Weed Control Motes

WEED CONTROL IN SMALL FRUIT

Control Series 43

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The control of weeds is the most expensive item in the production of small fruits. Hand weeding of these crops is very time consuming and tedious. Mechanical cultivation is not satisfactory in most instances. The use of chemicals for controlling weeds is gaining acceptance in these crops. When used correctly these chemicals will do a good job of controlling weeds.

For grapes and raspberries the sprays should be directed at the base of the plants and kept off the stems and vines. The chemicals recommended for strawberries are to be applied over the plants.

The following chemicals have resulted in good weed control when used according to directions. Rates stated are for both active ingredient (ai) and product per acre sprayed. Reduce rate accordingly, if band applications are used. Each label contains a list of annual weeds which will be controlled. Read the label on the herbicide containers and apply accordingly.

Chemical/A	Gal/A	REMARKS
dinoseb, DNBP 2.5 lb. ai (Dow General or Sinox General 2 qts)*	40	Apply in fall after harvest or in early spring before bloom. Do not apply during suckering or layering. Keep spray off of foliage (directed spray). This acts as a contant plus short soil residual herbicide on weed seeds.
Simazine 2-3 lb. ai (Princep 80W 2.5-3.75 lb)*	40	Apply in the spring or as a split appli- cation 1/2 in fall and 1/2 in spring. Use only 1/2 rate on new plantings (less than 6 months old). Do not apply to foliage or while fruit is present. It acts mainly through the soil to destroy germinating weed seed.
		GRAPES
dinoseb, DNBP ethanol and isopropanol salts 6-9 lb. ai (Dow Pre- merge 2-3 gals)*	20	Sprayed foliage of both weeds and grapes will be killed. Also, it will give short soil residual action on germinating weed seed. Direct spray to weeds while crop is dormant and before bloom. Do not graze livestock on treated areas. Do not apply to more than 6" of the base of grape stems or to young canes selected for bearing.

BLACKBERRIES AND RASPBERRIES

*Trade name

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		GRAPES Cont'd
Chemical/A	Gal/A	REMARKS
diuron 2 lb. (Karmex Diuron Weed Killer 80 WP 2.5 lb.)*	50	It destroys weed seeds as they start to germ- inate. Apply a single application per year in early spring, after clean cultivation or prior to germination of annual weeds. Do not apply to vines with trunks less 1 1/2" in diameter or injury may result.
simazine 2-2 1/2 lb/ai (Princep 80W 2 1/2-3 1/8 lb)*	40	Simazine acts mainly through the soil, des- troying germinating weed seeds. Apply a single application per year, early spring or in fall after clean cultivation. Vine- yards must be established at least 3 years.
		STRAWBERRIES
chloroxuron 4 lb. (Tenoran 50WP 8 lb.)*	40	Apply over the top of established plants any- time except during the interval of 60 days prior to harvest. On new transplants delay until strawberry plants become established. Do not apply more than 2 applications in one year. This acts through weed foliage and through soil on germinating weed seed.
CIPC, chlorpropham 1 lb. ai. (Chloro IPC E.C. 1 qt)*	20	Apply between period of November 1 and March 1 for chickweed control. Dormant ap- plication only. Do not apply to ever bear- ing varieties.
DCPA 9 lb ai (Dact- hal 75W 12 lb)*	40	Apply at transplanting or in early spring before annual grasses start to germinate. Do not apply after first bloom. DCPA acts on germinating weed seeds, very effective on crabgrass, foxtails, carpetweed, common chickweed, kambsquarter, and purslane.
2,4-D amine 1/2 lb ai (Various, l pt of 4 lb/ gal formulation)	20	Apply after picking is completed, or after new plantings are well established. Weeds must be small. Do not apply during bud, flower, or fruit stage.

*Trade Names

STRAWBERRIES Cont'd						
Chemical/A Gal/A	A REMARKS					
dinoseb, DNBP triethanol- 40 amine salts 3 lbs ai (Sinox P.E. 1 gal)*	In established beds, apply after seasonal growth is completed and weeds are small (November through January). Apply when temperatures are 50°F or above and only once during the season. Do <u>not</u> apply after strawberry plants have begun spring growth. Acts mainly as contact weed kill- er, good coverage required.					
Diphenamid 4-6 lb/A ai (Dymid-D 1-1 1/2 gal or Enide 50W 8-12 lb.)*	This kills weed seed as they start to germ- inate. Do not apply after transplanting un- til strawberry plants have developed 2 or 3 full sized leaves. Cultivate and hand weed before applying herbicide. May also be applied after plant bed renovation and clean cultivation. Do not apply within 60 days of harvest.					
sesone 2 lb. ai 30 (Sesone 90% 2.2 lb)*	Apply after plants are well established and after hand weeding and cultivation. Avoid spraying during rooting of runner plants, fruit bud development, flowering, and fruit- ing. Do not apply within 7 days of harvest or during harvest season. Sesone kill weed as they start to sprout.					

RESIDUE TOLERANCES

STRAWBERRIE	S	RASPBERRIES & B	LACKBERRIES	GRAPES	
Chemical	ppm	Chemical	ppm	Chemical	ppm
chloroxuron	0.1	DNBP	N.E.	Diuron	1.0
CIPC	N.E.	Simazine	0.25	DNBP	N.E.
DCPA	2.0			Simazine	0.25
2,4-D	N.E.				
Diphenamid	1.0				
DNBP	N.E.				
Sesone	2.0				

Trade and brand names are used only for the purpose of information and the Virginia Cooperative Extension Service does not guarantee nor warrant the standard of the product, nor does it imply approval of the product to the exclusion of others which may also be suitable.

KEYS TO PROPER USE OF PESTICIDES

- 1. Read the label on each pesticide container before each use. Follow instructions to the letter; heed all cautions and warnings, and note precautions about residues.
- Keep pesticides in the containers in which you bought them. Put them where children or animals cannot get to them, preferably under lock and away from food, feed, seed, or other material that may become harmful if contaminated.
- 3. Dispose of empty containers in the manner specified on the label. If disposal instructions are not printed on the label, burn the containers where smoke will not be a hazard, or bury them at least 18" deep in a place where water supplies will not be contaminated.

SEE YOUR DOCTOR IF SYMPTOMS OF ILLNESS OCCUR DURING OR AFTER USE OF PESTICIDES.