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Weed Control Recommendations For Commercial Vegetable Crops

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Extension Circular 746

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Oregon State University Extension Service

Oregon Weed Control Recommendations for Commercial Vegetable Crops

CROP	CHEMICAL	ACTIVE INGREDIENTS	TIME	REMARKS
ARTICHOKES	Simazine (Princep)	4 lbs.	Fall	
	Diuron	3.2 lbs.	Fall	
ASPARAGUS Seedbed	Chloramben (Amiben)	3 lbs.	Pre-emergence	Needs moisture
	Mineral spirits	50 gals.	Postemergence	Apply before broadleaf weeds have more than 4 true leaves
	Parquat Diuron (Karmex)	1 to 1½ lbs.	Pre-emergence	Effective only on emerged weeds
		1.6 to 3.2 lbs.	Spring	Before spears emerge, or after cutting
	Simazine (Princep)	1.6 to 3.2 lbs.	Fall or spring	After ferns die down, before spears emerge or after cutting
2,4-D (sodium) Dalapon		1.6 to 2 lbs. 7.4 lbs.	Spring Spring	For field bindweed control Spot spray for grass control
BEANS, snap and lima	Dinoseb (Dinitro amine)	3 to 6 lbs.	Pre-emergence	When most beans are in crook stage; use low rate for high temperature Work into soil thoroughly
		1½ to 4½ lbs.	Postemergence	
	Trifluralin (Treflan)	½ to ¾ lb.	Preplant	
	Chloramben (Amiben)	3 lbs.	Pre-emergence	
Snap beans only (Incl. Romano)	Profluralin (Tolban)	½ to 1.0 lbs.	Preplant	Work into soil immediately
	EPTC (Eptam)	3 lbs.	Preplant	Work into soil immediately
	DCPA (Dacthal)	9 lbs.	Pre-emergence	
BEETS	Pyrazon (Pyramin)	4 lbs.	Pre- or postemergence	Work into soil immediately
	EPTC (Eptam)	2 lbs.	Preplant	
	Cycloate (Ro-Neet)	3 to 4 lbs.	Preplant	
	Phenmedipham (Betanal)	1 lb.	Postemergence	
BROCCOLI BRUSSELS SPROUTS CABBAGE CAULIFLOWER	Bensulide (Prefar)	5 to 6 lbs.	Preplant or pre-emergence	Not recommended for cabbage. Also incorporate by cross discing of PTO rotary tiller When crop is grown by direct seeding
	CDEC (Vegadex)	4 lbs.	Immediately after seeding	
	Trifluralin (Treflan)	6 lbs.	After transplanting	Direct the spray to base of plants Work into soil thoroughly
		½ to ¾ lb.	Before seeding or before transplant	
	DCPA (Dacthal)	9 lbs.	After seeding or transplanting	
Nitrofen (TOK)	3 to 6 lbs.	Pre-emergence or postemergence	Use wettable powder formulation only	
CANTALOUPE CUCUMBERS WATERMELONS	NPA (Alanap liquid)	4 lbs.	Immediately after seeding	Requires soil surface moisture
	DCPA (Dacthal)	9 lbs.	4 to 6 weeks after seeding	Incorporate shallowly
	Bensulide (Prefar)	6 lbs.	Preplant	
Cantaloupes and Cucumbers only	CDEC (Vegadex)	4 lbs.	Immediately after seeding	
	Chloramben (Amiben)	2 to 3 lbs.	Pre-emergence	
Cucumbers only	Trifluralin (Treflan)	½ to ¾ lb.	Postemergence	Directed spray, when cucumbers have 3 to 4 leaves
	Dinoseb (Dinitro amine)	3 lbs.	Immediately after planting	Do not use if temperatures above 80°F are expected

CROP	CHEMICAL	ACTICE INGREDI-ENTS	TIME	REMARKS
CARROTS CELERY DILL PARSLEY PARSNIPS	Mineral spirits	60 to 80 gals.	Postemergence	Apply when crop plants have 3 leaves and weeds have emerged
	Linuron (Lorox)	2 lbs.	Postemergence	For carrots only. Use when carrots are 2"-6" tall but when weeds ar still small
	Nitrofen (TOK)	2 to 6 lbs.	Pre- or post-emergence	Carrots, celery and parsley only
	Trifluralin (Treflan)	½ to ¾ lb.	Preplant	Work into soil thoroughly Carrots and celery only
	Chloroxuron (Tenoran or Norex)	3 to 4 lbs.	Pre-emergence	For carrots only. Apply when weeds have emerged but are less than 2" tall.
CORN, sweet	Atrazine (AAtrex)	1.6 lbs.	Pre-emergence to weeds and within 3 weeks of planting	Use shallow soil incorporation or follow application with light irrigation (1 inch) for best results
		4 lbs.		For control of quackgrass or other perennials
	Atrazine plus Paraquat	2 to 3 lbs. active Atrazine plus ¼ to ½ lb. active Paraquat	Preplant or pre-emergence	Follow tank mixing directions carefully Alachlor (Lasso) may be added where a grass problem is anticipated
	Atrazine plus oil or 0.5 to 1.0% surfactant	1 to 1.6 lbs. active Atrazine plus 1 gal. oil	Postemergence	When weeds are small
	Dinoseb (Dinitro amine)	6 lbs.	Pre-emergence	May be delayed until just before corn emerges
		1½ to 3 lbs.	Postemergence	When corn is spike stage (1 to 2 inches tall); use low rates for high temperatures
	Propachlor (Ramrod)	5 lbs.	Pre-emergence	Best used with atrazine or 2,4-D
	Alachlor (Lasso)	2½ lbs.	Pre-emergence	
	EPTC plus safener (Eradicane)	2 to 4 lbs.	Preplant	Work into soil immediately
	Butylate plus safener (Sutan +)	4 lbs.	Preplant	Plant corn shallowly. Not recommended for use in corn planted for hybrid seed. For control of nutgrass and barnyardgrass
	2,4-D amine	½ lb.	Postemergence	After corn is up and until lay-by time Direct spray to base of plants after corn is 1 foot tall
GARLIC	Dinoseb (Dinitro amine)	1 lb.	Pre-emergence	Before garlic is 6 inches high
	DCPA (Dacthal)	9 lbs.	Pre-emergence	
	Paraquat	½ lb.	Pre-emergence	Apply on emerged weeds before garlic shoots appear.
LEAF CROPS Beet greens, Col-lards, Kale, Mus-tard, Rape, Spinach, Turnip greens	Trifluralin (Treflan)	½ to ¾ lbs.	Preplant	Work into soil thoroughly
	Sulfallate (Vegadex)	3 to 4 lbs.	Postemergence	Follow application immediately with light irrigation (1 inch)
Spinach	CIPC (Chlorpro-pham)	1 lb.	Pre-emergence	For fall plantings for spinach only
Collards, Kale and Mustard only	DCPA (Dacthal)	9 lbs.	Pre-emergence	
LETTUCE	Sulfallate (Vegadex)	4 lbs.	Pre-emergence	Follow application immediately with light irrigation
	IPC (Propham)	6 lbs.	Preplant or pre-emergence	
	Benefin (Balan)	¾ to 1 lb.	Preplant	Work into soil thoroughly
	Paraquat	1 lb.	Preplant or pre-emergence to crop	Postemergence on weeds
	Bensulide (Prefar)	5 to 6 lbs. active	Preplant or Pre-emergence	Incorporate preplant applications. Apply 1 inch of water by sprinkler irrigation for pre-emergence applications
	Pronamide (Kerb)	1 to 1.5 lbs.	At planting time	

CROP	CHEMICAL	ACTIVE INGREDIENTS	TIME	REMARKS
ONIONS	CIPC	4 to 6 lbs.	Pre-emergence or postemergence	Organic soil
	CDA (Radox)	6 lbs.	Pre-emergence or postemergence	Organic soils (more than 20% organic matter) Do not use on green onions
	D CPA (Dacthal)	6 to 9 lbs.	Pre-emergence	
	Nitrofen (TOK)	3 to 4 lbs.	Postemergence	When weeds are small and onions have reached the two true leaf stage. If wettable powder formulation is used onions may be sprayed in flag leaf stage.
PEAS	M CPA amine salt	$\frac{1}{8}$ to $\frac{1}{4}$ lb.	Postemergence	When peas are 4 to 6 inches tall
	M CPB	$\frac{3}{4}$ to 1 lb.	Postemergence	Use before flower buds form
	Dinitro amine	3 to 6 lbs.	Pre-emergence	
		$\frac{3}{4}$ to 1 $\frac{1}{2}$ lbs.	Postemergence	Before peas bloom; air temperature must be less than 85° F.
	Propachlor (Ramrod)	3.9 to 4.9 lbs.	Pre-emergence	
	Diallate or Triallate (Avadex)	1 $\frac{1}{2}$ lbs.	Preplant	For wild oat control work into soil by cross discing
	Barban (Carbyne)	$\frac{1}{8}$ lb.	Postemergence	For wild oat control. Apply when wild oats have 2 to 3 leaves
Trifluralin (Treflan)	$\frac{1}{2}$ to $\frac{3}{4}$ lb.	Preplant	Work into soil thoroughly	
PEPPERS	Diphenamid (Dymid or Enide)	3 to 5 lbs.	Pre-emergence or 1 month after trans- planting	Use low rate on light soil
	Paraquat	1 lb.	Prior to planting or crop emergence	On emerged weeds
	Trifluralin (Treflan)	$\frac{1}{2}$ to $\frac{3}{4}$ lb.	Before transplanting	Work into soil thoroughly
SQUASH	Chloramben (Amiben)	4 lbs.	Pre-emergence	
	Bensulide (Prefar)	6 lbs.	Preplant	Incorporate shallowly
TOMATOES	Diphenamid (Dymid or Enide)	4 to 6 lbs.	Immediately after seeding or trans- planting	Use low rate on light soil
	Paraquat	1 lb.	Prior to planting or crop emergence	On emerged weeds
	Bensulide (Prefar)	4 to 5 lbs.	Preplant	
	Isopropalin (Paralan)	1.1 to 1.9 lbs.	Preplant	For transplanted crop only

NOTE: 1. The chemical rates suggested are for complete coverage applications. For hand applications reduce the quantity of material used proportionate to the area actually sprayed.

2. For spray applications use 20 or more gallons of water per acre or as specified on the label.

3. Pre-emergence applications of herbicides are more satisfactory if applied to moist soil and followed immediately by a light irrigation or rain.

The first line of defense against weeds is the use of good cultural practices. In fields with known weed infestations, where possible, select crops that respond to weed-control programs for the weed species present. Adequate seedbed preparation improves the effectiveness of chemical weed-control programs.

Use close row spacings, where it is not possible to cultivate between the rows, only if it is certain that an adequate chemical weed-control program is available.

Weeds are killed most easily when conditions favor germination of weed seeds and rapid plant growth. Satisfactory results can be expected if herbicides are applied as directed and under normal conditions. Unusual temperatures or rainfall 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 herbi-

cides. Heavier soils usually require higher rates of application of pre-emergence herbicides to obtain weed control than do lighter, sandy soils.

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 on label.

Prepared by GARVIN CRABTREE, associate professor of horticulture, and N. MANSOUR, Extension vegetable production specialist, Oregon State University.

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