Blueberry Weed Control

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Benton County, Arkansas

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 Barrier

- Plastic Mulch
- Landscape Fabric
- Woodchips
- Sawdust
- Pine Bark
Sta-N-Step Blueberry Farm, Fayetteville, Arkansas
Physical Removal

- 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

photo courtesy of Dr. Strik, OSU
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)
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

<table>
<thead>
<tr>
<th>Weed/Timing</th>
<th>Material Mode of action</th>
<th>Amount of Formulation per Acre</th>
<th>Crop Age Restrictions</th>
<th>REI (hrs)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREPLANT/SITE PREPARATION</td>
<td>glyphosate, WSSA 3</td>
<td>1 to 5 qt</td>
<td>Apply 30 days prior to planting.</td>
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<td></td>
<td>Roundup and other generic formulations</td>
<td>Depending on formulation and weeds being treated</td>
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<td>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.</td>
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<td>PREEMERGENCE</td>
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<tr>
<td>Annual broadleaf weeds and grasses</td>
<td>benefin / oryzalin WSSA 3 (XI, 2G)</td>
<td>150 to 300 lb Depending on soil type</td>
<td>USE ON NON-BEARING PLANTS ONLY. Newly planted and non-bearing plantings. May also be used in burk bed production systems.</td>
<td>24</td>
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<tr>
<td>Annual broadleaf weeds</td>
<td>flumioxazin WSSA 14</td>
<td>150 lb</td>
<td>USE ON NON-BEARING PLANTS ONLY. Newly planted and non-bearing plantings. May also be used in burk bed production systems.</td>
<td>12</td>
<td>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.</td>
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<td>Crop Age</td>
<td>Fall</td>
<td>Winter</td>
<td>Spring</td>
<td>Summer</td>
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<td>Blueberry Established 1</td>
<td>Existing annual weeds can be removed with separate paraquat, glufosinate, glyphosate, or Sandea for nuthedge control.</td>
<td>Velpar (follow all label precautions and restrictions-only for high organic matter soils)</td>
<td>Chateau. Existing annual weeds can be removed with separate paraquat, glufosinate, glyphosate, or Sandea for nuthedge control. Poast and Select Max can be used to control emerged grasses.</td>
<td>Diuron. Existing annual weeds can be removed with separate paraquat, glufosinate, glyphosate, or Sandea for nuthedge control. Poast and Select Max can be used to control emerged grasses</td>
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<td>year or more, cont.</td>
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<td>Chateau plus glufosinate (to control emerged weeds). Poast or Select Max as needed.</td>
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<td>Blueberry established 2</td>
<td>Existing annual weeds can be removed with separate paraquat, glufosinate, glyphosate, or Sandea for nuthedge control. Poast and Select Max can be used to control emerged grasses.</td>
<td>Velpar (follow all label precautions and restrictions-only for high organic matter soils)</td>
<td>Chateau. Existing annual weeds can be removed with separate paraquat, glufosinate, glyphosate, or Sandea for nuthedge control. Poast and Select Max can be used to control emerged grasses.</td>
<td>Norflurazon. Existing annual weeds can be removed with separate paraquat, Reckon, glyphosate, or Sandea for nuthedge control. Poast and Select Max can be used to control emerged grasses</td>
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<td>years or more</td>
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<td>Sinbar and Chateau. Existing annual weeds can be removed with separate paraquat, glufosinate, glyphosate, or Sandea for sedge control. Poast and Select Max can be used to control emerged grasses.</td>
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<td>Herbicides</td>
<td>Codagrass</td>
<td>Foxtail</td>
<td>Goosegrass</td>
<td>Purslane, Fall</td>
<td>Ryegrass, Annual</td>
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</table>

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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