DIFFUSE KNAPWEED (Centaurea diffusa)

Family: Asteraceae (Aster)  
Life Cycle: Biennial to Perennial

Class: B - Control Required  
AKA: White knapweed
DIFFUSE Knapweed

- Most flowers white, but may be light purple
- 20% to 50% of plants break from root crown and become tumbleweeds, spreading seeds
- May hybridize with spotted knapweed
- Native to eastern Europe and western Asia

CONTROL METHODS

Mechanical: Hand pulling feasible for small populations; ensure roots are removed and pull new plants multiple times through season. Mowing at late bud to early flower stage, two to four times per season, can reduce seed production. Mowing can encourage plants to bloom and set seed at mower blade height. Regular cultivation will control knapweed; always clean equipment before removing from infested fields to reduce chance of spread.

Cultural: Grazing may reduce seed production, especially if grazed early in the season, and again in the fall on young plants. Timing is critical.

Biological: Weevils, root borers and moths have been used in efforts to control diffuse knapweed. None alone are effective.

Chemical*: Most effective in rosette stage. Use a surfactant to help penetrate plant hairs. See table below for recommendations.

DESCRIPTION

Growth Traits: Biennial to short-lived perennial; bushy plant growing to three and a half feet tall. Long taproot. Begins as basal rosette, then develops a main stem that branches extensively. Heavy branching makes a bushy, rounded plant. Knapweeds are allelopathic; they exude chemicals that inhibit the growth of nearby plants creating an environment in which they can spread and form monocultures more rapidly.

Leaves and Stems: Leaves and stems covered in short coarse hairs, giving plant gray-green appearance. Leaves and stems feel somewhat coarse. Basal leaves are deeply lobed. Upper leaves are linear and not lobed. Stems branch extensively.

Flowers: Blooms June - September. Flowers typically white, but may be pale purple. Flower bracts fringed with spines, and end in a spine that extends away from the flowerhead.

Roots and Reproduction: Long taproot; may form root crown where rosette will grow annually. Spreads only by seed. A single flower stalk may produce 1,200 seeds. Seeds may remain viable up to five years in the soil.

Habitat: Readily invades open habitat and disturbed areas: plains, rangeland, open lots, pastures, roadsides, trails. Does not tolerate much shade or consistently moist (e.g. irrigated) soils.

Toxicity: Not known to be toxic.

*ALWAYS read herbicide labels and follow instructions for use and PPE. The use of a surfactant (aka sticker) increases the efficacy of herbicide application, saving you time and money. If treating over multiple seasons, rotate using herbicides with different modes of action to reduce likelihood of herbicide resistance developing. Below are recommended herbicides based on stage of growth and time of year. All recommendations are supplied with the understanding that no discrimination is intended and no endorsement by the Noxious Weed Board is implied. Trade names are used to simplify recommendations. NOTE: There is no ‘magic bullet’ in noxious weed control, and control efforts must be repeated every season to stop their spread. Using a combination of methods (e.g. cultural and chemical) will lead to better control over time.

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<th>April - May</th>
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<td>Bolting, Bud, Bloom Stage</td>
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<tr>
<td>WeedMaster</td>
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<td>Regrowth after mowing, rosettes:</td>
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