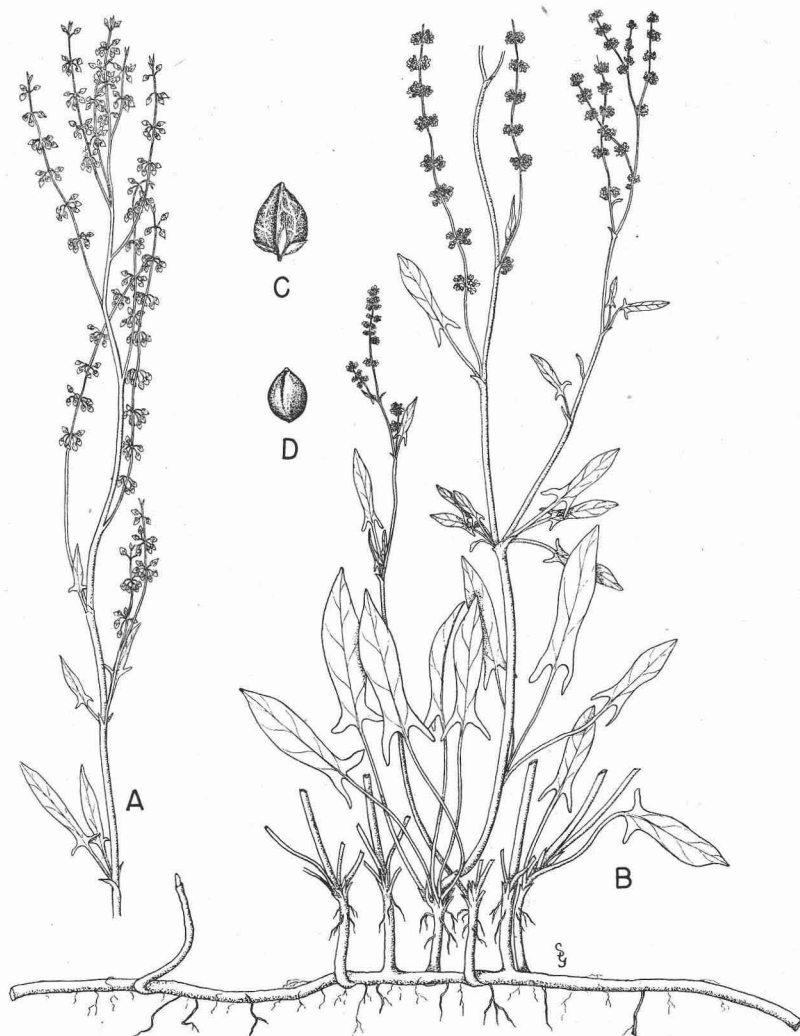


Sheep Sorrel and Dock

Rex Warren

Virgil Freed



SHEEP SORREL—*Rumex acetosella*—Showing female stem and flowers, A; male plant and flowers, B; seed in case, C; and seed, D. Seed magnified 5 diameters.

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Sheep Sorrel and Dock

(*Rumex* spp.)

By Rex Warren and Virgil Freed*

Illustrations by Cathrine Davis Young

In Oregon there are three common perennial members of the buckwheat family that cause damage. Two are quite similar in appearance, and since control methods are similar, they will all be discussed in this bulletin.

Sheep Sorrel

(*Rumex acetosella*)

Other common names: Red sorrel, sour grass, sour dock.

Sheep sorrel is generally found in fields low in fertility. It will grow on good soils but is not aggressive and is easily crowded out. The valuable plants tend to push it onto poor soils where it is content to grow. It is sometimes considered an indicator of acid soils, but this is not true since it grows well on eastern Oregon soils that are alkaline—the opposite of acid. It reproduces from seed and creeping rootstocks. It grows from a few inches to nearly 2 feet tall. It has tough, yellowish, creeping rootstocks that are usually within 3 inches of the surface and send up many shoots at from 2- to 4-inch intervals.

Leaves are arrowhead shaped, from 1 to 4 inches long, and have narrow appendages extending outward from the base. Stems are fragile, often nearly creeping, and are often reddish in color. These bright red stems, when present in numbers in pastures give a field a shimmering coppery appearance beautiful to the eye of everyone except the owner of the field. Flowers are very small and inconspicuous and are borne in clusters along branching stems at the top of the plant. Male and female flowers are produced on different plants. The female flowers are generally a deep red; the male flowers are more of a yellow. The latter are heavy pollen producers and may cause hay fever. If moisture is available, the plants bloom all summer. Large amounts of small triangular seeds are produced. They are hard to separate from alsike or white clover seed.

Damage. Sheep sorrel is troublesome in lawns and pastures. It is reported to be poisonous to livestock if eaten in large quantities. The foliage is sour and is not relished by stock, so they seldom eat enough of it to cause injury. As indicated by the name, sheep relish it more than other livestock. In overgrazed pastures livestock tend to eat the more palatable grasses and leave the sorrel, thus allowing it to spread. The main damage is to the seed industry. Alsike or Ladino clover seed containing seeds of sorrel sells for a lower price, and in removing the weed seeds, a great many crop seeds are usually lost in the process. A few cleaning plants have machinery that will remove most of the seed.

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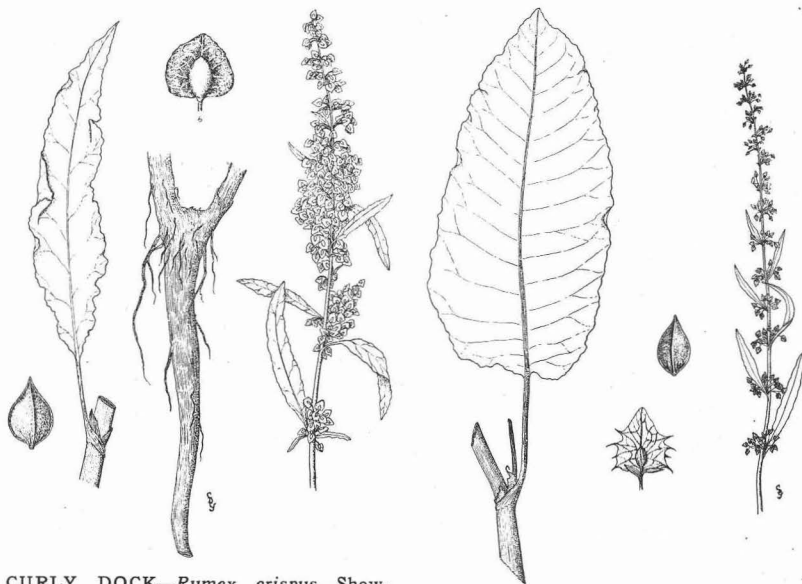
Curly Dock

(*Rumex crispus*)

Other common names: Narrow-leaved dock, yellow dock, curled dock.

Curly dock reproduction is from seed and by new shoots from the crown. Leaves are narrow and from 6 inches to 1 foot in length with wavy margins. It has a thick, strong taproot that is a distinctive bright orange-brown. Stems are strong, usually 2 feet or more tall, and they bear thousands of inconspicuous, whitish-green flowers in clusters close to the stem nearly its entire length. These turn brown at maturity and make the plant conspicuous at a distance in clover fields or pastures.

Seed cases are a little larger than red clover seed, triangular, shiny, light brown, and many thousands are borne on each plant. They are in podlike enclosures that have three wings, enabling them to float on water. Hence the



CURLY DOCK—*Rumex crispus*—Showing nature of root growth, flowering stem, leaf seed enclosed in case, and individual seed. Seed magnified 4 diameters. Seed case enlarged 2 diameters.

BROAD-LEAVED DOCK—*Rumex obtusifolius*—Showing leaf, seed case, individual seed and stem with flowers. Seed magnified 4 diameters, seed case enlarged 2 diameters.

weed is spread by irrigation water and is common on overflow land. Leaves are used for greens and the roots are often used for medicine. Curly dock seeds resemble miniature bechnuts and the name for this entire family, buckwheat, is a corruption of the early name, "beechwheat."

Broad-leaved Dock

(*Rumex obtusifolius*)

Other names: Bitter dock, blunt-leaved dock, butter dock, and celery seed.

Broad-leaved dock is another member of the dock family widely scattered in Oregon. It spreads by seed and by sending up new shoots each year from the root. It is commonly found in fields, pastures, lawns, and waste places and prefers rich, moist, or shaded soil. The weed often grows 3 feet high or more. The first year a large, strong taproot is formed that produces many large leaves slightly wavy along the edges. Lower leaves vary in length from about 6 to 14 inches, and are nearly heart shaped with blunt tips. Leaves on the upper part of the plant are narrow and more pointed. Flowers, which are very small, are produced in many clusters, each one borne by a small stem branching from the main stem. The seed case is three-cornered, dark red, and shiny. Broad-leaved dock differs from curly dock mainly in having larger, broader leaves without the extremely curled or wavy leaf margins.

Damage from docks. Both broad-leaved and curly dock cause damage in this state mainly from the seeds that occur in quantities in red clover seed. It is difficult to remove them and much good seed may be wasted in the process. It is often cheaper to pull the weeds in the field than to pay for cleaning the seed from the crop.

Control. Sheep sorrel often will disappear if the soil is drained and the fertility built up. Clean summer fallow for a year will generally give control as will a row crop, kept clean. If soils are acid, 2 tons or more of lime per acre may be needed before legumes can be grown. If legumes are grown and the organic matter or humus is built up by turning under manure, green manure, straw, clover chaff, etc., fertility is usually increased so that sorrel is no longer a problem. In pastures, a good pasture mixture including a sod-forming grass will usually discourage sorrel, provided the pasture is not overused.

Scattering plants of the other two docks can be killed by digging the crown and roots of each plant. A period of summer fallow or a cultivated crop is recommended for badly infested areas. On irrigated land it is sometimes possible to pull the large tough plants when the ground is wet. An hour or two of dock pulling in a clover-seed field is time well spent.

Sheep sorrel and dock are not readily killed with 2,4-D. Fair results have been obtained by using 2 to 3 pounds of 2,4-D acid per acre when spraying during the rosette stage of growth.

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