Montana Noxious Weed Education

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Diffuse Knapweed

flower

bracts

leaves

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Diffuse Knapweed

Genus: Centaurea
Species: diffusa
Priority Listing: 2B
Annual or Biennial
Biological control agents: Four root moths, one root weevil, and three flower head weevils

Diffuse knapweed is native to Turkey, Syria, the Balkans, Ukraine and southern Russia; it was introduced into the United States as a contaminant in a shipment of alfalfa seed. Diffuse knapweed was first identified in Washington State in 1907 and now occurs in 19 states.

The leaves of diffuse knapweed are gray-green in color; rosette leaves at the base of the plant are pinnately divided and have small hairs, while mature leaves alternate on the stem and are divided into long narrow segments that are broadly lanceloate. The stems of diffuse knapweed can grow up to 2' in height and are highly branched making a ball-shaped plant.

Flower heads are white to purple or lavender in color, and their bracts are fringed with cream to brown colored spines with a long, spreading, stiff spine at the tip. Diffuse knapweed seeds are small, brown or gray in color, and a single plant can produce 18,000 seeds!

Diffuse knapweed can be spread by: farming practices, wildlife, water, and wind. The wind does not blow the seed far, but in the fall the wind breaks the plant off at the ground and blows it like a tumble weed dropping seeds as it rolls.

Diffuse knapweed can be controlled by various integrated weed management techniques. There are eight bio bugs that feed on knapweed, Cyphocleonus achates a root boring weevil whose larva, pupa, and adult Cyphos feed on the roots of diffuse knapweed, injuring the plant and limiting its growth.


Photo courtesy of Bonnie Million, NPS, Bugwood.org

Annual: a plant that completes its life cycle and dies within one year

Biennial: a plant that lives two years, usually flowering in the second year

Biological Control Agents: a method of controlling pests (including insects, mites, weeds and plant diseases) using other living organisms

Bracts: a modified leaf that often wraps the base of a flower, these leaves vary in shape and size from the plant's other leaves

Integrated Weed Management Techniques: the combination of multiple management tools to reduce a pest population to an acceptable level while preserving the quality of existing habitat, water, and other natural resources

Lanceolate: tapering from a rounded base toward an apex; lance-shaped

Pinnate: a compound leaf with leaflets on each side of the petiole

Rosettes: circular clusters of leaves that radiate from a center of a plant, close to the ground, like the dandelion