

RUSSIAN KNAPWEED: List B Species

Acrotilon (centaurea) repens



Status in Delta County: Basically, it's everywhere! It is widespread in lower elevations of Delta County. However there is little to no knapweed in the eastern part of the County above 7500 feet in dorest settings.

County Management Strategy: Suppression throughout the County.

Control Methods: Herbicides are the only method known that provides good control results. Repeated pulling or digging may work for very small or new infestations, but must be done over a long period of time. Tillage, other than that necessary for seeding competitive plants, spreads small root pieces that can then sprout into new plants, resulting in a denser infestation. Planting

competitive plants is necessary following herbicide application. The soil must be tilled and left for a week or two before planting to allow the knapweed's allelopathic chemical to dissipate. CSU Extension Service Fact Sheet No. 3.111 details control methods and seeding recommendations.

No biological control agents are currently available for this species. However, there is an insect currently being raised at the Insectary in Palisade that may be available for release in 2012.

Identification: A rhizomatous perennial weed with a silvery green appearance, growing up to 3 feet tall. Rosette leaves are lobed and about 3-5 inches long. Stem leaves are linear, not toothed, and about 1 to 2 inches long. Flowers appear in May to June and occasionally late summer. They are purple and about ½ inch in diameter. The bracts below the petals are soft and greenish tan. Roots are black and scaly. Seedheads remain intact throughout the winter. Leaves and possibly roots of Russian knapweed release an allelopathic chemical to the soil, which prevents other species' seed from germinating .

Other names: Turkestan thistle, hardheads

Similar Species: Diffuse and spotted knapweed have similar flowers, but both have fern-like leaves throughout and the bracts under the flowers differ from Russian knapweed. Purple aster (*Aster macaerantha*) has very green leaves, the flowers have a yellow center and it blooms in the late summer and early fall. Seeds are released from the seedhead before the plant dies back in the fall.

Control Timing: In the bud to bloom stage and in the late summer and fall.

Control target: Prevent seed production and stress root system.

Toxicity: Russian knapweed is toxic to horses, causing nigropallidial encephalomalacia, a Parkinson's-like neurological disease that results in the inability to chew followed by starvation. Although toxicity to humans is undocumented, cases of tumors, illness from breathing smoke from burning plants, and a garlic-like taste in the mouth have been reported. It is *essential* to wear gloves when working with this plant. AVOID BREATHING FUMES FROM BURNING RUSSIAN KNAPWEED – IT HAS BEEN REPORTED TO CAUSE RESPIRATORY IRRITATION.

Photos/Control

<http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1167928184099#R>

<http://www.ext.colostate.edu/pubs/natres/03111.html>