1975

OREGON WEED CONTROL RECOMMENDATIONS FOR COMMERCIAL SMALL FRUIT CROPS

OREGON STATE UNIVERSITY
EXTENSION SERVICE

Extension Circular 747 Revised March 1975

Extension Service, Oregon State University, Corvallis, Joseph R. Cox, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U. S. Department of Agriculture, and Oregon counties.

Oregon Weed Control Recommendations for Commercial Small Fruit Crops—1975

CROP	CHEMICAL	APPLICATION RATE PER ACRE: ACTUAL	APPLICATION RATE PER ACRE: FORMULATION	TIME	REMARKS
BLACKBERRIES (including Boysen, Evergreen, Logan, and Marion)	Simazine (Princep)	1.6 lbs.	2 lbs. 80% or 40 lbs. of 4%	Spring, after berries are growing	For new plantings
	Diphenamid (Enide or Dymid)	6 lbs.	7½ lbs. of 80% or 12 lbs. of 50%	Soon after planting	For new plantings
	Diuron	2.4 lbs.	3 lbs.	Winter	Established plantings
	Simazine (Princep)	4 lbs.	5 lbs. of 80%	Winter	
	Dinoseb (Dinitro general)	2 lbs. Dinitro	3 pts. Dinitro		
	plus CIPC	6 lbs. CIPC	1½ gals. CIPC		
	CIPC	6 lbs.	2 gals.	Fall to spring	
	Dichlobenil (Casoron)	4 lbs.	100 lbs. of 4% granular	Late fall to Jan. 1 irrigate in if above 70°F	
	Dinoseb (Dinitro general)	2½ lbs.	2 qts.	Early to mid-April	Use in 100 gallons of water per acre
	plus summer type spray oil	4 qts.	4 qts.		Spray to 18 in. for foliage and fruit spur removal
	Pronamide (Kerb)	½ to 3 lbs.	1-6 lbs. 50%	Fall or Winter	Best results Oct.-Nov.
	Paraquat	⅓ to 1 lb.	1-2 qts. of 2 lb. formulation	Winter or Spring before new shoots	A contact herbicide
BLUEBERRIES	Simazine (Princep)	1.6 lbs.	2 lbs. of 80% or 40 lbs. of 4%	Spring, after berries are growing	For new plantings
	Dichlobenil (Casoron)	4 lbs.	100 lbs. of 4% granular	4 weeks or more after transplanting	For new plantings
	Diuron	2.4 lbs.	3 lbs.	Winter	For established plantings
		1.6 lbs.	2 lbs.	Oct. and April	(Use only in winter, or as split application in fall and spring, not both)
	Pronamide (Kerb)	1-2 lbs.	2-4 lbs. 50%	Fall or Winter	Best results Oct.-Nov.
	Simazine (Princep)	4 lbs.	5 lbs. of 80%	Winter	Same comment as for Diuron
		2 lbs.	2½ lbs. of 80%	Oct. and April	
	Dichlobenil (Casoron)	6 lbs.	150 lbs. of 4% granular	Late fall to early spring	Irrigate in if above 70° F
	Dinoseb (Dinitro general)	2 lbs. Dinitro	3 pts. Dinitro	Winter	
	plus CIPC	6 lbs. CIPC	1½ gals. of CIPC		
	CIPC	12 lbs.	3 gals.	Winter	
	2,4-D amine	1 lb.	1 quart	After harvest	For broadleaf perennial weeds
	Paraquat	⅓ to 1 lb.	1-2 qts. of 2 lb. formulation	Winter or Spring before new shoots	A contact herbicide
CRANBERRIES	CIPC	12 to 20 lbs.	3 gals. EC or 60 to 100 lbs. of 20% granular	Early spring or after harvest	Use the higher rate of granules for fall only
	Simazine (Princep)	2 lbs.	50 lbs. or 4% granular	After harvest	Use only on established bogs
	Dichlobenil (Casoron)	4 lbs.	100 lbs. of 4% granular	Early spring or after harvest	
	(Mor-Cran)	13 lbs.	100 lbs. of 13% granular	Winter or early spring	For preemergence weed control
	2,4-D	1 lb. acid equivalent	5 lbs. of 20%	Winter or early spring	
	Mineral spirits	To wet weeds	Undiluted	Any time vines are dormant	Use as a spot treatment
	Dalapon	7.4 lbs.	10 lbs.	Early winter	For grass and sedge control
Weed control on dikes	2,4-D amine	2 lbs.	2 qts. of 4 lbs./gal. formulation	When weeds are growing	
	Paraquat	1 lb.	2 qts. of 2 lbs./gal. formulation	Any time in growing season	Do not apply within one week after applying 2,4-D

CROP	CHEMICAL	APPLICATION RATE PER ACRE: ACTUAL	APPLICATION RATE PER ACRE: FORMULATION	TIME	REMARKS
CRANBERRIES (Continued)	Aromatic weed oil	To wet weeds	Undiluted	Any time in growing season	Do not apply within one week after applying 2,4-D
	Simazine (Princep)	24 lbs.	30 lbs. of 80% formulation	Early spring	
CURRANTS	Dinoseb (Dinitro general)	2½ lbs. Dinitro	2 qts. Dinitro	Winter	Established plantings
GOOSEBERRIES	Diuron	2.4 lbs. 1.6 lbs.	3 lbs. of 80% 2 lbs. of 80%	Winter Oct. and April	Use only in winter, or as split applications in fall and spring, not both
GRAPES	Trifluralin (Treflan)	0.5-1.0 lbs.	1-2 pts.	Pre-plant	Incorporate in soil
		1.0-2.0 lbs.	2-4 pts.	Only on est. plantings	Incorporate in soil
	Diuron	3.2 lbs.	4 lbs. of 80%	Early spring	Application may be split and half applied in fall
	Simazine (Princep)	3.2 lbs.	4 lbs. of 80%	Early spring	Application may be split and half applied in fall
	Dichlobenil (Casoron)	4-6 lbs.	100 to 150 lbs. 4% granular	Late fall to early spring	Use 4-weeks after transplanting or on established vineyards
	Paraquat	½ to 1 lb.	1 to 2 qts.	Any time on emerged weeds	Do not allow contact with green stem or foliage of grape
	Dinoseb (Dinitro general)	1.9 lbs.	3 pts. of 5 lb./gallon	When weeds are small	Do not use in period 4 wks. after bloom through harvest
RASPBERRIES	Simazine	1.6 lbs.	2 lbs. of 80% or 40 lbs. of 4%	Spring, after berries are growing	For new plantings
	Diphenamid (Enide or Dymid)	6 lbs.	7½ lbs. of 80% or 12 lbs. of 50%	Soon after planting	For new plantings
	Diuron	2.4 lbs. 1.6 lbs.	3 lbs. 2 lbs.	Winter Oct. and April	Established plantings (Use only in winter, or as split application fall and spring, not both)
	Simazine (Princep)	4 lbs. 2 lbs.	5 lbs. of 80% 2½ lbs. of 80%	Winter Oct. and April	Same as above
	Dichlobenil (Casoron)	4 lbs.	100 lbs. of 4% granular	Late fall to early spring	Before new shoot emergence in spring
	Dinoseb (Dinitro general)	2 lbs. Dinitro	3 pts. Dinitro	Winter	
	plus CIPC	6 lbs. CIPC	1½ gals. CIPC		
	CIPC	6 lbs.	1½ gals.	Winter	
	Dinoseb (Dinitro general)	2½ lbs.	2 qts.	Early to mid-April	Use in 100 gals. of water per acre
	plus summer type spray oil	4 qts.	4 qts.		Spray to 18 in. for foliage and fruit spur removal
	Pronamide (Kerb)	½ to 3 lbs.	1-6 lbs. 50%	Fall or Winter	Best results Oct.-Nov.
	Paraquat	½ to 1 lb.	1-2 qts. of 2 lb. formulation	Winter or Spring before new shoots	A contact herbicide
STRAWBERRIES New planting	Diphenamid (Enide or Dymid)	4 to 6 lbs.	5 to 7½ lbs. of 80% or 8 to 12 lbs. of 50%	Immediately after planting	
	Simazine (Princep)	1 lb.	1¼ lbs. of 80%	One month after planting	Requires soil surface moisture and no established weeds
	Simazine (Princep) plus Chloroxuron (Tenoran or Norex)	1.0 lb. Simazine 2.0 lbs. Chloroxuron	1¼ lbs. of 80% 4 lbs. of 50%	After transplant and before weeds emerge	

CROP	CHEMICAL	APPLICATION RATE PER ACRE: ACTUAL	APPLICATION RATE PER ACRE: FORMULATION	TIME	REMARKS
STRAWBERRIES (Continued)	Chloroxuron (Tenoran or Norex)	4 lbs.	8 lbs. of 50%	After plants are established	Apply while weeds are small 1-2 in.
	Chloroxuron (Tenoran or Norex)	2 lbs.	4 lbs.	After transplanting and before weed emergence	
	plus diphenamid (Dymid or Enide)	3 lbs.	3¾ lbs. of 80% or 6 lbs. of 50%		
Established plantings	Simazine (Princep)	1 lb.	1¼ lbs. of 80%	After harvest and/or after last cultivation in fall	Requires soil surface moisture
	Diphenamid (Dymid or Enide)	4-6 lbs.	5-7½ lbs. of 80% 8-12 lbs. of 50%	From after harvest to early winter	
	Dinoseb (Dinitro general)	2 lbs. Dinitro	3 pts. Dinitro	In Dec. & Jan. when plants are dormant	Recommended as a salvage only program
	Chloroxuron (Tenoran or Norex)	4 lbs.	8 lbs. of 50%	Any time except the interval 60 days prior to and through harvest	
	Chloroxuron (Tenoran or Norex)	2 lbs.	4 lbs.	From fall to early spring until 60 days before harvest	
	plus diphenamid (Dymid or Enide)	3 lbs.	3¾ lbs. of 80% or 6 lbs. of 50%		
	Simazine (Princep) & Chloroxuron (Tenoran or Norex)	1.0 lb. Simazine 2.0 lbs. Chloroxuron	1¼ lbs. of 80% 4 lbs. 50%	After last cultivation in fall	

Fruit growers are aware of the importance of adequate weed control for the production of high yields of high quality. Weeds compete with crops for water, nutrients, and light and are often hosts for insects and diseases.

The first line of defense against weeds is the use of good cultural practices. If there is a choice, select fields without serious weed problems for planting perennial fruit crops. If a field infested with perennial weeds must be used, follow a weed-killing program before the crop is planted.

Cultivation is often the most efficient method of removing weeds from between rows of fruit plants, and herbicide applications should be planned to supplement cultivation practices. Much injury can be done to fruit plants by cultivating too deeply and too close to the plants.

Several generalizations can be made about chemical weed control in small-fruit crops that may help growers decide the value of a herbicide program for a particular weed problem.

Weeds are killed most easily when conditions favor germination and rapid plant growth. 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.

Young weeds are more easily killed than well-established weeds. Many herbicide programs for small-fruit crops are effective only in preventing new weeds from starting.

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 do 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.

Small-fruit growers should learn as much as possible about the herbicide they are using. Information on loss by evaporation, movement with soil moisture, and limitations of certain weed species will aid in making most effective use of the control programs listed in this leaflet.

For blackberries and black raspberries that are propagated by tip layering, the tips should be rooted in soil *not treated* with a residual herbicide such as dichlobenil, diuron, pronamide or simazine.

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

Compiled by GARVIN CRABTREE, associate professor of horticulture, and RALPH GARREN, Extension small fruits specialist, Oregon State University.