

Rangeland-Pasture Recommendations

Dames Rocket

Identification and Management



Dames rocket (*Hesperis matronalis*) is an escaped ornamental commonly found in gardens, woodlands, ditches, roadsides and pastures. It is a Colorado B List Noxious weed.

A non-native, naturalized plant, it is a showy member of the Mustard family with purple, pink or white flowers clustered on terminal stalks. Dames rocket occurs as a biennial or short lived perennial persisting for only a few growing seasons.

Dames rocket grows 1.5 feet to over 3 feet tall with a shallow root system and numerous flower stalks. Leaves of dames rocket are oblong, with toothed margins, alternately arranged and decrease in size as they ascend the stem. Lower leaves usually have leaf stems while the upper leaves attach directly to the stem. Both stems and leaves are covered with short hairs.

Flowers consist of 4 petals and develop in stages allowing the plant to produce flowers and seeds at the same time. Flowering occurs early in the growing season from May-July. Large quantities of seeds are found in long narrow siliques (pods) and are the sole method of reproduction. Most seeds will germinate the following season but some may remain dormant for several years.

Dames rocket has become a very successful invasive weed and that success can be attributed to its wide distribution in “wildflower” seed mixes. It is against the law to purchase seed packets which contain dames rocket or other ornamental noxious weeds.

Often confused with garden phlox, dames rocket has four petals and alternate leaves and phlox has five petals and opposite leaves. It also resembles another non-native mustard - Money plant (*Lunaria annua*) which is grown in gardens and escapes as a weed. *Lunaria* has large, round coin-like seed capsules and leaves that are indented where they join the leaf stalk.

On the backside of this sheet are dames rocket management recommendations. If you have any questions, please contact the Weld County Public Works Dept., Weed Division at (970) 304-6496 ext 3770. Please visit our website at www.weldweeds.org



Recommended management methods:

Cultural – Establishment of selected, aggressive grasses can be an effective cultural control of Dame’s Rocket. Contact your local CSU Extension office or Natural Resources Conservation Service office for seed mix recommendations.

Mechanical – Control methods include pulling or cutting flowering stalks to prevent seed production. When pulling mature plants, stems often break off and the taproot can resprout if not removed. The site will need to be monitored for several years as available seeds will continue to germinate. Flower heads should be bagged for landfill disposal or dried and burned where permissible.

Biological – There is no recommended biological control at this time.

Herbicides – Selectively applying a broadleaf herbicide according to label recommendations may also be an effective means of control. Herbicides, if used, should be applied to the rosettes in the late fall or early spring to avoid damage to adjacent vegetation.

The following are recommendations for herbicides that can be applied to range and pasturelands. Always read, understand, and follow label directions. The herbicide label is the LAW!

Herbicide	Rate	Application Timing/Comments
Roundup UltraMax	1.6% solution or 2 oz/gallon water	Apply at early plant growth. Use caution when applying near grasses or other desirable vegetation. Roundup will possibly kill surrounding vegetation. No residual soil activity. Non-selective herbicide. Will kill all vegetation.
Outlaw (2,4-D and Dicamba)	1 to 2 pints/acre or 0.5 oz – 1.0 oz/gallon water	Spring- at emergence of seedlings. Continue until frost. Add non-ionic surfactant @ 0.32 oz/gal water or 1 qt/100 gal water. Grazing restrictions. DO NOT apply near or under trees or where soils have rapid permeability or where water level is high.
Clarity + 2,4-D Amine	1 qt./acre for each product or 1 oz/gal water for each product	Spring- at or just after full-bloom and/or fall. DO NOT apply when outside temperatures will exceed 85 degrees. DO NOT apply near or under trees or where soils have rapid permeability or where water level is high. Add non-ionic surfactant @ 0.32 oz/gal water or 1 qt/100 gal water.

Garden Replacement Options

Native garden replacement plants for dames rocket include sidebells penstemon (*Penstemon secundiflorus*), Palmer penstemon (*Penstemon palmeri*), bee balm (*Monarda fistulosa*), columbine (*Aquilegia caerulea*), narrowleaf coneflower (*Echinacea pallida*), and woods rose (*Rosa woodsii*).

Cultivated garden replacement plants for dames rocket include bleeding hearts (*Dicentra* spp.), meadow rue (*Thalictrum aquilegifolium*), bloody cranesbill (*Geranium sanguineum*), coral bells (*Heuchera* spp.) garden phlox (*Phlox paniculata*), and hollyhocks (*Alcea rosea*).