inland areas of the Pacific Northwest. Sulfur cinquefoil establishes in a variety of ecosystems, and in the West, it is able to invade undisturbed grasslands, shrublands, and open forests. It also invades disturbed sites, such as roadsides, abandoned fields, and areas with heavy livestock grazing. Because of



Map of sulfur cinquefoil distribution from the USDA PLANTS database (<http://plants.usda.gov/java/profile?symbol=PORE5>).

EXOTIC

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Pale yellow flowers, each with five notched petals, occur at the ends of stem branches.

the high tannin content of its leaves and stems, livestock tend to avoid eating it. Sulfur cinquefoil may hybridize with native cinquefoils.

Description

Sulfur cinquefoil is a perennial herb whose stems are covered with shiny, erect hairs at right angles to the stem. Reaching 8 to 30 inches in height, sulfur cinquefoil has one to eight stems arising from a woody base. Below the woody base is a single taproot with several shallow, spreading lateral roots. The plant grows new shoots from this woody base in early spring and the flowering stems begin to grow in May. Although new shoots can grow from the base, sulfur cinquefoil reproduces by seeds that are dispersed by the wind. Long-distance dispersal can occur via animal fur, clothing, and vehicles.



OHIO STATE WEED LAB ARCHIVE, OSU

Each compound leaf has five to nine leaflets with serrated edges.

Leaves

The leaves are alternate and shaped like a palm with five to nine leaflets per leaf. The leaves have serrated edges and are covered with sparse, stiff hairs.

Flowers and Fruits

The pale yellow flowers occur in a branched inflorescence that is almost flat-topped. Each inflorescence can have from one to 60 flowers. The flowers have five petals, each with a notch in the center of the tip. Sulfur cinquefoil flowers from early May to July.

The fruit is an achene (a dry fruit with a single seed and thin walls that does not open at maturity; for example, a sunflower “seed”). These achenes are shaped like commas and are dark brown with a netted pattern covering the surface.

Etymology

Potentilla is a diminutive of the Latin word *potens*, which means powerful. The genus name reflects the strong astringent properties of some species. The species epithet “*recta*” means upright.

Similar Species

Sulfur cinquefoil can be confused with native cinquefoils, but it can be distinguished by its three unique characteristics: 1) long hairs perpendicular to the stem, 2) many stem leaves but few basal leaves, and 3) a net-like pattern on its seed coat.

Control Methods

Possible control methods are explained at these websites:

- <http://www.imapinvasives.org/GIST/ESA/esapages/documnts/poterec.pdf>
- http://www.mt.nrcs.usda.gov/technical/ecs/invasive/technotes/invasiveTN_17/index.html
- <http://www.fs.fed.us/database/feis/plants/forb/potrec/all.html>

References

Endress, B. A., and C. G. Parks. 2004. *Potentilla recta* in Element Stewardship Abstracts. The Nature Conservancy, Arlington, VA. Available at <http://www.imapinvasives.org/GIST/ESA/esapages/documnts/poterec.pdf> (accessed 12 April 2010).

Charters, M. L. 2009. California plant names: Latin and Greek meanings and derivations. Available at <http://www.calflora.net/botanicalnames> (accessed 12 April 2010).

Natural Resources Conservation Service. 2007. Ecology and management of sulfur cinquefoil (*Potentilla recta* L.). Invasive Species Technical Note No. MT-17. United States Department of Agriculture, Montana State Office, Bozeman, MT.

Zouhar, K. 2003. *Potentilla recta* in Fire Effects Information System. US Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Available at <http://www.fs.fed.us/database/feis> (accessed 12 April 2010).



STEVE HURST

The fruits are shaped like commas and have a netted pattern covering the surface.