

1974

OREGON WEED CONTROL RECOMMENDATIONS FOR COMMERCIAL ORCHARDS

Extension Service

Oregon State University, Corvallis

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Oregon Weed Control Recommendations for Commercial Orchards—1974

CROP	CHEMICAL	APPLICATION RATE PER ACRE		TIME	REMARKS
		ACTUAL	FORMULATION		
ALL ORCHARD CROPS	Aromatic weed oil Dinoseb (Dinitro General)	40 gals. or more 1.9 lbs.	3 pints of 5 lbs. per gal. formulation	Any time on small weeds, repeat as needed When weeds are small	Adjust application rate to cover weed foliage Use in water or oil spray Avoid spraying tree trunks or foliage
ALL NON-BEARING ORCHARDS	Simazine (Princep)	0.8-1.6 lbs.	1-2 lbs. 80%	Late fall to early spring	Use lower rates on lighter soil types
APPLES	Simazine (Princep) Diuron Terbacil (Sinbar) Dichlobenil (Casoron) Paraquat Dalapon (Dowpon) 2,4-D oil soluble amine or acid Diphenamid (Dymid or Enide) (Poison Oak control) Ammonium sulfamate (Ammate)	3.2 lbs. 3.2 lbs. 1.6-3.2 lbs. 6 lbs. ½ to 1 lb. 5 lbs. 1 to 2 lbs. 6 lbs. 57 lbs.	4 lbs. of 80% 4 lbs. of 80% 2-4 lbs. of 80% 150 lbs. of 4% granular 1 to 2 qts. 7 lbs. of 74% 1 to 2 qts. of 4 lbs./gal. 7.5 lbs. of 80% or 12 lbs. of 50% 60 lbs. per 100 gal. water	After harvest, but before fruit forms in the spring Any time, repeat if needed In spring, repeat if needed Any time, repeat if needed Soon after plant—or after weeds have be removed in a new planting When poison oak is in full leaf	Use lower rate on lighter soil types Irrigate in if above 70° F. When weeds are 1 to 6 inches high For control of grass When weeds are in early bud stage Soil surface moisture is necessary for good weed control Spot treat to wet poison oak foliage
CHERRIES (Sweet and tart)	Dichlobenil (Casoron) Paraquat Simazine (Princep) Trifluralin (Treflan)	6 lbs. ½ to 1 lb. 3.2 lbs. ½ to 1 lb. or 2 lbs.	150 lbs. of 4% granular 1 to 2 qts. 4 lbs. of 80% 1 to 2 pints or 2 quarts	After harvest but before fruit forms in the spring Any time, repeat if needed Late fall to early spring Prior to planting When soil can be worked	Irrigate in if above 70° F. When weeds are 1 to 6 inches high Mix into the soil Use in established orchards
FILBERTS	Paraquat Simazine (Princep) Dichlobenil (Casoron)	½ to 1 lb. 2 to 4 lbs. 4 to 6 lbs.	1 to 2 qts. 2½ to 5 lbs. of 80% 100 to 150 lbs. of 4% granular	Any time except when nuts are on the ground Late fall to early spring	When weeds are 1 to 6 inches high Use lower rate on lighter soil types Irrigate in if above 70° F.
PEACHES	Terbacil (Sinbar) Simazine (Princep) Dichlobenil (Casoron) Paraquat Dalapon (Dowpon) Trifluralin (Treflan) Diphenamid (Enide or Dymid)	1.6-3.2 lbs. 3.2 lbs. 6 lbs. ½ to 1 lb. 5 lbs. ½ to 1 lb. or 2 lbs. 6 lbs.	2-4 lbs. of 80% 4 lbs. of 80% 150 lbs. of 4% granular 1 to 2 qts. 7 lbs. of 74% 1 to 2 pints or 2 quarts 7½ lbs. of 80% or 12 lbs. of 50%	Early spring Late fall to early spring Any time, repeat if needed In spring, repeat if needed Prior to planting When soil can be worked Soon after planting or after weeding	Use lower rate on lighter soil types Irrigate in if above 70° F. When weeds are 1 to 6 inches high For control of grass Mix into the soil Use in established orchards

CROP	CHEMICAL	APPLICATION RATE PER ACRE		TIME	REMARKS
		ACTUAL	FORMULATION		
PEARS	Simazine (Princep)	3.2 lbs.	4 lbs. of 80%	After harvest, but before fruit forms in the spring	Irrigate in if above 70° F.
	Diuron	3.2 lbs.	4 lbs. of 80%		
	Dichlobenil (Casoron)	6 lbs.	150 lbs. of 4% granular	Any time, repeat if needed In spring, repeat if needed	When weeds are 1 to 6 inches high For control of grass
	Paraquat	½ to 1 lb.	1 to 2 qts.		
	Dalapon (Dowpon)	5 lbs.	7 lbs. of 74%	Any time, repeat if needed When poison oak is in full leaf	When weeds are in early bud stage Spot treat to wet poison oak foliage
2,4-D oil soluble amine or acid	1 to 2 lbs.	1 to 2 qts. 4 lbs./gal.			
(Poison Oak control)	Ammonium sulfamate (Ammate)	57 lbs.	60 lbs. per 100 gal. water		
PLUMS and PRUNES	Dichlobenil (Casoron)	6 lbs.	150 lbs. of 4% granular	After harvest, but before fruit forms in the spring	Irrigate in if above 70° F.
	Paraquat	½ to 1 lb.	1 to 2 qts.	Any time except when fruit is on the ground	When weeds are 1 to 6 inches high For control of grass
	Dalapon (Dowpon)	5 lbs.	7 lbs. of 74%	In spring, repeat if needed	
	Trifluralin (Treflan)	½ to 1 lb. or 2 lbs.	1 to 2 pts. or 2 quarts	Prior to planting When soil can be worked	Mix into the soil Use in established orchards
	Simazine (Princep)	3.2 lbs.	4 lbs. of 80%	From after harvest in fall until fruit forms in spring	In succeeding years reduce rate to 2 lbs. of 80%
WALNUTS	Trifluralin (Treflan)	½ to 1 lb. or 2 lbs.	1 to 2 pts. or 2 quarts	Prior to planting When soil can be worked	Mix into soil Use in established orchards
	Simazine (Princep)	3.2 lbs.	5 lbs. of 80%	After harvest in fall to early spring	
	Diuron	2.4 lbs.	3 lbs. of 80%	After harvest in fall to early spring	
	Dichlobenil (Casoron)	4 to 6 lbs.	100 to 150 lbs. of 4% granular		
	Paraquat	½ to 1 lb.	1 to 2 qts.	Any time except when nuts are on the ground	When weeds are 1 to 6 inches high

Adequate weed control is necessary to obtain maximum development of new plantings of trees and to conserve moisture in nonirrigated orchards. Other benefits include prevention of rodent damage, aiding in harvest of certain crops, and removal of flowers competitive to pollination.

The first line of defense against weeds is the use of good cultural practices. If possible, select fields without serious weed problems for planting an orchard. If a field infested with perennial weeds must be used, follow a weed-killing program before planting the trees.

Cultivation is often the most efficient method of removing weeds, but orchards can be severely damaged by cultivating too deeply and too close to the trees.

Herbicides provide a valuable tool to help control weeds in orchards. Improper use of herbicides can result in tree injury; proper use can reduce labor costs and improve weed control.

Annual weeds are killed most easily when conditions favor germination and rapid plant growth. Control of perennial weeds by herbicides active through the soil is best if the herbicide is applied at a time when rainfall

or irrigation will move the herbicide into the root zone of the weeds just before they start active growth. Control of perennial weeds by foliage-active herbicides is usually best if applied soon after the greatest period of foliage development. Satisfactory results can be expected if herbicides are applied as directed and under normal conditions. Unusual temperatures or rainfall at the time of, or soon after, application of herbicides may cause unsatisfactory results.

Soil characteristics, such as clay content and organic-matter level, strongly influence the effect of some herbicides. Heavier soils usually require higher rates of application of herbicides to obtain weed control than the lighter, sandy soils.

It is necessary to apply the correct amount of herbicide uniformly over the control area. In order to do this, quantities of chemicals must be measured carefully, application equipment calibrated accurately, and application made carefully. When a strip treatment along tree rows is applied, it is often best to apply half rates from each side of the row, completely lapping the treated area.

To prevent the development of an infestation of a

herbicide-tolerant weed species, it is desirable to rotate herbicides where an alternate material is available. When a weed-free situation has been established, it may be possible to reduce application rates of residual herbicides such as dichlobenil, diuron, simazine, and terbacil by as much as one half for a maintenance program.

To avoid crop damage, do not spray in windy weather or with ester formulations of 2,4-D. Use low sprayer pressures (about 40 pounds per square inch for most sprayers, although special equipment may operate at 5 psi or less) and moderate to high spray volumes.

The information in tabular form is only a guide to herbicide use in orchards, and complete information on labels or other sources should be followed.

Remember: All agricultural chemicals are dangerous if not handled properly. Store in locked compartments away from children and destroy empty containers. Follow manufacturer's safety recommendations as listed on the label.

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**EXTENSION
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