

FRUIT AND NUT CROPS

SUGGESTED USES OF HERBICIDES ON FRUIT AND NUT CROPS

Herbicide	Apple	Blackberry	Blueberry	Grape	Peach	Pecan	Strawberry
2,4-D	Yes ¹	No	No	No	No	No	Yes
Carfentrazone	Yes	Yes	Yes	Yes	Yes	Yes	No
DCPA	No	No	No	No	No	No	Yes
Dichlobenil	Yes	Yes ¹	Yes	Yes	Yes	No	No
Diuron	Yes ²	No	Yes ²	Yes ³	Yes ³	Yes ³	No
Fluazifop ⁴	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Glufosinate	Yes	No	Yes	Yes	No	Yes	No
Glyphosate	Yes	Yes	Yes	Yes	Yes	Yes	No
Isoxaben ⁴	Yes	Yes	Yes	Yes	Yes	Yes	No
Mesotrione	No	No	Yes	No	No	No	No
Metolachlor	Yes ⁴	No	No	Yes ⁴	Yes ⁴	No	No
Napropamide	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Norflurazon	Yes	Yes	Yes	Yes ⁵	Yes ²	Yes	No
Oryzalin	Yes	Yes	Yes	Yes	Yes	Yes	No
Oxyfluorfen ⁶	Yes	No	No	Yes	Yes	Yes	No
Paraquat	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pronamide	Yes	No	Yes	Yes	Yes	No	No
Sethoxydim	Yes	No	Yes	Yes	Yes ⁴	Yes ⁴	Yes
Simazine	Yes	Yes ⁸	Yes ²	Yes ³	Yes	Yes ⁵	No
Terbacil	No	Yes ²	Yes ²	No	No	Yes ²	No

¹Do not apply to bare ground.

²Apply to established crops only.

³Apply to plants established 3 years or more.

⁴Do not apply to crops that will bear harvestable fruit within 12 months.

⁵Do not apply to transplants less than 2 years old.

⁶Apply to dormant crops only.

⁷Consult label for correct application procedure.

⁸Use 1/2 rate on plantings less than 6 months old.

Consult labels for approved adjuvants.

Weed resistance to recommended use-rates of certain herbicides has been documented in Mississippi — SEE PAGE 9.

Fruit and Nut, Continued

Herbicide	Broadcast rate lb or pt/A	Crops	Time of application	Weeds controlled	Remarks, limitations
benefin + oryzalin XL 2G	2.5 lb ai 150 lb 2G	Nonbearing Apple Blackberry Blueberry Grape Peach Pecan	Before weeds germinate.	Many annual grasses and small seeded broadleaf weeds.	Rainfall or irrigation critical for acceptable weed control. Emerged weeds must be controlled before applica- tion. Do not apply within 1 year of harvest. Do not re- enter treated sites within 12 hours after application.
bentazon Basagran 4SL	0.75-1.0 lb ai 1.5 to 2.0 pt	Nonbearing Apple Blackberry (at or before planting only) Blueberry Grape Peach Pecan	Apply only as a DIRECTED spray when weeds are actively growing. Keep spray off green foliage and stems.	Many broadleaf weeds, including coffee senna, dayflower, smartweed, prickly sida, sesbania, wild mustard, wild poinsettia, and yellow nutsedge.	Do not apply within 1 year of harvest. Adding crop oil concentrate at 1 qt/A improves control of certain weeds. Do not apply to stressed plants or injury may occur. Do not exceed 2 pt/A per application or total application of 4 pt/A per year. Do not graze animals in treated fields or use hay from treated fields for ani- mal feed or bedding.
carfentrazone-ethyl Aim EC	1-2 oz/A	Apple Blackberry Blueberry Grape Peach Pecan	When weeds are actively growing.	Most broadleaf weeds.	Use a minimum of 20 gal- lons of spray per broadcast acre. A nonionic surfactant or crop oil concentrate is required. Apply as a direct- ed spray.
clethodim Select 2EC	0.09-0.13 lb ai 6-8 oz	Nonbearing Apple Grape Peach Pecan	Apply only as a DIRECTED spray with nonionic sur- factant at the rate of 1 qt per 100 gal spray.	Annual and perennial grasses.	Do not apply within 1 year of harvest. Do not exceed 8 oz/A per application or 32 oz/A per year. Do not apply if rainfall is expected within 1 hour after treatment.
DCPA Dacthal 75% WP	8-10.5 lb ai 10.7-14.0 lb	Strawberry	Before weed emergence.	Annual grasses and some small- seeded broadleaf weeds.	Apply no more than 9 lb a.i./A for establishment plantings nor 10.5 lb a.i./A to established plantings. Do not apply after first bloom. Rainfall or irrigation fol- lowing applications improves weed control.
dichlobenil 4% G 50% WP	4.0-6.0 lb ai 100-150 lb 8.0-12 lb	Apple Blackberry Blueberry Grape Peach	Preemergence in late winter to early spring after plants established at least 4 weeks.	Many annual and perennial grasses and broadleaves.	Apply as directed spray be- fore weed seed germinate. Use low rate for annuals if application is followed by more than 0.5-inch of water. Use high rate for perennials or if incorporation is poor.
diquat Reglone	0.25-0.5 lb ai 1.5-2.0 qt	Nonbearing Apple Blackberry Blueberry Grape Peach Pecan	Apply only as a DIRECTED spray with nonionic sur- factant at the rate of 1 qt per 100 gal spray.	Small broadleaf and grassy weeds.	Do not apply within 1 year of harvest. Do not allow spray to contact green foliage, stems, or fruit. Do not graze treated sites.

Fruit and Nut, Continued

Herbicide	Broadcast rate lb or pt/A	Crops	Time of application	Weeds controlled	Remarks, limitations
diuron 80% DF/WP 4 lb/gal	1.2-3.0 lb ai 1.5-3.7 lb 2.4-6.0 pt	Apple Peach Pear Pecan	Preemergent in spring or early sum- mer. Add 0.5% sur- factant if weeds have emerged.	Annual grasses and broadleaves.	Apples must be established at least 1 year and peaches and pecans must be estab- lished at least 3 years. Do not apply on soils containing less than 1% organic matter. Do not use on sand, loamy sand, or gravelly soils.
diuron 80% DF/WP 4 lb/gal	1.2-1.6 lb ai 1.5-2.0 lb 2.4-3.2 lb	Blueberry Grape			
2,4-D Formula 40 3.8 lb/gal	0.5-1.0 lb ai 1.0-2.1 pt	Apple Strawberry	After last picking.	Most broadleaf weeds.	Use in established plantings after last picking. Do not apply unless possible injury to crop is acceptable. Do not apply to bare ground.
fluazifop Fusilade DX	0.25-0.37 lb ai 8-16 oz	Nonbearing: Apple Blackberry Blueberry Grape Peach Pecan	Warm weather when grasses are actively growing.	Grasses.	Apply to cover young actively growing annual and perennial grasses at least one hour before rain. Do not mix with other pesti- cides or apply to grasses injured by previous herbi- cide applications. Apply using 2 pt crop oil concen- trate or 1/2 pint surfactant in 25 gallons spray.
glufosinate ammonium Rely 200	0.75-1.25 lb ai 57-96 oz/A	Apple Grape Blueberry Pecan	Apply low rate if weeds are less than 6 in. tall or high rate if weeds are 6 in. or more tall. Apply 2.4 fl oz/gal for spot treatment.	Broadleaf, grasses, and sedges.	Avoid contact with foliage or green tissue of desirable vegetation. Do not harvest within 14 days after appli- cation. Do not apply to apples planted less than 1 year. Do not exceed 12 qt/A/year in berries.
glyphosate	0.75 - 2.25 lb ae 1% (v/v) - 1.3 fl oz or 2.6 tbsp 3 lb ae/gal water or 1 gal 3 lb ae/100 gal water 2% (v/v) - 2.6 fl oz or 5.2 tbsp 3 lb ae/gal water or 2 gal 3 lb ae/100 gal water	Apple Blackberry Blueberry Grape Peach Pecan Strawberry	When weeds are actively growing.	Most annual weeds less than 6 in tall. Most annual weeds over 6 in tall and perennial weeds.	Apply as a directed spray, avoiding contact with foliage, green stems or open wounds of crop. In peach orchards, apply to trees at least 2 years old with shielded sprayer that prevents contact with any part of trees. Do not apply within 90 days after first bloom. For optimal control of perennial weeds, apply during seed production or 2 to 4 weeks before frost.
isoxaben Gallery 75 DF	0.5-1.0 lb ai 0.6-1.3 lb	Nonbearing: Apple Blackberry Blueberry Grape Peach Pecan	Preemergence in late fall or early summer.	Broadleaf weeds.	Do not apply before soil around plant roots has firmed. Do not apply to plants that will bear har- vestable fruit within 12 months.

Fruit and Nut, Continued

Herbicide	Broadcast rate lb or pt/A	Crops	Time of application	Weeds controlled	Remarks, limitations
mesotrione Callisto	Up to 6 oz/A	Blueberries	Preemergent prebloom.	Most broadleaf weeds.	Two 3-oz/A applications may be used, but make no more than two applications per year. Using a crop oil is recommended. Do not apply after the onset of bloom. Apply as a directed spray
metolachlor Pennant Liquid	2.0-4.0 lb ai 2.0-4.0 pt	Apple Peach	Preemergence in spring prior to weed emergence.	Annual grasses, small-seeded broadleaves, and yellow nutsedge.	Do not apply to orchards less than 30 days old or before soil settles around transplants and are filled in. If weeds have emerged, control by tillage or post- emergence herbicides. Do not harvest grapes within 12 months of application.
Dual 8E	2.0-4.0 pt	Nonbearing: Grape			
napropamide Devrinol 50% WP	2.0-4.0 lb ai 4.0-8.0 lb	Apple Blackberry Blueberry Grape Peach Pecan Strawberry	Preemergent before weed emergence.	Annual grasses and small-seeded broadleaf weeds.	Rainfall or irrigation within 24 hours of application is necessary for weed control. Application may be made immediately after planting and once each year follow- ing. Application to straw- berry should be delayed until the desired number of daughter plants are estab- lished. Do not apply from bloom to harvest.
norflurazon Solicam Zorial 80% DF	2.0-4.0 lb ai 2.5-5.0 lb	Apple Blackberry Blueberry Grape Peach Pecan	Preemergent in spring before weeds emerge. Use when plants are dormant, before weeds emerge.	Annuals.	Avoid contact with leaves and fruit. Use lower rates on lighter soils and higher rates on heavier soils. One application per year. See label for tank mixes.
oryzalin Surflan AS 4 lb/gal	2.0-4.0 lb ai 4.0-6.0 pt	Apple Blackberry Blueberry Grape Peach Pecan	Preemergent in spring before weeds emerge.	Annual grasses and small-seeded broadleaf weeds.	Rainfall or irrigation follow- ing applications improves weed control. Existing weeds should be destroyed before application. Use lower rates for short-term control and higher rates for long-term control. May be tank mixed with diuron or simazine. See label for spe- cific crop and rate recom- mendations.
oxyfluorfen Goal 2XL	0.5-2.0 lb ai 2.0-8.0 pt	Dormant Apple Grape Peach Pecan	Preemergence or postemergence. Add 0.25% nonionic sur- factant if weeds are emerged.	Annual grasses and broadleaf weeds.	Do not apply after bud swell or if foliage, fruit, or nuts are present.

Fruit and Nut, Continued

Herbicide	Broadcast rate lb or pt/A	Crops	Time of application	Weeds controlled	Remarks, limitations
paraquat Gramoxone Extra 2.5 lb/gal	0.62 to 0.93 lb ai 2.0-3.0 pt Add up to 1 qt of a suitable nonionic surfactant to 100 gal of spray solu- tion.	Apple Blackberry (Brambles) Blueberry Grape Peach Pecan	When weeds are actively growing before 6 inches tall.	Annuals and top kill of perennial weeds.	Avoid contact with crop plant. Do not graze treated area. Do not apply when nuts to be harvested are on ground. Must be used by certified applicator. May be tank mixed with simazine. See label for spe- cific crops and rates. Bram- bles and blackberries: apply before emergence of new shoots as injury may occur.
pronamide Kerb 50 W	1.0-4.0 lb ai 2.0-8.0 lb	Apple Blueberry Grape Peach	Preemergence or postemergence. Late fall or early winter.	Annual and perennial grasses and broadleaf weeds.	Do not apply more than 4 lb Kerb/season to blueber- ries. Apply to established blueberries only.
sethoxydim Poast 1.5E	0.3-0.5 lb ai 1.5-2.5 pt	Bearing: Apple Blueberry Grape Strawberry Nonbearing: Peach Pecan	Postemergence when grasses are actively growing.	Annual and perennial grasses.	Rate dependent upon grass species, size, and growing conditions. Always add 2 pt Crop Oil Concentrate to each 100 gal spray. Do not apply to nonbearing crops within one year of harvest. Preharvest intervals: Apple 14 days Blueberry 30 days Grape 50 days Strawberry 30 days
simazine Princep 4 lb/gal 90%DG	2.0-4.0 lb ai 4.0-8.0 pt 2.2-4.4 lb	Apple Blackberry Blueberry Grape Peach Pecan	Preemergent in spring before bud break of crop.	Annuals and perennials.	One year establishment before application in apple, blackberry, blueberry, and peach, 2-year establishment before application in pecan and 3-year establishment before application in grape. May be used in combina- tion with paraquat. See label for instructions on specific crops and rates.
terbacil Sinbar 80% WP	1.6 - 3.2 2.0-4.0 lb	Blackberry Blueberry Pecan	Preemergent in spring or fall.	Annuals.	Treat only when bushes have been established for at least one year. Consult label for correct application technique.
triflurali + isoxaben Snapshot 2.5TG	2.5-5.0 lb ai 100-200 lb	Nonbearing Apple Blackberry Blueberry Grape Peach Pecan	Preemergent prior to weed germination or immediately after cultivation.	Many broadleaf summer and win- ter annual weeds.	Do not apply within 1 year of harvest. Do not apply to newly transplanted crops until soil has settled and no visible soil cracks exist. Do not exceed 600 lb/A per year. Sequential applications of 150 lb/A or more should not be made within 60 days of previous applications.