

**WRITTEN FINDINGS OF THE
WASHINGTON STATE NOXIOUS WEED CONTROL BOARD**

Scientific Name: *Centaurea calcitrapa* L.

Common Name: Purple starthistle

Family: Compositae

Legal Status: Class A

Description and Variation: Erect, branched, annual or biennial. Stems and leaves are covered with cobwebby hairs often becoming smooth with maturity. Lower leaves deeply divided, upper leaves are narrow and undivided. Rosette leaves are deeply divided with a circle of spines in the center. Flower heads of lavender to deep purple flowers. Spine-tipped bracts subtend the flower head.

Economic Importance: Similar in some respects to yellow starthistle, this is an aggressive *Centaurea*, which is a major problem on annual rangelands in the San Francisco Bay area.

Geographical Distribution: Infestations are present in the North and Bay counties of California, and Converse County, Wyoming. Was collected in Washington in 1989 from Asotin County and Island County. A single plant was also identified in Adams county in 1990.

Habitat: Purple starthistle occurs in grasslands; it tends to occur on sites more mesic than those occupied by yellow starthistle. When the two species occur together, purple starthistle grows on heavier bottomland soils.

History: Native to Asia Minor from a region between the Black and Caspian seas, it was first introduced into California in the early 20th century. It was reported from Ellensburg, WA in 1929. However, no additional reports were made for Washington until 1989, when purple starthistle sites were found in Asotin and Island counties. The purple starthistle introduction in Asotin County occurred on CRP land where grass seed contaminated with purple starthistle was planted.

Growth and Development: A biennial, sometimes acting as an annual or a short-lived perennial.

Reproduction: Seed

Response to Herbicides: Herbicides are most effective when applied in the spring to the sensitive rosette stage. Glyphosate, 2, 4-D, dicamba, and picloram reportedly effective. Read and follow current herbicide labels and recommendations for control.

Response to Cultural Methods: Grubbing or digging can be effective for small infestations. Mowing is not effective.

Biocontrol Potentials: No biological control program is currently being developed for purple starthistle. Reportedly, biotypes of *Bangasternus*, a seed head weevil, utilize purple starthistle in Europe.

References:

- *Amme, David. Controlling Purple Starthistle, A Case Study. Unpublished Report.
- *Barbe, 1990. Purple Starthistle Detection map. State of California, Department of Food and Agriculture Detection Manual.
- *McMaster, V. 1989. Purple Starthistle found in Asotin County CRP. Nez Perce Soil and Water Conservation District Newsletter, September 1989, p.2.
- *Pratt, Dave. 1987. Purple Starthistle Control. Stock Talk, A Bi-monthly Newsletter. 3:6. Fairfield, CA
- *Roche', C.T. and B.F. Roche', Jr. 1990. Purple Starthistle (*Centaurea calcitrapa* L.) and Iberian Starthistle (*Centaurea iberica* Trev. ex Sprengel). PNW 350. Pacific Northwest Extension - Washington, Oregon, Idaho.
- *Roche', C.T. and B.F. Roche', Jr. 1993. Identification of Knapweeds and Starthistles in the Pacific Northwest. PNW 432. Pacific Northwest Extension - Washington, Oregon, Idaho.
- *Roche', C. and C.E. Hovanic. 1990. Washington Weeds: Purple starthistle. Washington Farmer Stockman 115(8):15.
- * Whitson, T. D., ed. 1987. Weeds and Poisonous Plants of Wyoming and Utah. Cooperative Extension Service, University of Wyoming.
- * ***Literature available from the Washington State Noxious Weed Control Board Office in Kent.***