



Eric Coombs, Oregon Department of Agriculture, Bugwood.org

Eric Coombs, Oregon Department of Agriculture, Bugwood.org



Steve Dewey, Utah State University, Bugwood.org

RUSSIAN KNAPWEED (*Rhaponticum repens*)

Family: Asteraceae (Aster)	Life Cycle: Perennial
Class: B Designate - Control Required	AKA: hardheads, Turkestan thistle

RUSSIAN KNAPWEED

- Toxic to horses, causes chewing disease
- Extensive vertical and horizontal root system
- Small root fragments may grow into new plants and form new colonies
- Old plant material accumulates over time, creating a thatch over soil surface
- Native to Russia and Eastern Europe

CONTROL METHODS

Mechanical: Seedlings can be hand pulled or dug; ensure all root is removed. This will not control established plants. Repeated mowing can reduce seed production, but also encourages plants to spread vegetatively. Summer mowing followed by fall herbicide treatment can be effective. Repeated tilling to one foot deep over three years can kill much of the root system. Clean equipment to prevent spread to new sites.

Cultural: Sensitive to light competition; cultivation of dense competitive crops like grains or perennial grasses can reduce populations. Reseeding following herbicide application can also reduce populations. Fertilizing in conjunction with herbicide application can increase competitiveness of remaining grasses.

Biological: A gall forming nematode can reduce plant vigor; its impact in Washington is unknown.

Chemical*: See table below for recommendations.

***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.

DESCRIPTION

Growth Traits: Bushy branching perennial plant. Grows one to three feet tall and has extensive root system. Vegetative spreading from creeping roots results in dense colonies of Russian knapweed that crowds out other more desirable vegetation. Has allelopathic properties, making it harder for other plants to grow near Russian knapweed.

Leaves and Stems: Basal leaves are gray-green and lobed. Upper stem leaves are smaller with toothed or smooth edges. Stems are hairy, upright and branching. Young plants hairy and may appear whitish and wooly.

Flowers: Blooms July - August. Flowers pink to pale purple, may occasionally be white. Many flowers per plant, appearing singly on ends of branches. Bracts smooth compared to diffuse and spotted knapweeds.

Roots and Reproduction: Roots grow several feet deep and branch creating an extensive vertical and horizontal root system. Spreads by seed and vegetative shoots on vigorously spreading creeping roots. Seeds may remain viable in soil for two to three years.

Habitat: Prefers moist soils, but can grow in many soil types and is very drought tolerant once established. Frequently invades pastures, hayfields, cropland, rangeland, roadsides, ditches and waste areas.

Toxicity: Toxic to horses, causing chewing disease. Livestock tend to avoid grazing on it due to the plant's bitter taste.

April - May Rosette, Seedling Stage	June - July Bolting, Bud, Bloom Stage	August - October Seeding, Fall Regrowth Stage
2,4-D	Tordon + 2,4-D	Tordon + 2,4-D
WeedMaster	Roundup (<i>spot spray</i>)	Regrowth after mowing:
Milestone	Transline	2,4-D
Tordon + 2,4-D	Milestone	Milestone