Blueberry Weed Control

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help from **Dr. Mark Czarnota**UGA- Griffin Campus



Weed Control Strategy



- Pre Plant
- Physical Barrier
- Physical Removal
- Bio-Control
- Chemical Control

Pre Plant

- Early Cultivation to eliminate some weed species and to incorporate amendments and lower pH
- Consider sprays of glyphosate and triclopyr (Garlon 3A) to eliminate woody and perennial weeds.
- Start several months before planting – try to repeat



Physical Barrier



- Plastic Mulch
- Landscape Fabric
- Sawdust
- Woodchips
- Pine Bark















Physical Removal



photo courtesy of Dr. Strik, OSU

- Hand weeding is expensive and not always effective
- Mechanical cultivation is problematic due to raised beds and damage to the shallow roots of the blueberry plant
- Probably still necessary at least early to keep escaped weeds from going to seed

Chemical Control

- Last alternative, usually combined with other control measures
- Products are safe when used properly.
- They are easy to use, and save hours of labor



Pre-Emergent

- Apply to bare soil or mulch before germination of seeds
- Need water to move (activate) herbicide into seed germination zone
- 2-4 month effectiveness

Post-Emergent

- Apply any time after seed has germinated
- Need a certain period of dryness after application
- Selective (Select Max)
- Non-Selective (Roundup)

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2019 Southeast Regional Blueberry Integrated Management Guide

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Recommendations are based on information from the manufacturer's label and performance data from research and extension field tests.

Because environmental conditions and grower application methods vary widely, suggested use does not imply that performance of the pesticide will always conform to the safety and pest control standards indicated by experimental data.

This publication is intended for use only as a guide. Specific rates and application methods are on the pesticide label, and these are subject to change at any time. Always refer to and read the pesticide label before making any application! The pesticide label supersedes any information contained in this guide, and it is the law.

Herbicides for Non-Bearing Plants Only

Weed/Timing PREPLANT/SITE PI	Material Mode of action	Amount of Formulation per Acre	Crop Age Restrictions	REI (hrs)	Comments
	glyphosate, WSSA 3 Roundup and other generic formulations	1 to 5 qt Depending on formulation and weeds being treated	Apply 30 days prior to planting.	4	Apply broadcast or POST-directed to control weeds prior to planting. Generic formulations may require the addition of a surfactant. See label for details on controlling specific perennial weeds.
PREEMERGENCE	•				
Annual broadleaf weeds and grasses	benefin / oryzalin WSSA 3 (XL 2G)	150 to 300 lb Depending on soil type	USE ON NON- BEARING PLANTS ONLY. Newly planted and non-bearing plantings. May also be used in bark bed production systems.	24	
Annual broadleaf weeds	flumioxazin WSSA 14 (Broadstar 0.25 GR)	150 lb	USE ON NON- BEARING PLANTS ONLY. Newly planted and non-bearing plantings. May also be used in bark bed production systems.	12	To avoid crop injury do not apply to moist or wet foliage. Irrigate plants with overhead irrigation within 1 hour after application with 0.5 to 0.75 inch of water to wash particles off of foliage and to activate the herbicide. See label for further instructions.

Suggested Blueberry Herbicide Programs

Crop Age	Fall	Winter	Spring	Summer					
Blueberry Established 1 year or more, cont.			Chateau. Existing annual weeds can be removed with separate paraquat, glufosinate, glyphosate, or Sandea for nutsedge control. Poast and Select Max can be used to control emerged grasses.	Diuron. Existing annual weeds can be removed with separate paraquat, glufosinate, glyphosate, or Sandea for nutsedge control. Poast and Select Max can be used to control emerged grasses					
Blueberry established 2 years or more	Existing annual weeds can be removed with separate paraquat (rabbiteye: see comments) or Reckon applications. Glyphosate (spot treat for perennial weeds). Poast (as needed).	Velpar (follow all label precautions and restrictions-only for high organic matter soils)	Chateau plus glufosinate (to control emerged weeds). Poast or Select Max as needed for grass control.	Chateau plus glufosinate. Poast or Select Max as needed.					
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			nutsedge control. Poast and Select Max can be used to control emerged grasses.	grasses.					

Weed Response to Herbicides used in Blueberry

	Annual Grasses						Annual Broadleaf Weeds														Perennial Weeds					
Herbicides	Crabgrass	Foxtail	Goosegrass	Panicum, Fall	Ryegrass, Annual	Chickweed	Dock	Galinsoga	Geranium, Carolina	Groundsel, Common	Henbit	Jimsonweed	Lambsquarters	Morninnglory, Annual	Nightshade	Pigweed	Radish, Wild	Ragweed	Sida, Prickly	Smartweed	Spotted Spurge	Bermudagrass	Dandelion	Nutsedge, Yellow	Smilax	Virginia Creeper
Preemergen	ce																									
Callisto	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	G	E	F	E	E	NA	F	NA	E	NA	NA	NA	P	NA	NA
Casoron	G	G	G	G	G	G	G	F	G	G	G	G	G	F	F	G	G	G	NA	G	G	NA	G	NA	NA	NA
Chateau	G	G	G	G	G	G	NA	G	G	NA	Е	G	Е	G	G	Е	G	G	Е	G	Е	NA	G	NA	NA	NA
Dacthal	G	G	G	G	P	F	P	NA	NA	NA	F	P	G	NA	NA	F	NA	NA	NA	N	G	NA	P	NA	NA	NA
Devrinol	G	G	G	G	G	G	NA	P	NA	G	P	NA	F	NA	NA	G	NA	NA	P	P	NA	NA	P	NA	NA	NA
Diuron	G	G	G	F	G	G	NA	G	F	NA	G	G	G	G	G	G	G	G	G	G	N	NA	NA	NA	NA	NA
Dual Magnum	Е	Е	E	Е	Е	G	NA	G	NA	NA	NA	NA	G	NA	Е	Е	NA	P	NA	NA	G	NA	NA	Е	NA	NA
Gallery	P	P	P	P	P	G	F	G	G	G	G	G	G	F	G	G	G	G	G	G	G	NA	G	NA	NA	NA
Kerb	G	G	G	G	G	G	NA	P	NA	NA	G	P	F	F	F	P	F	F	NA	F	NA	NA	P	P	NA	NA
Oryzalin	Е	Е	Е	G	G	G	NA	N	NA	F	F	N	Е	F	P	Е	P	P	P	P	F	NA	P	NA	NA	NA
Simazine	F	G	G	F	G	G	NA	G	F	F	G	G	Е	F	G	G	Е	G	F	G	P	NA	P	NA	NA	NA
Sinbar	G	G	G	G	G	Е	G	G	Е	F	F	Е	Е	G	G	G	Е	Е	Е	G	Е	NA	F	P	NA	NA
Solicam	Е	Е	Е	Е	G	Е	NA	G	NA	F	G	G	F	F	G	P	G	G	Е	G	F	P	G	P	NA	NA
Velpar	Е	Е	Е	Е	Е	Е	F	NA	Е	Е	F	G	Е	G	NA	Е	G	Е	NA	G	G	F	F	NA	NA	NA
Postemergeno	e																									
Basagran	NA	NA	NA	NA	NA	NA	NA	G	NA	G	NA	Е	F	F	G	F	P	G	G	Е	NA	NA	NA	G	NA	NA
Clethodim	Е	E	Е	Е	Е	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Е	NA	NA	NA	NA
Fusilade	G	G	G	G	G	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Е	NA	NA	NA	NA
Reckon 280	F	G	G	G	G	G	NA	F	F	F	F	G	G	Е	G	G	G	G	F	G	G	F	G	F	P	P
Glyphosate	E	E	Е	E	Е	Е	G	G	G	Е	F	Е	Е	G	Е	Е	G	Е	G	F	G	F	G	F	G	G
Paraquat	G	G	G	G	G	G	NA	G	F	F	F	G	G	G	G	G	F	G	G	G	G	P	P	P	P	P
Poast	Е	Е	Е	Е	G	NA	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Е	NA	NA	NA	NA

E = excellent, G = good, F = fair, P = poor, NA = not recommended

Herbicide Damage



Roundup damage, sub lethal dose

Sinbar damage on low organic matter soils





Clethodim applied at bud break

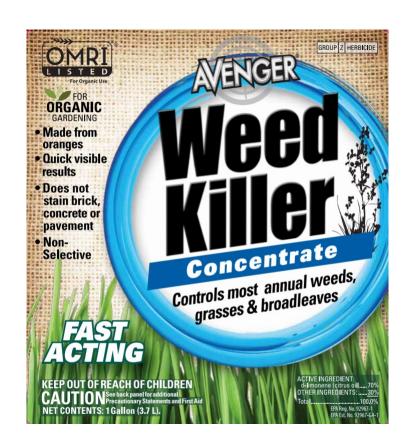
Certified Organic Options

Post Emergent, Burndown

- Acetic Acid/Vinegar
- Clove and Cinnamon Oils
- Fatty Acid
- Strong Soap

Pre Emergent

Corn Gluten



Chemical Mowing

- If you have Bermudagrass and Bahiagrass row middles, many maintain with glyphosate to limit growth.
- Treat middles in Spring when actively growing (treat with 2 lb ai/A glyphosate (shielded sprayer).
- That year, retreat one or 2 more times (1 lb ai/A glyphosate when normal growth starts again
- Could use Select Max



Thank You!

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