

Invasive Plants of Wisconsin



Dame's Rocket (*Hesperis matronalis*)

Authors: Brendon Panke and Mark Renz¹

In Wisconsin, a simple perennial acting as a biennial elsewhere, 2-4' tall. First-year leaves form a basal rosette that overwinters. Flowering stalks emerge in spring.

Legal Classification in WI: Restricted

Leaves: Lance-shaped, toothed, and alternate with a very short or absent (sessile) petiole. Leaves decrease in size as they ascend the stem. Fine hairs present on leaves and stem.

Flowers: Late spring through summer. Flowers are four-petaled and fragrant with colors ranging from white to pink, sometimes purple. Flowers appear in the top third of the canopy in a loose inflorescence. Stamens and style are mostly concealed in flower tube, with 6 stamen, 4 long and 2 short.

Fruits & Seeds - Produced in slender capsules (siliques) up to 5" long that are constricted between seeds and break apart lengthwise at maturity.

Roots: Tap-rooted with smaller branching roots.

Similar species: Fall phlox (*Phlox paniculata*; native) has opposite leaves that are not toothed, and flowers with 5 petals.

Ecological threat:

- Invades woodlands (interior and edges), open areas, and roadsides.
- Found in "native" wildflower seed mixes sold throughout the country and planted as an ornamental.

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CONTROL METHODS:

Non-Chemical control

<p>Removal – Pulling is effective in eliminating established plants and while effective at any stage, it is easiest to pull just before flowering. For pulling to be effective, the entire taproot must be removed. If flowers are present, bag material and dispose of in a landfill or burn to avoid potential for seed spread. It will take 2-5 years of pulling to suppress populations, but removal rarely controls established populations.</p>
<p>Mowing – Mowing after flowering stems have elongated, but before flowering will suppress populations as it will prevent plants from producing viable seed, but often plants survive. Typically 2-5 years of mowing is required to reduce population size, but populations will not be eliminated. If areas cannot be mowed, cutting stems and bagging flower heads after blooming is also effective.</p>
<p>Prescribed burning – Spring burns can kill germinating seedlings and suppress above ground growth of established plant depending on fire intensity. After the fire, established plants will quickly re-sprout and reinvade areas, therefore this management method is not recommended unless integrated with other techniques. Fire may benefit other species well adapted to this management (e.g. prairie grasses), resulting in improved competition with parsnip. Burns also allow for increased visibility of rosettes for follow-up treatment as they are often one of the first plants to green up after a burn. A hand-held propane torch can be effective for treating seedlings.</p>

Chemical control²

<p>Foliar – Apply directly to individual plants or broadcast across an infested area. Broadcasted foliar applications are typically the most cost effective treatment in dense infestations. Dame’s rocket is most sensitive in the fall or during flowering, if applications are made at other times, use higher rates. Use lower rates on smaller plants and less dense populations, use higher rates on larger plants and denser populations.</p>	
<p>Active Ingredient (A.I.): 2,4-D Common product name: Many</p>	<p>Rate – <i>broadcast</i>: 0.95-1.9 lb a.e./A <i>spot</i>: 0.5-0.8% (0.019-0.03 lb a.e./gal)</p> <p>Timing – Apply to rosettes in the fall or spring or to flowering plants.</p> <p>Remarks – While effective on new infestations, multiple applications will only suppress established populations.</p> <p>Caution – Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury.</p>
<p>Active Ingredient (A.I.): chlorsulfuron Common product name: Telar</p>	<p>Rate – <i>broadcast</i>: 1.0-2.0 oz/A (0.75-1.5 oz a.i./A) <i>spot</i>: 1.0 g/100 gal (0.75 g a.i./100 gal)</p> <p>Timing – Apply to rosettes in the fall or spring or to flowering plants.</p>

² Herbicide information is based on label rates and reports by researchers and land managers. Products known to provide effective control or in common use are included. Those that do not provide sufficient control or lack information for effectiveness on target species have been omitted. References to pesticide products in this publication are for your convenience and not an endorsement of one product over a similar product. You are responsible for using pesticides in accordance with the label directions. *Read the label before any application.*

<p>Active Ingredient (A.I.): dicamba</p> <p>Common product name: Banvel</p>	<p>Rate – <i>broadcast</i>: 32-64 fl oz/A (0.5-2.0 lb a.e./A) <i>spot</i>: Equivalent to broadcast rates.</p> <p>Timing – Apply to rosettes in the fall or spring or to flowering plants.</p> <p>Remarks – While effective on new infestations, multiple applications will only suppress established populations.</p> <p>Caution – Rates > 16oz/A (0.5 lb a.e./A) may cause stunting and discoloration of sensitive grasses, such as smooth brome. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury.</p>
<p>Active Ingredient (A.I.): glyphosate</p> <p>Common product name: Roundup</p>	<p>Rate – <i>broadcast</i>: 0.75 -1.5 lb a.e./A <i>spot</i>: 1-3% (0.045-0.14 lb a.e./gal)</p> <p>Timing – Apply to rosettes in the fall or spring or to flowering plants. Use higher rates when air/soil temperatures drop below 40°F to maintain control.</p> <p>Caution – Applications can result in bare ground as glyphosate is not selective. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): imazapic</p> <p>Common product name: Plateau</p>	<p>Rate – <i>broadcast</i>: 6-10 fl oz/A (0.9-1.5 lb a.e./A) <i>spot</i>: 0.25-1.0% (0.0048-0.019 lb a.e./gal)</p> <p>Timing – Apply to rosettes in the fall or spring or to flowering plants.</p> <p>Caution – Has potential to leach through soil into ground water under certain conditions. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.</p>
<p>Active Ingredient (A.I.): metsulfuron</p> <p>Common product name: Escort</p>	<p>Rate – <i>broadcast</i>: 0.5-1.0 oz/A (0.30-0.6 oz a.i./A) <i>spot</i>: 1 oz/100 gal (0.6 oz a.i./100 gal)</p> <p>Timing – Apply to rosettes in the fall or spring or to flowering plants.</p>
<p>Active Ingredient (A.I.): triclopyr</p> <p>Common product name: Tahoe 4</p>	<p>Rate – <i>broadcast</i>: 24-32 fl oz/A (2.25-3.0 lb a.e./A) <i>spot</i>: 1-2% (0.12-0.23 lb a.e./gal)</p> <p>Timing – Apply to rosettes in the fall or spring or to flowering plants</p> <p>Caution – Can volatilize, avoid application during high temperatures and low humidity, especially when the application contacts impervious surfaces. Overspray or drift to desirable plants should be avoided as even minute quantities of the spray may cause severe injury. Use aquatically labeled product if potential exists for solution to contact open waters.</p>

This series of fact sheets was created in cooperation with University of Wisconsin-Extension Team Horticulture.

This material is based upon work supported by the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture, under Award No. 2009-45060-06000.

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