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Curly Dock and Broadleaf Dock

Rumex crispus L. and *R. obtusifolius* L.

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Curly dock (*Rumex crispus* L.) is a perennial. It does not have creeping roots or rhizomes (Figure 1). Leaves are oblong to nearly lance-shaped, often 12 inches or more long, with wavy (crisped) margins (Figure 2). Erect, generally unbranched stems up to 5 feet tall are produced in spring and flower in summer.

Flowers are small, green, and crowded in long clusters. At maturity, flowers become brown and remain conspicuous through the winter. Individual fruits are enclosed in veiny winglike structures with smooth edges.

Curly dock, a native of Europe, is widespread and well recognized in the Pacific Northwest. It's well suited to moist soils. As with most simple perennials, curly dock rarely is a problem in cropland that is tilled annually.



Figure 1.—Curly dock is a common perennial plant in wet soil.



Figure 2.—Leaves of broadleaf dock are more oval-shaped than leaves of curly dock, which is more common in the Pacific Northwest.

Broadleaf dock (*Rumex obtusifolius* L.) is similar to curly dock, but generally has larger, broader leaves, and one to three pointed teeth on the wing of the structure enclosing the fruit (the calyx; see Figure 3). In distribution, it's more or less restricted to pastures and fields west of the Cascades, primarily in coastal counties.

Broadleaf dock was introduced from Eurasia.

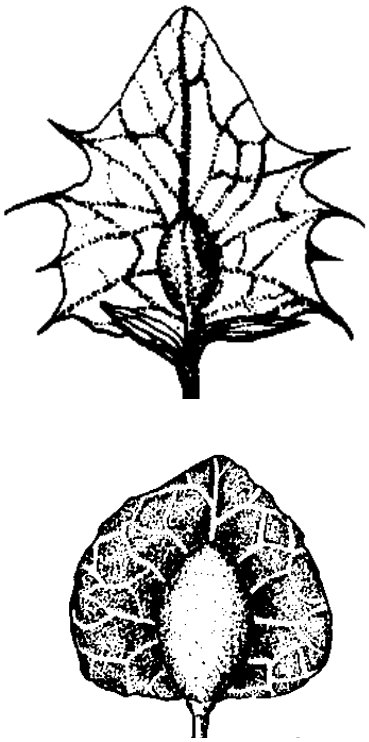


Figure 3.—The calyx enclosing the fruit of broadleaf dock (above) has three pointed teeth, in contrast to the smooth edges of the calyx of curly dock (below).

Control

Mechanical. Docks can be controlled in areas commonly used for perennial crops or pastures by shifting to annual crops that require or accommodate tillage. Seeds of both docks remain viable in the soil for several years, so a 1-year rotation will provide little control.

For sparse infestations, using a shovel to remove the crown about 2 inches below the soil surface is a simple and effective control. Mowing will prevent seed production and reduce top-growth of dock to allow more

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complete grazing of forage species, but it won't control dock.

Biological. The docks aren't readily eaten by domestic livestock, which means that intensive grazing serves only to reduce competition to the dock. There are no insects or disease organisms available for use on dock.

Because these weeds are closely related to some economic crops such as rhubarb and buckwheat, control agents would have to be highly host-specific.

Chemical. In noncrop areas or in grass crops, there are several herbicides that will selectively control the docks. Selective control in broadleaf crops or in pastures containing clovers is more difficult.

Limited experience with selective applications of glyphosate in a weed wiper was partially effective, but this practice requires that the dock be allowed to grow taller than the crop.

Herbicide registrations change frequently; therefore, this publication doesn't contain specific herbicide uses. Registered uses are summarized each year in the *Pacific Northwest Weed Control Handbook.*

In addition, detailed instructions for herbicide use are provided on herbicide container labels and in other literature provided by herbicide manufacturers.

For further reading

Pacific Northwest Weed Control Handbook, WEED (Oregon State University, revised annually). $25.00

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- **Wear** protective clothing and safety devices as recommended on the label. **Bathe or shower** after each use.
- **Read** the pesticide label—even if you've used the pesticide before. **Follow closely** the instructions on the label (and any other directions you have).
- **Be cautious** when you apply pesticides. **Know** your legal responsibility as a pesticide applicator. You may be liable for injury or damage resulting from pesticide use.

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