

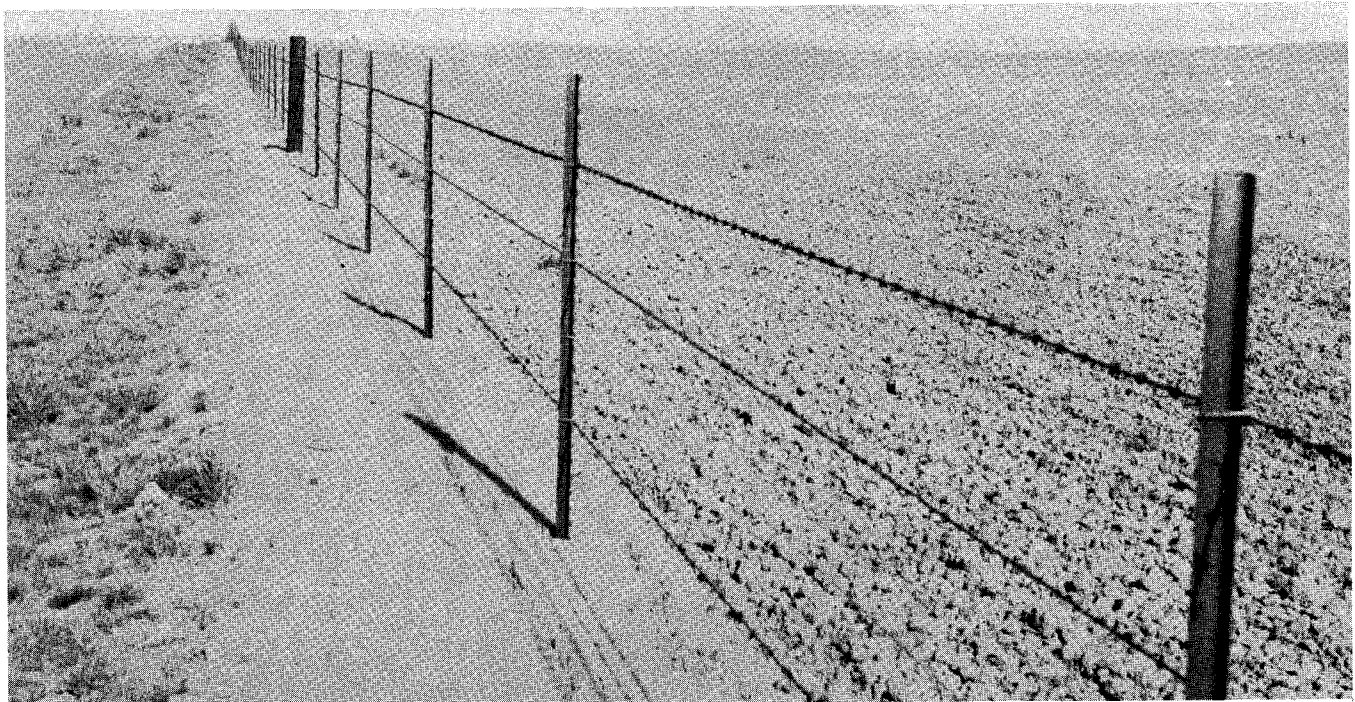
Weed Control on Highway Shoulders, Fence Rows, and Ditchbanks

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Road shoulders, fence rows, and ditchbanks are common places for the growth of many weeds. Weeds in these locations add to the cost of maintaining roads and ditches. Fence rows, road shoulders, and ditches are a source of weeds which contaminate crop and range lands.

All kinds of weeds find a home in fence rows, on road shoulders, and on ditchbanks. Some are annuals, others perennials. Some are grassy type plants, others so-called broadleaf plants. Seeds of some weeds germinate with the first fall moisture; others germinate the following spring and summer. Good control of this wide range of plants requires careful selection of chemicals, as well as care in time and rate of application.

Weed seedlings of both annuals and perennials are easily controlled. After seedlings become established, heavier rates and more specific chemicals are needed for effective control. It is usually cheaper to use light rates of chemicals annually than to attempt to get control of plant growth for more than one year with heavier rates of the same herbicide. Patches of deep-rooted, persistent perennial weeds require special treatment. Leaflets are available on the control of plants such as field bindweed, Canada thistle, Russian knapweed, quackgrass, etc. The final goal in weed control on fence rows and ditchbanks is establishment of low-growing perennial grasses which prevent or suppress the growth of undesired annuals.



Fence row in Gilliam County sprayed with 4 pounds of atrazine per acre in November.
(Picture taken the following fall.)



This is one of a series of *Fact Sheets* reporting Cooperative Extension work in agriculture and home economics, F. E. Price, director. Printed and distributed in furtherance of Acts of Congress of May 8 and June 30, 1914. Oregon State University, Oregon counties, and U. S. Department of Agriculture cooperating.

Chemicals to Use

Atrazine; simazine, Karmex (diuron), Hyvar, and Hyvar X are soil sterilant chemicals. The length of sterility of the soil depends largely on the rate of application and the amount of moisture in the area treated. These chemicals are effective at light rates in the control of seedling plants.

Amitrole (Weedazol or Amino Triazole) or amitrole T (Cytrol or Amitrole T) are foliage-active chemicals. They kill plants by contacting growing leaves. Combinations of amitrole and amitrole T with soil sterilants are recommended when there is plant growth on the area at the time of treatment.

Fall germinating weeds, such as cheatgrass or winter rye, are readily controlled with 2 to 4 pounds (as purchased) of atrazine, simazine, Karmex, Hyvar, or Hyvar X. The 4-pound rate of these chemicals kills the less hardy summer annuals such as Russian thistle, lambsquarter, China lettuce, etc.

Sandbur, puncture vine, and barnyardgrasses are more tolerant of herbicides. The best control is obtained by applying at least 6 pounds of atrazine* and 2 pounds of amitrole*, or 2 quarts of amitrole T* per acre in February or March; 4 pounds of Hyvar X* plus 2 pounds of amitrole* or 2 quarts of amitrole T* has proven effective.

When fall germinating weeds, such as cheatgrass and rye, are in the same area where sandbur and puncture vine are found, it is advisable to delay spraying until early spring and use the heavier rates of herbicides.

The rate of treatment can be reduced from 4 pounds of the soil sterilant to 2 or 3 pounds the second year of treatment. The lighter rate of treatment the second year should not be used where puncture vine and sandbur are a problem.

Light rates (4 pounds) of sterilant are excellent in preparing fire guards in fire hazard areas. Applications should be made during late fall and early winter.

Soil sterilant chemicals must be used carefully in areas to be seeded to perennial grasses. Sterilant type chemicals should not be used within one year of the time that grasses are to be seeded. Annual plants invading such unsprayed areas prior to seeding perennial grasses can be controlled with 2 pounds of amitrole* or 2 quarts of amitrole T*. Broadleaf weeds invading areas after grass seeding can be controlled by spraying with 2,4-D. Grass seedlings should be well established, at least eight weeks old, before being sprayed with 2,4-D.

Atrazine, simazine, Karmex, Hyvar, and Hyvar X are wettable powders and require constant agitation for good application. Sprayers with good mechanical agitation are preferred over other types of sprayers.

Summer Weed Control

Weeds can be controlled in areas where soil sterilization is not wanted. Dalapon or amitrole plus ester of 2,4-D are effective chemicals for summer application. For control with amitrole, use 10 pounds of 50% commercial amitrole or 2 gallons (4 pounds) of amitrole T. When using dalapon, use 10 pounds of 85% dalapon. Many weeds not controlled with amitrole or dalapon are killed by the addition of 2,4-D.

The chemicals can be applied with 20 to 100 gallons of water per acre. The lower rates are effective when boom type sprayers are used. Higher rates are needed

for hand spraying. Garlon, a commercial mixture of dalapon with silvex, may be used at the rate of 5 gallons per acre.

Treatment should be applied in the spring after most of the weeds have germinated but prior to the blossoming of the weeds to be controlled. It may be necessary to make retreatments one or more times during the year. Precautions should be taken to avoid drift of the chemicals to susceptible crops.

The cost of controlling weeds along fences, roads, and ditches is comparatively small. An acre is an area 8 feet wide and 1 mile long. The area in fence rows and ditches, on the average farm, comprises very few acres of land.

* All rates of chemicals are made on the basis of amount per acre of materials as purchased, rather than amount of active material.