



SPECIES FACT SHEET

Asteraceae (Sunflower family)

Spiny Plumeless Thistle

Carduus acanthoides

At a Glance

- Biennial or winter annual
- Freely branching stems that grow one to four feet tall.
- Stems have leaf-line spines.
- Leaves in a basal rosette the first part of the life cycle.
- Stem leaves are alternate and sparsely hairy underneath.
- Purple to pink flowers erect on the stem, solitary or in clusters of two to five.
- Fruit is an achene capped with cream-colored bristles.

Habitat and Ecology

Spiny plumeless thistle is found in the Northeast, the Midwest, and many western states, except Oregon, Nevada, Utah, and Arizona. It is native to Europe and was first discovered in the United States in Camden, New Jersey, in 1878. Spiny plumeless thistle does not compete well with established vegetation, but disturbance creates prime sites for colonization. The thistle is typically found in open sites, roadsides, pastures, annual grasslands, and waste areas. It

EXOTIC



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Spiny plumeless thistle has leaf-like spines that extend up to the flower head and spiny bracts under the flowers.

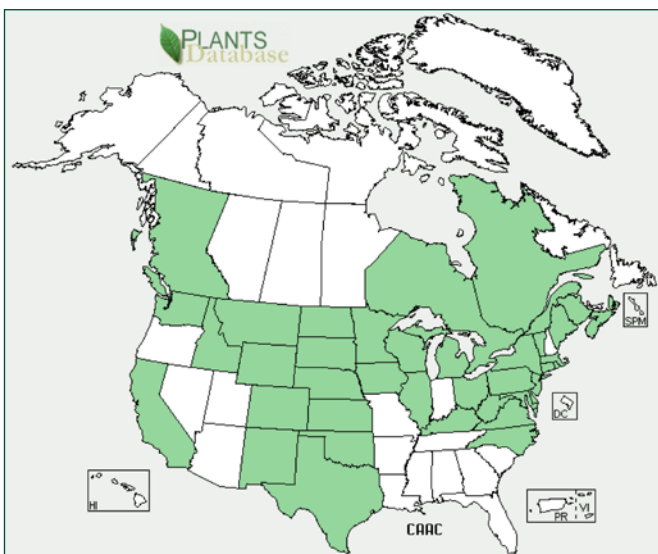
easily hybridizes with other *Carduus* thistles.

Description

Spiny plumeless thistle is an herb with leaf-like spines that extend up to the flower heads. Most of the plants are biennials, germinating in winter and spring and then existing as a basal rosette until flowering in the spring and summer of the following year. Mature plants are one to four feet tall. The freely branching stems arise from a single, thick taproot that can grow to a foot long. Spiny plumeless thistle reproduces by seeds.

Leaves

The leaves of the basal rosette are 4-8 inches long and have spiny teeth. The stem leaves are alternate and attach directly to the stem. They are sparsely hairy underneath. The spines on the leaf margin can be up to 0.2 inches long.



Map of spiny plumeless thistle distribution from USDA PLANTS (<http://plants.usda.gov/java/profile?symbol=CAAC>).





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After spiny plumeless thistle germinates, it remains as a basal rosette and grows a stem and flowers the following year.



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The stem leaves of spiny plumeless thistle have spines along the leaf margins.

Flowers and Fruits

The flowers are purple or pink and are up to one inch in diameter. Under the flowers are spiny bracts. The flower-heads are erect on the stems, and the end of the stem may have only one flower or flowers in clusters of two to five. Spiny plumeless thistle flowers June through October.

The fruit is an achene (a dry, one-seeded fruit with a thin wall that does not open at maturity; for example a sunflower “seed”.) The achenes are 2-3 mm long, and they are light brown with faint lengthwise stripes. The achene is capped by a ring of cream-colored bristles that are 4-5 inches long.

Etymology

Car’duus is the classical Latin name for thistle. Acantho’ides means appearing like a spike or spine.

Similar Species

Spiny plumeless thistle is similar to musk thistle (*Carduus nutans*), but its flowers are a third the size and its stems have many leaf-like spines that extend up to the bases of the flower heads. It can also be confused with Canada thistle (*Cirsium arvense*), bull thistle (*Cirsium vulgare*), and Scotch thistle (*Onopordum acanthium*). Canada thistle has small flower heads, plumes on the achene bristles, and smooth stems. Bull thistle has plumes on the achene bristles and stiff bristly hairs on the upper leaf surfaces. Scotch thistle is not densely covered with bristles and has deeply-pitted, honeycomb-like receptacles (the thickened part of the stem below the flower). For a comparison chart of spiny-leaved thistles, see: <http://www.cdfa.ca.gov/phpps/ipc/weedinfo/spinythistle-key.htm>.

Control Methods

Possible control methods are explained at these websites:

- <http://www.cdfa.ca.gov/phpps/ipc/weedinfo/carduus.htm>
- http://dnr.wi.gov/invasives/fact/thistles_plum.htm

References

- California Department of Food and Agriculture. No date. *Carduus* in Encyclopededia. Available at <http://www.cdfa.ca.gov/phpps/ipc/weedinfo/carduus.htm> (accessed 9 March 2010).
- Charters, M. L. 2009. California plant names: Latin and Greek meanings and derivations. Available at <http://www.calflora.net/botanicalnames> (accessed 9 March 2010).
- Center for Invasive Species and Ecosystem Health. No date. Spiny plumeless thistle. Available at <http://www.invasive.org/species/subject.cfm?sub=3400> (accessed 9 March 2010).
- Keil, D.J. 1997. *Carduus*. In: Flora of North America Editorial Committee, editors. 1993+. Flora of North America North of Mexico. 15+ vols. New York and Oxford. Vol. 19,20, and 21, pp. 90, 92.
- Wisconsin Department of Natural Resources. No date. Plumeless or bristly thistle (*Carduus acanthoides*). Available at http://www.dnr.state.wi.us/invasives/fact/thistles_plum.htm (accessed 9 March 2010).