

Tansy Ragwort *Senecio jacobaea*

Tansy ragwort is a member of the sunflower family and is native to much of Europe, Asia, and Siberia. In the United States, it was recorded first in California in 1912, then in Oregon in 1922.

Tansy ragwort establishes in areas with cool, wet, cloudy weather and readily invades disturbed sites such as clearcuts, riparian areas, pastures, and rangelands.

It is a problem weed because it not only competes with valuable native plants but also contains alkaloids that are lethal to most livestock except sheep, causing irreversible liver damage. All parts of the plant are poisonous. The alkaloids can even taint honey and be transferred through cows' milk to humans.

Tansy ragwort often is confused with common tansy, which is not harmful to livestock.

Description

Tansy ragwort grows to 6 feet tall and is an erect, robust plant (Figure 1).

Its stout taproot produces many fleshy roots that extend 1 foot deep into the soil. The upper part of the plant is highly branched and bears up to 250 bright yellow, daisylike flowers (Figure 2). The deeply lobed leaves are dark green; lower leaves form a rosette that will die back when the flowers are well developed. Tansy ragwort is



Figure 2. Tansy ragwort. Photo: Eric Coombs, Oregon Department of Agriculture.

generally biennial, but if damaged by grazing, mowing, or other control measures, the plant may become perennial until it is able to produce seed.

An individual plant can develop up to 200,000 seeds which can remain viable in the soil for up to 15 years. Most plants are produced from seed, but shoots can regenerate from crown buds, root fragments, and intact roots. The seeds possess variable germination, dormancy, and dispersal characteristics and so are able to invade a wide range of sites.

Management options

Any control plan must be a long-term effort if it is to succeed. Tansy ragwort presents special challenges to management because it very rapidly grows from seed or rootstocks. In creating your management plan, consider the size of the weed population and the real level of threat it represents for extensive invasion and resultant problems, and make a realistic appraisal of the resources available to carry out an effective control effort.

Prevention

A thorough prevention program is a practical and cost-effective means for controlling this noxious weed. Keep in mind that tansy requires sunlight and a disturbed site in order to become established, and competition from other vigorous vegetation can cause high tansy seedling mortality.

- Carefully monitor your property to identify tansy populations when they are small, young, and easier to treat.
- Use only certified weed-free seeds and forage.
- Work closely with neighbors in an areawide prevention program.



Figure 1.—A tansy ragwort infestation. Photo: Eric Coombs, Oregon Department of Agriculture.

- Prevent vehicles from moving between infested and noninfested areas.
- If livestock are in an infested area, clean them carefully before they enter a noninfested area.
- Allow grazing only during the period before tansy ragwort starts producing seed.
- Minimize soil disturbance.
- Create and maintain a boundary strip between infested and noninfested areas.
- Maintain land in good condition overall. Tansy ragwort cannot compete with a dense grass stand but will vigorously invade disturbed sites.

Biological control

Several natural enemies have been used against tansy ragwort with spectacular success in the Pacific Northwest:

- The ragwort flea beetle, *Longitarsus jacobaeae*, which feeds on roots, crowns, and leaves
- The ragwort seed fly, *Pegohylemia seneciella*, which feeds within the seed head
- The cinnabar moth, *Tyria jacobaeae*, which eats leaves, buds, and flowers

Because the three species attack different parts of the plants, their effects are complementary and highly effective.

Biological measures are slow and may take 5 to 10 years to establish large enough populations. Even then, they will not eradicate tansy ragwort but will keep it at a low and manageable level.

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.

Chemical control

Note: Before you apply herbicide on forest land, you must file a “notification of operations” with the Oregon Department of Forestry at least 15 days in advance.

The following information about herbicides is only a brief summary; consult your local Extension agent or Oregon Department of Agriculture representative for specific recommendations for your situation. Read and follow the herbicide label carefully. Before spraying over or around seedlings, ensure the chemicals pose no hazard.

Chemical control with 2,4-D is effective against tansy ragwort when applied to rosettes in the spring, or applied to new growth after fall rains.

Plants with large rosettes or flowering stalks are controlled well with dicamba, but avoid spraying conifer seedlings. Also, some dicamba labels may have forestry application while others do not; so read the label carefully.

Glyphosate in a 5-percent solution used as a spot spray works well.

Consider chemicals primarily for suppressing the infestation while working to promote desired vegetation. Proper timing is essential with herbicides; treat plants during the seedling or early rosette stages.

Any herbicide treatment program should rotate among chemicals to prevent developing herbicide-resistant strains of the weed.

For details on chemical control, refer to the current edition of the *PNW Weed Management Handbook* and to *Herbicide-resistant Weeds and Their Management*, PNW 437. Both are available from OSU Extension <http://extension.oregonstate.edu/catalog/>

Mechanical control

Hand-pulling is effective with small populations in their first year of growth. Mechanically treating mature stands must remove the entire root system to be effective. Mowing can prevent the plant from going to seed; however, tansy ragwort recovers well from mowing (in fact, it tends to stimulate vegetative reproduction, resulting in multistemmed plants).

Grazing

Sheep can tolerate the toxins fairly well. If they graze infestations in early summer, when tansy ragwort plants are in the rosette stage and considered a good feed, the plant is effectively controlled. However, sheep grazing mature plants might stimulate them to develop multiple crowns.

For more information

Oregon Department of Agriculture, Plant Division,
Noxious Weed Control.

<http://oregon.gov/ODA/PLANT/WEEDS/>

Weedmapper, a collaborative project of Oregon Department of Agriculture, Oregon State University, U.S. Bureau of Land Management, and U.S. Forest Service.

<http://www.weedmapper.org/>

California Department of Food and Agriculture,
Encycloweedia.

<http://www.cdfa.ca.gov/phpps/ipc/weedinfo/>

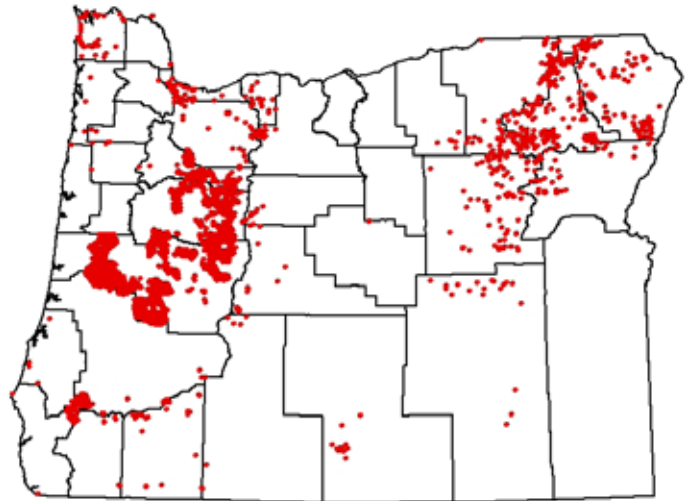


Figure 3.—Tansy ragwort distribution in Oregon.
Map: Weedmapper.

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