

NEWS RELEASE  
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## POISON OAK

BACKYARD HORTICULTURE  
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After becoming an expert, or rather victim, of poison oak myself, it seemed like a good idea to research it. The following is a summary of how to identify and manage this plant and suggestions for treating exposure to poison oak. Further details are in Leaflet 7431, Poison Oak, available from the U.C. Cooperative Extension office in Mariposa

### **IDENTIFICATION**

Poison oak, *Toxicodendron diversilobum*, is a deciduous (loses leaves in winter), woody plant that can have a shrub or vine form. In open areas under full sunlight, poison oak forms a dense leafy shrub usually one to six feet in height. In shaded areas, such as in redwood and oak woodlands, it becomes a much taller climbing vine.

Leaves normally consist of three leaflets with the stalk of the central leaflet being longer than those of the other two. In spring, poison oak produces small, white-green flowers. Whitish-green, round fruit form in late summer. In early spring the young leaves are green or sometimes light red. In late spring and summer the foliage is glossy green, and later turns attractive shades of orange and red.

## **IMPACT**

While it can reduce optimal grazing area in rangeland or pastures, the primary concern associated with poison oak is the allergic reaction it causes in many people. In California, the number of working hours lost as a result of dermatitis caused by poison oak makes it the most hazardous plant in the state.

Contact with poison oak leaves or stems at any time of the year can cause an allergic response. Even cut branches can remain toxic for 18 months. Unwashed, contaminated clothing can retain toxicity for more than one year. When the allergen contacts the skin surface, it is rapidly absorbed into the surrounding cells. Within one to six days, skin irritation and itching will be followed by water blisters. Contrary to popular belief, the exuded material from the blisters does not contain the allergen and does not transmit the rash to other regions of the body or to other individuals. However, scratching other parts of the body with contaminated fingernails can spread poison oak.

In addition to direct contact with the plant, transmission of the allergen can occur from a number of other sources including smoke particles, contact with objects such as clothing, gloves, and tools, or contact with animals, particularly pets. Never burn poison oak.

After coming in contact with the allergen, the best way to prevent skin irritation is to pour a mild solvent, such as isopropyl alcohol (rubbing alcohol), over the exposed area and then follow this with plenty of cold water (warm water enhances penetration of the oil) within a few minutes of exposure. If isopropyl alcohol is not available, just wash

with *lots* of cold water, but you need to wash within five minutes of exposure to prevent a rash. Even if it is too late to prevent the rash, washing the skin to remove excess plant oil will keep the rash from spreading. The poison oak toxin is oil, so it does not dissolve in water. Sufficient quantities of water, however, will dilute the oil to the point where it is no longer harmful.

Using only a small amount of water or disposable hand wipes is more likely to spread the toxin than remove it. Soaps can be used to wash, but only if used with copious amounts of water; otherwise, they too will spread the toxin.

If a rash develops after exposure to poison oak, the use of a product called Tecnu, which is sold at most drug stores, will relieve the itch and reduce the rash. When applied once a day, it stops the itching for most of the day and clears up the rash in about seven days.

## **MANAGEMENT**

The primary ways of managing poison oak are mechanical removal by hand pulling (not recommended for individuals who are sensitive to poison oak) and treatment with herbicides.

### ***Mechanical***

Hand pulling or mechanical grubbing (using a shovel, pick, etc.) can be used to physically remove plants located in a yard or near houses. Remove plants in early spring or late fall when the soil is moist and the rootstalks are easily dislodged. Grubbing when

the soil is dry and hard will usually break off the stems, leaving the rootstalks to vigorously resprout. Whether the individual is sensitive or believed to be immune, he or she should wear appropriate protective clothing, including washable cotton gloves over plastic gloves, when handling the plants. Wash all clothing thoroughly, including shoes, after exposure.

Mowing has little effect in poison oak control, unless it is performed repeatedly (at least four times during the growing season), because of the underground rootstalks. A single plowing is of no value and often serves to propagate the shrub.

### ***Chemical Control***

Herbicides used to control poison oak in California include glyphosate (Roundup, etc.) and the herbicides triclopyr (Garlon, Ortho Brush-B-Gon, etc.), 2,4-D (Spurge & Oxalis Killer, etc.), and dicamba (Banvel, Spurge & Oxalis Killer, etc.). These herbicides can be applied as stump or basal applications, or as a foliar spray.

Glyphosate should be applied late in the growth cycle, after fruit have formed, but before leaves lose their green color. It is important to note that glyphosate is a nonselective compound and will damage or kill other vegetation it contacts.

Other herbicides, such as triclopyr, 2,4-D, dicamba, and combinations of these herbicides, are also used to control poison oak. The application timing with these herbicides is somewhat different than for glyphosate: applications can be made earlier than with glyphosate, when plants are growing rapidly from spring to midsummer.

Triclopyr is the most effective of these herbicides for control of poison oak. A new herbicide in California, imazapyr, is also very effective for the control of poison oak, but is only available for application by licensed pesticide applicators.

### ***Stump Application***

Stump treatments are most effective during periods of active growth. Cut stems of poison oak one to two inches above the soil surface, and immediately after cutting, treat the stump. A delay in treatment will result in poor control. Be sure to completely cover all surfaces of the stumps with the herbicide until it runs down the base of the stubs. Spray any regrowth from cut stumps with a foliar spray when the leaves fully expand.

Foliar application of herbicides to poison oak is most effective when done during the flowering stage. Do not apply foliar herbicides before plants begin growth in spring or after the leaves have begun to turn yellow or red in late summer or fall.

One application of a herbicide usually does not completely control poison oak. Re-treat when new, sprouting leaves are fully expanded, generally when the plants are about two feet tall. Watch treated areas closely for at least a year and re-treat as necessary. Be sure to read and follow all label directions with the use of any herbicide.

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