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COMMON CRUPINA

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Common crupina (*Crupina vulgaris* Cass.) was recently introduced into the United States from the Mediterranean region of Europe. The species was first reported in North America in 1968 near Grangeville, Idaho. Surveys in 1979 indicate 8,000 acres were infested scattered within a 40,000-acre area that includes portions of Clearwater, Lewis and Idaho counties. These infestations currently occur only on rangeland.

Cattle will not feed on common crupina plants. The species is competitive and forms solid stands reducing forage production and range carrying capacity. Common crupina could potentially become an economic pest in rangeland throughout the Western United States.

Because this weed is an immediate threat to livestock production in Idaho and adjacent states,

control programs are being implemented to reduce or eliminate the potential economic loss caused by this species.

Detection of all infestations is the first phase of developing a control and eradication program for common crupina. A cooperative program between state agencies or institutions and Animal and Plant Health Inspection Service (APHIS) is currently underway in the western U.S. to detect and delineate infestations of common crupina so that eradication programs can be implemented.

The purposes of this publication are to promote awareness of common crupina and to enlist the aid of the public in detecting the weed. The inner pages can be used as a poster that will help people to identify the weed. Agencies to be contacted are listed if the weed species is found.

Identifying Characteristics Of Common Crupina



1. Cotyledons of Crupina

- The first leaves (cotyledons) to develop on emerging seedlings are large, thick and dark green (1).
- In late fall or early spring, rosettes may be found with both the large rounded primary leaves at the base and finely divided true-leaves (2).
- Main flower stems are from 1 to 4 feet tall with leaves occurring from the base to the flowers (3).
- Leaves are alternate on the flower stalk and consist of finely divided, lace-like leaflets (pinnatifid or bipinnatifid). Leaves feel sticky because of short stiff hairs on the surface (4).
- Flowers are lavender to purple; flower heads are 1/2-inch long. Small plants produce 5 to 10 flower heads and taller plants may have 130 or more flower heads. Each head produces 1 to 5 seeds (5).
- Seeds (achenes) are large, cylindrical, tapering slightly to a blunt end. Around the basal end of the seed are dark, stiff, hair-like structures (pappus) 1/4-inch in length. Dense, fine hairs cover the seed resulting in shades of black to silver (6).
- Infestations have generally been found on well-drained, rocky to silt loam soil in pasture or rangeland. Infestations start in disturbed areas or sites with sparse vegetation (7).



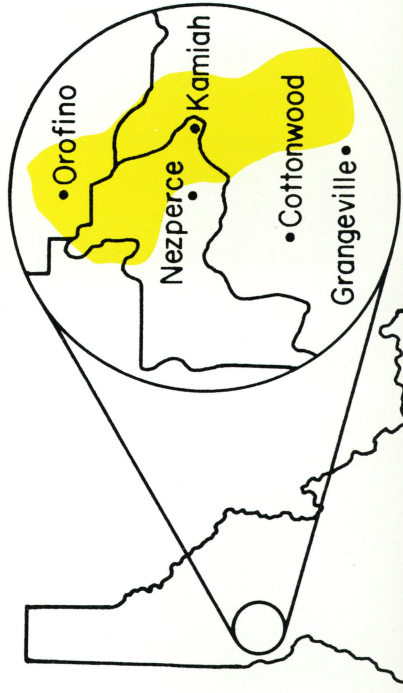
3. Mature Crupina Plant



2. Rosette of Crupina



5. Crupina Flower

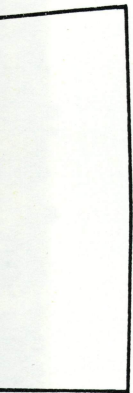




4. Crupina Leaf



6. Crupina Seed



7. Known Infestation Area of Crupina

If You Find Common Crupina

- Mark and make note of the infested area so the exact site can be relocated.
- If positive identification is in question, notify one of the addresses below and do not disturb the plant until an authority has identified the species on site, or you may collect the whole plant with flowers, place it in a sealed container, and send it to the address below for positive identification.
- Notify the appropriate agency from the list below to arrange a field visit.

In Idaho

- Weed Scientist, Department of Plant and Soil Sciences, University of Idaho, Moscow, Idaho 83843 (208-885-6617).
- State Weed Coordinator, Idaho Department of Agriculture, P.O. Box 790, Boise, Idaho 83701 (208-334-2707).
- County Weed Supervisor or County Extension Agent in your respective community.

In Western United States

- Extension Weed Specialist at the state Land Grant University.
 1. University of Arizona, Tucson, AZ 85721
 2. University of California, Davis, CA 95616

3. Colorado State University, Fort Collins, CO 80523
 4. Montana State University, Bozeman, MT 59717
 5. New Mexico State University, Las Cruces, NM 88003
 6. University of Nevada, Reno, NV 89557
 7. Oregon State University, Corvallis, OR 97331
 8. Utah State University, Logan, UT 84322
 9. Washington State University, Pullman, WA 99164
 10. University of Wyoming, Laramie, WY 82071
- Plant or Pest Control Division. State Department of Agriculture in your respective state.

Biology and Ecology

Common crupina, also known as bearded creeper (*Crupina vulgaris* Cass.), is a winter annual species that reproduces by seed. A member of the Compositae family, the weed is a close relative of the knapweed species, all members of the Centaurea tribe. Common crupina seeds (achenes) germinate in the fall when soil moisture is adequate. Large, succulent cotyledonary leaves emerge first and then a basal rosette forms. A dense fibrous root system develops quickly after the seedlings are established. The plants overwinter as compact rosettes. With increased day-length in the spring, the plants bolt and develop flower stalks. Floral stem initiation is generally in April under Idaho climatic conditions.

Flowering begins in early summer (4 to 6 weeks after bolting begins) and continues until frost in the fall. An individual plant is capable of producing more than 400 seeds. Each seed has a bristly pappus or parachute. Seeds are large and relatively heavy, so they are not carried far by wind. The major means of spreading the seed are believed to be moving water and animals. The pappi attach to the hair of livestock and wildlife. Mature seed germinate readily whenever moisture is ample. Tests of seed by the Idaho State Seed Laboratory in 1977 showed that 85% of the collected seed germinated, 7% was dormant and 8% was dead.

In Idaho, infestations have been confirmed in Clearwater, Lewis and Idaho counties. In these areas, common crupina occurs primarily on rangelands in relatively deep canyons with steep slopes. The native vegetation of the infested areas is annual and perennial grasses, forbs, deciduous brush and scattered stands of conifers. Although common crupina may not be limited by soil type, so far plants have been found only on well-drained sites that are slightly acidic, with rocky to silty loam soils formed from basalt and wind-deposited silt. In the area where crupina is now found, rainfall varies from 15 to 30 inches, the mean annual temperature is 46 to 54° F and the elevation ranges from 1,100 to 3,200 feet. The weed is most often associated with disturbed sites or areas with sparse vegetation. Generally, geographic areas in which knapweed species occur have environmental conditions suited for common crupina.

Cooperative programs for the detection and eradication of common crupina are being initiated. Intensive surveys are being conducted to determine more precisely the distribution of this newly introduced weed species. Public awareness and cooperation will help prevent the deterioration of the rangeland resources of the Western United States.

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