

Dame's Rocket (*Hesperis matronalis*)

DESCRIPTION:

This short lived European mustard forms a basal rosette in the first year and develops a flowering stalk in subsequent years. One of the biggest challenges in controlling Dame's Rocket is the fact that it is a rather attractive plant. Gardeners think they have been gifted with a lovely free flower. Large property owners often assume it is a tall and showy species of phlox. As a result, very little work is done to control this species until it is out of control, dominating the site and displacing other species. Until recently, dames rocket was often included in low quality "wildflower" seed mixes, though sale of this species is now illegal in Wisconsin. Dames Rocket is listed federally as a noxious weed and has the potential to be as problematic as its cousin, garlic mustard. Dame's rocket can be found in a variety of sites from full sun to shade but prefers moist to mesic soils. It is typically found in somewhat disturbed sites such as urban lots, railroad corridors, roadsides and disturbed woods. In these habitats it can spread quickly and dominate other plants.

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Exotic
Invasive

IDENTIFICATION:

Dame's rocket is typically 2-4' in height, with a bright pink or white cluster of flowers at the top of each stalk. Once flowering has completed, seeds form in long cylindrical seed pods called siliques. The leaves are relatively large, up to 5" in length and broad, at widths up to 2" with serrated teeth along the leaf margins. The stem is about as thick as a pencil and distinctively hairy.

This plant is often confused with our various native phlox species. The easiest way to tell them apart is that phlox, which has *five* letters in its name, also has *five* petals per flower. Dame's rocket, like all other mustards, has *four* petals per flower. Dame's rocket is taller than any native phlox (which rarely get taller than 18") and has alternately arranged leaves with toothed margins as opposed to oppositely arranged leaves with smooth margins as are present in the phlox species.

CONTROL METHODS:

Organic: The most effective method for controlling small populations of this species is hand pulling in a manner similar to that of Garlic Mustard control. Uprooting the entire plant including the majority of its root system is critical. This species is typically better rooted than garlic mustard, therefore pulling is best done when the soil is very wet and/or loose. If the soil does not cooperate a hori-hori, trowel or small spade can be a helpful tool.

Chemical: Dormant-season herbicide application is probably the best control method for large populations. Glyphosate (Round-Up®, etc.) can be sprayed on the overwintering rosettes in late fall after most native species have gone dormant or in early spring before native species have become active again. The temperature must be above 45 degrees, and there should not be rain in the forecast for at least 12 hours after treatment. If you wait until late spring to apply herbicide, its best done before flowers open or early in the flowering stage to prevent seed development. Care should be taken to avoid damaging other plants in the area. Always read herbicide labels carefully before use and always apply according to the instruction on the product label.

NATIVE ALTERNATIVES:

Due to their similar appearance the obvious replacements for Dame's Rocket are the native phlox species, though both are shorter than Dame's Rocket. Woodland phlox (*Phlox divaricata*) is best for shady sites; its flowers are somewhat more purple in color. Prairie phlox (*Phlox pilosa*) is best for full sun to dapple shade. Wild geranium (*Geranium maculatum*) and wild columbine (*Aquilegia canadensis*) are showy wildflowers with pink and red flowers respectively that grow in shade or sun and bloom around the same time as Dame's Rocket.

