

YELLOW ROCKET

(Barbarea vulgaris)

SEEDLING DESCRIPTION

The seedling stem (hypocotyl) of yellow rocket is red, smooth, and about ¼ inch (6 mm) long. The two seed leaves (cotyledons) are oval and have rounded bases and slightly notched tips. Cotyledons are less than ¼ inch long and are attached by smooth, reddish leaf stems (petioles) about ¼ inch long.

The first true leaves are oval or slightly heart-shaped and have smooth petioles ½ to ¾ inch (3 to 12 mm) long. True leaves soon form a round, flat rosette. As the

1. Cotyledons are oval with slightly notched tips.
2. Leaves are smooth.
3. Mature plant in flower.
4. Maturing seed pods are below flowers along the stem.
5. Yellow rocket is the first mustard to bloom in spring.

leaves mature, their margins develop lobes.

BIOLOGY

Yellow rocket is a member of the Mustard family (Cruciferae), a large group that in-

cludes many other weeds and numerous crop plants, such as cabbage, turnips, broccoli, and cauliflower. Yellow rocket is generally considered a biennial: it germinates in summer or fall, produces an overwintering crown that includes a ro-



sette and yellow taproot, and sends up a flower stalk early the following spring. The whole plant usually dies the following autumn. Occasionally, however, its crown continues to send up new flower stalks in spring for several years in a row, and yellow rocket becomes in effect a short-lived perennial.

The smooth, strong stems are angular or ridged in cross-section and grow 1 to 3 feet (30 to 90 cm) tall. Three to eight stems emerge from the crown and continue to branch out as they grow.

Leaves are deep green, smooth, and come in various shapes, depending on their location on the plant. Rosette leaves — those at the base of the plant — are 2 to 8 inches (5 to 20 cm) long, and have a large, round terminal lobe as well as one to four pairs of small, deeply indented, oval lobes near the leaf base. Stem leaves are alternately arranged and come in two different shapes. Leaves on the lower part of the stem are shaped like the rosette leaves and are directly attached to the stem. They measure ½ to 5 inches (1.2 to 13 cm) long, becoming shorter and less deeply lobed toward the top of the plant. Leaves on the upper part of the stem are not lobed at all and have coarsely toothed margins.

Yellow rocket is the first weed in the Mustard family to bloom in spring. The bright yellow flowers form upright clusters about 5 inches long at the end of each branch. In the northeastern United States, yellow rocket blooms in April and May. Others, including wild mustard, bloom in late summer and fall. Individual flowers have four petals and measure about ⅓ inch across. The lower flowers on the cluster open first and soon develop into long narrow seed pods as the flower buds farther up on the stem open. So when blossoming is halfway completed, each flower stalk has seed pods at the bottom, flowers in the middle, and unopened buds at the top. Seed pods are dark green, about 1 inch (2.5 cm) long, less than ¼ inch in diameter, and nearly square in cross section.

Seeds are oblong, about ½ inch (0.8 mm) long, and light-yellow to yellow-brown when ripe. They germinate during summer and on into autumn and may remain viable in soil for several years.

SIMILAR SPECIES

Three weeds in the Mustard family closely resemble yellow rocket: wild radish

(*Raphanus raphanistrum*), wild mustard (*Brassica kaber*), and black mustard (*B. nigra*), from which we produce table mustard. The leaf shape and flowers of all these weeds resemble those of yellow rocket, but yellow rocket has smooth leaves and the others have hairy leaves. As mentioned above, only yellow rocket blooms in early spring. Yellow rocket seedlings can be distinguished from the other three weeds by leaf shape. The cotyledons and first true leaves of yellow rocket are oval. The other three weeds have deeply notched, kidney-shaped cotyledons, and their first true leaves are coarsely toothed and hairy.

NATURAL HISTORY

Yellow rocket is a native of both North America and Eurasia. It is especially abundant in the northeastern and north central United States, but grows throughout North America as far south as Arkansas, and north into Ontario and Newfoundland. It prefers moist ground and rich alluvial soil. In early spring, its profuse bright yellow blossoms are a common sight in hayfields and meadows, where its seeds may mature before the first harvest. Yellow rocket also grows in cultivated fields, along roadsides, and on wasteland.

Yellow rocket can be eaten year-round, but it has the best flavor when its leaves are still covered with snow. Its vitamin-C-rich buds and leaves may be eaten raw as a salad green or cooked as a potherb. The flavor is most delicate in early spring, and the taste resembles that of turnip greens. Other common names are rocket cress, yellow cress, bitter cress, and winter cress.

In medieval times, yellow rocket was used as a poultice on wounds. The genus name *Barbarea* was given in honor of Barbara, patron saint of artillerymen and soldiers, who was called upon for protection during lightning storms and heavy gunfire.

CONTROL

Yellow rocket is a problem weed primarily in hayfields and pastures. The best mechanical control method is to time the first hay harvest early enough to mow off flowers before seeds mature. If fields are badly infested, rotating to a cultivated crop such as corn or soybeans for several years gives good control. The ground can be disked or harrowed in late summer or early fall to induce yellow rocket seeds to germinate; spring plowing will then destroy seedlings

and young rosettes. However, fall plowing on land with more than a 3 percent slope causes soil erosion over winter. Unless fields are quite level, plowing should wait until spring. Several commonly used broadleaf herbicides are effective against yellow rocket. The best choice depends upon the cropping system and other weed problems.

For specific recommendations, consult your county Extension agent or the most recent *Weed Control Manual and Herbicide Guide*, available through Meister Publishing Company, 37841 Euclid Avenue, Willoughby, Ohio 44094. Follow label instructions for all herbicides and observe restrictions on grazing and harvesting procedures.

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Where trade names appear, no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.

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