Whitman County Extension
Weeds

Washington State University
WHITMAN COUNTY EXTENSION

**SEPTEMBER 2011**

# STEVE'S

# Weed of the Month

## Common Crupina

**Also Known As:** bearded creeper

**Common Crupina is a Class A Noxious Weed:** Non-native species that are limited in distribution in Washington. State law requires that these weeds be **eradicated.**

**Common crupina (*Crupina vulgaris* Cass.)**, native to the Mediterranean region of Europe, is a federally listed noxious weed that has invaded lands in California, Oregon, Washington, and Idaho. This erect winter annual reproduces by seed. The seedling's first 2 leaves (cotyledons) are large, fleshy, shiny, and dark green, with a prominent mid-rib that may be purple to red. Common crupina overwinters as a rosette. As the plant bolts in spring, the stem and leaf margins develop short, stiff spines. Mature plants reach 1–4 feet tall and have multiple branches. On the lower plant stem, alternately arranged leaves are lobed, while on the upper stem they are finely dissected into lacelike leaflets that grow increasingly divided and smaller toward the apex. Common crupina produces flowers from May/June until soil moisture is depleted. Slender, ½-inch long flower heads contain pink to purple flowers that partially protrude through a whorl of stiff bracts. Each plant can have as many as 40 flower heads and each individual head produces 1–5 seeds (achenes). The seeds can remain viable for 3 years under field conditions and have an estimated 85-99% germination rate. Seeds are dark, about the size of a kernel of wheat and have a distinct ring of dark, bristly hairs (pappus) encircling their broad end, resembling a fishing fly.

Photo by: Richard Old, XID Services Inc, Bugwood.org

Two varieties of *crupina vulgaris* are found in the Pacific Northwest. Washington's infestation is *C. vulgaris* var. *brachypappa*. The infestations found in Idaho, Oregon, and California are *C. vulgaris* var. *typica*. The 2 varieties can be distinguished by their seeds. Var. *typica* achenes are 4–5 mm long and the longest pappus silk is 7–8 mm, while var. *brachypappa* achenes are 3.5–5.0 mm, with pappus silk of 4–5 mm.

Photo by: USDA APHIS PPQ Archive, USDA APHIS PPQ, Bugwood.org

Photos by: Utah State University Archive, Utah State University, Bugwood.org

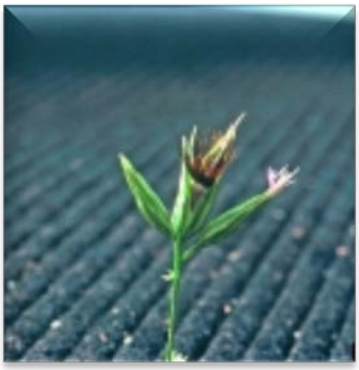

Photo by: Utah State University Archive, Utah State University, Bugwood.org

Photo by: Joseph M DiTomaso, University of Cal-Davis, Bugwood.org

Photo by: Steve Dewey, Utah State University, Bugwood.org

Common crupina is an aggressive invader from the same botanical tribe (*Cynareae*) as the knapweeds and yellow starthistle. While common crupina may casually resemble certain knapweed species, the knapweeds have flower receptacles with bristles and leaf margins without bristly hairs. Adapted to a wide range of soil and growing conditions, common crupina invades disturbed grasslands, pastures, rangeland, open forest lands, roadsides, and waste areas in the western United States. It forms dense stands that reduce forage species, displace native plants, and impair plant communities by reducing biodiversity.


Photo by: USDA APHIS PPQ Archive, USDA AOHIS PPQ, Bugwood.org

## Control Methods

Effective control of common crupina begins with prevention. Since seed is the plant's only reproductive mechanism, preventing new plants from establishing and producing seed should be the objective of weed control efforts. Because viable seed may pass through the digestive system of cattle, horses, and deer (not sheep), horses and cattle should not be allowed into infested areas and should always be properly managed to prevent overgrazing. Animals coming from crupina-infested range should be quarantined in holding pens for a number of days.

**Cultural Control:** Healthy plant communities can deter common crupina from establishing, so it is important to maintain vigorous grasses or other competitive plants. For previously infested areas, a revegetation strategy is important in preventing recolonization of the area by invasive plants.

**Mechanical/Physical Control:** Hand-pulling and hoeing before the plants have flowered and produced seed are effective ways to control small infestations; these measures must be repeated throughout the growing season to remove newly emerged plants. Cutting may actually stimulate lateral branching, thus increasing flower and seed production, but if cutting/mowing is attempted it should never occur after flowering/seed production.

**Chemical Control:** Herbicides offer a good control option with the caveat that treatment timing and application rate are important for effective control. Herbicides used for control of common crupina include glyphosate, dicamba, clopyralid, 2, 4-D, picloram, and metsulfuron.

**More information can be found in the**
**PNW Weed Management Handbook**

**Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.**

**Biological Control:** No insect or pathogenic biological control agents are currently available in the United States for control of common crupina. Most grazing animals avoid eating the plant once it is mature due to the short, stiff, spine-like hairs covering its leaves and stems and will graze it only if more suitable forage is unavailable.

**Questions:** contact Steve Van Vleet or phone (509) 397 – 6290