

# Dodder

Scientific name: **Cuscuta** sp.

Common names: Love vine, strangeweed, devil's hair

*By Homer M. Hepworth, Extension weed specialist, and  
Irving Townsend, Baker County Extension agent, Oregon State University*



Dodder is a threadlike, leafless, annual plant that receives nourishment from its host plants.

Dodder entwined on a clover plant.

Seeds are small and resemble alfalfa.

Flowers are generally white, small, and in dense clusters.

## Where Found

In the Pacific Northwest, dodder is an important economic pest of alfalfa and carrots. It will also infest potatoes, onions, sugarbeets, and a wide variety of other broadleaf crops and weeds. Dodder may be found in home yards and gardens. It does not attack any member of the grass family such as wheat, corn, or pasture grasses.

## Life Cycle

Germination may begin as low as 4° C (39° F) soil temperature, and seedlings will emerge from as deep as 10 cm (4 in.) in 5 to 10 days. The seedling then rotates in a counterclockwise pattern to contact a host plant. If contact is made within 2 to 6 days, the seedling attaches itself to the host plant by means of haustoria. These stem

structures allow dodder to "hang on" to the host and are also the sites of nutrient transfer between the host and dodder.

After attachment, the seedling elongates and branches and may eventually cover an area 10 to 15 feet in diameter. Dodder may reproduce by seed or by generation from parts broken off an active plant.

### Control of General Infestations in Alfalfa Fields

**Chemical:** chlorpropham (Chloro IPC)

**Rate and treatment method:** Field management for irrigated alfalfa. Application time is relative to soil temperature and dodder germination:

1. Irrigate, if possible, in fall.
2. Surface till in spring.
3. Irrigate in spring.
4. Apply 30 pounds of 20 percent granular CIPC (6 lbs. active) per acre not later than 5 days after spring irrigation. For best results, alfalfa should be 4 to 10 inches tall when treated.
5. Harvest when ready.
6. Surface till fields 10 to 12 days after harvest if the soil surface is moist and the dodder is emerging.
7. Irrigate approximately 3 days after tillage.
8. Apply 6 pounds active granular CIPC approximately 3 days after irrigation.

*Note:* Items 5 through 8 apply only when a crop of hay is removed. Follow label for feeding restrictions.

**Chemical:** pronamide (Kerb)

**Rate and treatment method:** In the spring before dodder germinates:

1. Furrow- or rill-irrigated fields: Incorporate lightly 3 to 4 pounds Kerb 50-W (1.5 to 2 lbs. active) per acre. Irrigate within 7 days.
2. Sprinkler-irrigated fields: Incorporate lightly 2 to 3 pounds Kerb 50-W (1 to 1.5 lbs. active) per acre. Irrigate within 7 days with no longer than 12-hour sets.

3. Flood-irrigated fields: Incorporate lightly 2 to 3 pounds Kerb 50-W (1 to 1.5 lbs. active) per acre. Flood within 3 days.

4. Follow labeled feeding and grazing restrictions.

**Chemical:** dichlobenil (Casoron)

**Rate and treatment method:**

1. First crop seed alfalfa: Apply 35 to 50 pounds Casoron G-4 per acre in the spring before irrigation. *Note:* Light tillage will increase the activity of dichlobenil, but may cause stunting of growth and some foliar symptoms. For continued control, make a second application of 35 to 50 pounds Casoron G-4 per acre, 3 to 5 weeks after the first application. Follow with irrigation.

2. Second crop seed alfalfa: Remove forage crop and destroy any stubble-attached dodder (flaming or mechanical). Allow alfalfa to grow 4 to 6 inches tall. Apply 35 to 50 pounds of Casoron G-4 per acre and irrigate.

*Caution:* Do not graze or feed forage to animals after treating with Casoron.

### Control of Scattered Patches in Alfalfa Fields

Destroy dodder and host plant by:

1. Burning the patch with a propane weed burner.
2. Spraying the patch with a diesel oil or other fuel oil that has been fortified with 4, 6-dinitro o-sec-butylphenol (dinoseb).
3. When alfalfa and dodder are dry, burn spots black. Additional fuel—straw or oil—may be added, or weed burner may be used.

**Chemical:** dinoseb mixed with oil

**Rate and treatment method:**

Mix 1 pint of dinoseb with 50 gallons of oil. Use enough spray to completely cover host plant and dodder. High-pressure spray will help penetrate the foliage.

Treat dodder as soon as it is located. Treat several feet beyond the edge of the infestation. Check the field frequently for new outbreaks of dodder.



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