

POISON OAK



POISON OAK—*Rhus diversiloba*—Showing branch with leaflets, individual leaf, male flowers, top, and female flowers, center.

Poison Oak

Rhus diversiloba

By REX WARREN, Extension Farm Crops Specialist

Oregon State University

Poison oak is found in most western Oregon and a few eastern Oregon counties. It will not stand cultivation, but thrives and spreads in hill pastures, cutover forest lands, fence rows, and waste places. It has some value as a browse plant for livestock, especially goats and sheep, and is a source of good-quality honey. Its brilliantly colored fall foliage attracts, to their sorrow, an annual new group of children, city people, or newcomers, who gather it for house decoration.

The shrub grows from 3 to 10 feet tall, erect, thick, and woody, or may grow as a vine and twine around trees. It reproduces both by seed and rootstocks. It often has aerial rootlets that adhere to the trunks of trees. Leaflets are from $\frac{1}{2}$ to nearly 2 inches long, produced 3 in a group on a common stem. The leaflets somewhat resemble oak leaves. The leaf surface is glossy and may have a blistered appearance. Flower groups are about $\frac{1}{4}$ inch across, greenish-white, borne in clusters on a slender stem. The fruits are berry-like, glossy, and dry when ripe, with a striped stone inside the papery shell.

The entire plant contains at all seasons an oily substance extremely poisonous to some people, causing painful irritation of the skin that appears several hours after contact. Humans vary from extreme susceptibility to near immunity. A few cases have been reported where the poison covered such large areas of the body that death resulted. This is rare, but doctors should be consulted in all extreme cases. To cause poisoning, the skin usually must come into direct contact with the oil, either by touching the plant or by touching something that has touched it, such as clothing, gloves, livestock, or firewood. However, the smoke from poison oak wood fires often poisons persons who think they are immune.

After exposure to poison oak, the hands and arms should be thoroughly washed with strong soap and hot water. The soap should contain an excess of lye. A solution of water and alcohol in equal proportions will dissolve the poison, but the solution must be used liberally. Numerous lotions for relieving the discomfort of poison oak are on the market.

Control Methods

Foliage sprays

Amitrole, sometimes called ATA or ATZ, with trade names of Amino Triazole and Weedazol, will control poison oak. Amitrole or Amitrole-T should be applied when the poison oak is in full leaf, preferably during the month of June. Later applications are effective, but not as good as June applications. Use at least 1 pound of the 50% Amitrole, or 1 quart ($\frac{1}{2}$ pound) of Amitrole-T for each 12 gallons of water. The foliage of the poison oak should be thoroughly covered. One treatment usually eradicates poison oak; however, should regrowth occur, it should be resprayed with Amitrole or Amitrole-T the following year.

The chemicals 2,4,5-T and mixtures of 2,4,5-T and 2,4-D (commonly called brush killers) are also effective for control of poison oak. Best control has been obtained by using 3 to 4 pounds of the parent acid of these chemicals per 100 gallons of water. The foliage should be covered thoroughly for good control. Foliage spraying should be done in the spring after the poison oak plants are fully leafed out. Regrowth and missed plants should be resprayed with a similar spray the following year. The 2,4,5-T type sprays kill slowly and must be applied carefully in areas where susceptible plants are growing.

Ammate (Ammonium sulfamate) is another effective, rapid-killing chemical for poison oak plants. This spray is mixed at the rate of 1 pound of ammate per gallon of water. It should be applied after the plant is in full leaf. Ammate can be used successfully any time during the summer months. It is especially effective around parks and playgrounds where rapid plant kills are important. Ammate does not volatilize, thus is safe to use in areas where 2,4,5-T susceptible plants are growing. Ammate is corrosive to spray equipment. Sprayers used for applying ammate should be thoroughly washed after each use.

Basal or dormant sprays

One gallon (4 pounds) of 2,4,5-T, when mixed with 25 gallons of diesel or stove oil, can be applied as a basal spray on poison oak. This spray can be applied during the dormant season. The lower 30 inches of the plants are sprayed with this method. Winter or basal sprays are especially well adapted for spraying fence rows and roadsides. They are generally applied when there is a minimum chance for injury to nearby susceptible plants.

Soil sterilants

Soil sterilants such as sodium chlorate, borate, and mixtures of borate-chlorate, will kill poison oak. These chemicals are not selective and should not be used in areas where desired plants are growing. Sodium chlorate, after becoming wet, is a fire hazard. Soil sterilants must come in contact with the root system of the plant. In western Oregon the chemical should be applied in April. In eastern Oregon, October applications are best. More uniform dry applications of soil sterilants can be obtained if poison oak is burned before treatment.

Recommended Rates

<i>Chemical</i>	<i>Rate (pounds per sq. rod)</i>
Sodium chlorate	4-5
Atlacide	5-6
Borate	12-15
Borate-chlorate mixture	8-10

Cooperative Extension work in Agriculture and Home Economics, F. E. Price, director. Oregon State University and the United States Department of Agriculture cooperating. Printed and distributed in furtherance of Acts of Congress of May 8 and June 30, 1914.