

# Herbicides for Commercial Fruit Crops—1971

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Herbicides are a valuable "tool" for the fruit grower in his constant battle against weeds. Weeds not only compete with fruit crops for light, moisture and nutrients, but also may harbor insects and diseases and often interfere with other operational practices. In many situations herbicides are the most economical means of controlling weeds. In some situations herbicides may be the only practical means of controlling weeds. However, other methods of weed control (cultivation, mulching) may prove economical or practical in still other situations.

In the chart below are listed herbicides most likely to give satisfactory results under Missouri conditions. Herbicides other than those listed may prove equally effective if they have label approval for the particular fruit crop, but they should be used on a limited scale until safety and effectiveness are determined for your

specific soil and environmental conditions.

Herbicide effectiveness is largely dependent upon: 1) temperature, 2) moisture, 3) soil type, 4) weed or grass species, and 5) rate and method of application. Therefore, read the label on the container and understand all the factors leading to the safe and effective use of each herbicide.

The chart below lists the fruit crop, the common name of the herbicides suggested for use, the weeds controlled, and the time of application. Trade names are in parentheses. For further information on rates, methods of application and special considerations -- READ THE LABEL!

Crop	Weeds Controlled	Chemical	Rate per Acre Sprayed Area	Time of Application
APPLES non-bearing	annual grasses and weeds (pre-emergent application)	diuron (Karmex) simazine (Princep) terbacil (Sinbar)	4 lb. 80W 5 lb. 80W 4 lb. 80W	Early spring before annual grasses and weeds appear. <u>Do Not</u> use Diuron or simazine for 1 year or terbacil for 3 years after planting.
	annual grasses and weeds (post-emergent application) (also for top-kill of perennial grasses and weeds)	paraquat (Paraquat)	2 qts. 42EC	Use any time annual grasses and weeds become a problem. Can be used in combination with diuron, simazine or terbacil.
	most perennial weeds and poison ivy	amitrol (Weedazol) (Cytrol)	4 lbs. 50W	May be applied any time. Keep off foliage
		2,4-D amine salt or low volatile ester	1 1/2 lbs. actual	Spray in late June. Repeat in August if necessary. Keep off foliage.
	perennial grasses; sand burs	dalapon (Dowpon)	8 lbs. 90W	When grass growth is 4-8". Do not use until trees are 4 yrs. old.
	<u>NOTE: dalapon and amitrol or 2,4-D may be combined for control of perennial grasses &amp; weeds.</u>			
APPLES bearing	perennial grasses and weeds	dichlobenil (Casoron)	150 lbs. 4G	Best results from fall (November) application.
	annual grasses and weeds (pre-emergent application)	diuron (Karmex) simazine (Princep) terbacil (Sinbar)	4 lb. 80W 5 lb. 80W 4 lb. 80W	Early spring before annual weeds and grasses appear.
	annual grasses and weeds (post-emergent applica.) (also for top-kill of perennial grasses and weeds)	paraquat (Paraquat)	2 qts. 42EC	Use any time annual weeds and grasses become a problem. Can be used in combination with diuron, simazine or terbacil.
	poison ivy and most perennial weeds	2,4-D amine salt or low volatile ester	1 1/2 lbs. actual	Spray in late June. Repeat in August if necessary. Keep off foliage.
	perennial grasses; sand burs	dalapon (Dowpon)	8 lbs. 90W	When grass growth is 4-8"
	<u>NOTE: dalapon and 2,4-D may be combined for control of perennial grasses and weeds</u>			
	perennial grasses and weeds	dichlobenil (Casoron)	150 lbs. 4G	Best results from fall (November) application.
PEARS	Same as apples, but <u>do not use terbacil</u> on pears.			



Crop	Weeds Controlled	Chemical	Rate Per Acre Sprayed Area	Time of Application
PEACHES	annual grasses and weeds (Pre-emergent application)	simazine (Princep)	4 lb. 80W	Early spring before annual grasses and weeds appear. <u>Do not</u> use simazine for 1 year or terbacil for 3 years after planting. <u>Do not</u> apply dichlobenil within 4 weeks after planting.
		dichlobenil (Casoron)	150 lbs. 4G	
		terbacil (Sinbar)	4 lbs. 80W	
	annual grasses and weeds (post-emergent applic.)	paraquat (Paraquat)	2 qts. 42EC	Use any time annual grasses and weeds become a problem. Can be used in combination with simazine and terbacil.
GRAPES bearing vineyard only!	annual grasses and weeds (pre-emergent application)	diuron (Karmex)	2½ lbs. 80 W	Early spring for pre-emergent control of grasses and weeds <u>beneath the trellis only</u> .
		simazine (Princep)	4 lbs. 80W	
		annual grasses and weeds (post-emergent applic.) (also for top-kill of perennial grasses and weeds.)	paraquat (Paraquat)	2 qts. 42EC
STRAWBERRIES new planting	annual grasses and weeds (pre-emergent applica.)	DCPA (Dacthal)	10-12 lbs. 75W	Before weeds germinate. <u>Do not</u> use Tenoran or diphenamid within 60 days of harvest. <u>Do Not</u> use Tenoran more than 2 times per season. <u>Do Not</u> make repeat applications of diphenamid within 6 months.
		diphenamid (Enide) (Dymid)	8 lbs. 50W	
		Chloroxuron (Tenoran)	8 lbs. 50W	
	broadleaved weeds	2,4-D granular	1 to 1 1/2 lbs. actual	<u>Do Not</u> apply Aug. 1 to Nov. 1, or to Earlidawn or Robinson varieties. <u>Do Not</u> apply during bud, flower or fruit stage.
	smartweeds - cotyledonary stage	CIPC (Chloro IPC)	1 pint (1/2 lb.)	
established planting	annual grasses and weeds	DCPA (Dacthal)	10-12 lbs. 75W	Before weeds germinate and/or after renovation. <u>Do Not</u> use Tenoran or diphenamid within 60 days of harvest. <u>Do Not</u> use Tenoran more than 2 times per season. <u>Do Not</u> make repeat applications of diphenamid within 6 months.
		diphenamid (Enide) (Dymid)	8 lbs. 50W	
		chloroxuron (Tenoran)	8 lbs. 50W	
	broadleaved weeds	2,4-D granular or amine salt	1 to 1 1/2 lbs. actual	<u>Do Not</u> apply Aug. 1 to Nov. 1, or to Earlidawn or Robinson varieties. <u>Do Not</u> apply during bud, flower or fruit stage.
special weed problems	fall germinated and germinating weeds and grasses; grain in straw	2,4-D amine	1 lb. actual	Very effective combination. Apply in early November. Gives continued control in fall, winter and early spring months.
		plus diphenamid (Enide) (Dymid)	8 lbs. 50W	
	fall germinated weeds and grasses; grain seed in straw mulch	CIPC (Chloro IPC)	1/2 gal.	January. <u>Plants must be fully dormant</u> .
		DNBP (Premerge) (Sinox P.E.)	1/2 gal.	Dormant application to bed middles and shoulders (January).
RASPBERRIES and BLACKBERRIES	most annual grasses and broadleaved weeds	diuron (Karmex)	2½ lb. 80W	Apply ahead of weed germination. Do not apply while fruit is present.
		simazine (Princep)	3-4 lb. 80W	

