



Western Wildcucumber

Marah oreganus (T. & G.) Howell

L.C. Burrill

Western wildcucumber (*Marah oreganus* [T. & G.] Howell), also known as Old-man-in-the-ground, *Echinocystis oregana* Cogn., is a perennial with stems that regrow each spring from a huge woody root (figure 1). Stems become long, and they climb with the aid of branched tendrils (figure 2). Leaves are alternate, lobed, and up to 6 inches wide and long.

Flowering starts soon after the first stem appears and continues throughout the spring and early summer. Flowers are white, star-shaped, up to ½ inch across, with five or occasionally up to eight lobes, and attached to stalks coming from leaf axils. Flowers produce gourdlike fruits that are fleshy with weak spines or nearly smooth.



Figure 1.—The woody roots become much larger than the one shown here.



Figure 2.—Western wildcucumber is a perennial vine that climbs with the aid of branched tendrils.



Figure 3.—The gourdlike fruits may have weak spines, or they may be nearly smooth.

When mature, the fruit becomes papery and breaks to release up to eight seeds per fruit (figure 3). Seeds are tan to brown, nearly an inch long, broad, rounded at each end, and somewhat flattened.

Western wildcucumber is native to western North America. It's found mostly west of the Cascades, from British Columbia to northern California. It's been reported as far east as the Snake river along the Oregon-Idaho border.

It's common on open hillsides, bottom land, fence rows, and

thickets. Seeds are transported by water, birds, and rodents.

Marah means bitter in Hebrew and refers to the intensely bitter-tasting root.

Other climbing plants that might be confused for wildcucumber don't have the typical cucumber-type leaves:

- *Clematis ligusticifolia* is common on fences and along creek bottoms in sagebrush country east of the Cascades. Leaves are

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compound and coarsely toothed. The stems become woody.

- Members of the *Lonicera* genus (honeysuckle) sometimes are vines or climbing shrubs. Leaves have entire margins, and the fruit is a small berry.

Wildcucumber vines are a problem when they climb over annual or perennial crops. Christmas trees or other woody plants are deformed by the heavy vines, which also interfere with harvest of field crops.

CONTROL

MECHANICAL. The tremendous amount of food reserves in the root of wildcucumber presents a challenge when control measures are attempted. When fields are plowed or disked in the spring, wildcucumber is rarely a problem.

This seems to be a result of breaking off the emerging stem rather than damaging the root. From one to several stems may grow from the top of a root, but each root has many buds capable of producing new plants if the root is fragmented.

Fall-plowing isn't effective because the vines emerge in early spring and mature in early summer. In theory, repeated removal of vines within 2 weeks after emergence should eventually

deplete the food reserves in the roots, but this could take several years.

Mowing may reduce competition and physical damage caused by the vines, but it won't provide lasting control.

BIOLOGICAL. There are no insects or disease organisms known to give control. There are unconfirmed observations that wildcucumber wasn't seen in pastures being grazed by cattle, but vines appeared in great numbers the year after the cattle were removed.

No reliable reports were found to indicate that the vines of wildcucumber are either toxic or palatable to livestock.

CHEMICAL. Field research has demonstrated that several herbicides applied to foliage of wildcucumber will kill the foliage and prevent regrowth a year later. Growth in subsequent years wasn't evaluated. Controlling wildcucumber requires a long-term commitment because of the great amount of food reserves in the root.

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.

USE PESTICIDES SAFELY!

- **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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Photos courtesy of Robert Hawkes.

Published and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914, by the Oregon State University Extension Service, O.E. Smith, director; Washington State University Cooperative Extension, Larry G. James, interim director; the University of Idaho Cooperative Extension System, LeRoy D. Luft, director; and the U.S. Department of Agriculture cooperating.

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