WILD RADISH SPECIES

Cultivated radish or wild radish (*Raphanus sativus*)
Wild radish (*Raphanus raphanistrum*)

Mustard Family (Brassicaceae)

DESCRIPTION

These two radish species are herbaceous annuals (sometimes perennials) that frequently invade grasslands and open, disturbed areas, including roadsides. Wild radish, *Raphanus raphanistrum*, may also be found in wetland areas.

Although both species grow wild and both are commonly called wild radish, *Raphanus sativus* is the (escaped) cultivated plant, while *R. raphanistrum* is its wild relative. (Sativus means "cultivated" in Latin.)

Both species can grow to 3 feet or taller. The plants are erect, with branching stems that typically give mature plants a bushy appearance. The leaves are alternate, with lower leaves pinnately compound.

REPRODUCTION

Raphanus sativus has 4-petaled flowers that range from white to pink, and bloom mostly between April and June, or almost year-round in the East Bay. R. raphanistrum has 4-petaled pale yellow and white flowers with dark veins, and blooms later in the year. The flowers are pollinated by bees and butterflies. Seed pods (siliques) are dark green or occasionally dark red, ribbed, and either smooth or downy. R. sativus may have only up to 5 seeds per pod, but R. raphanistrum pods contain up to 10 seeds. The seeds are dark, oval, and hard.

Wild radishes reproduce only by seed. Seeds can remain viable for at least 5 years and reportedly up to 20 years. Seeds are generally wind-dispersed, but are also spread by water and machinery. Germination takes place in spring and fall.



Wild radishes are capable of excluding native plant species. Both radish species are also agricultural weeds. *R. raphanistrum* seeds in large quantities may be poisonous to livestock.

Raphanus sativus

KEY FACTORS

- u High seed production.
- u Long seed dormancy.

TREATMENT OPTIONS

- u Pull individual plants by hand or with a Weed Wrench before seed pods develop. Given the stout taproot, it's best to do this after a heavy rain. The taproots in mature plants make hand removal more difficult.
- Cut plants below the root crown with a pick or shovel before seed pods develop.

- u Mow or brush cut wild radish if it covers a large area. It's important to do the first mowing before any seed pods develop. Mow as close to the ground as feasible, as the plants often resprout.
- u Foliar spray. Some weed workers spray a 1 percent solution of glyphosate on the leaves before the plant flowers. However, wild radishes are reportedly developing resistance to several herbicides. Glyphosate application might best be reserved for follow-up spot treatment.

DISPOSAL

Plants with seed should be bagged and removed from the site whenever feasible or composted on-site in a small area that will be maintained (for example, by follow-up weeding). Plants without seed can be left to decompose on-site.

FOLLOW-UP

Given the high seed production and long seed viability of wild radishes, it is important to return to the site several times a year to check for seedling germination.

INTERESTING FACTS

Radishes are native to the Mediterranean.

Notes