Irrigation Recommendations and Weed and Bird Control for Blueberry and Blackberry

Joe Masabni
UKREC
Princeton, KY
Weed Control

Joe Masabni
Blueberry and Blackberry

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Non-Bearing

Gallery: 0.66 – 1.33 lb/A in 20 gpa

• Apply in fall after cultivation or early spring before weeds emerge and when soil has settled.
• Do not apply within 12 months of harvest.
• Rainfall or 1” irrigation required.
Non-Bearing

Select 6-8 fl.oz/A OR Fusilade 1-1.5 pt/A

- Specific for grass control.
- Safe on blueberry, still use as a directed spray.
- Do not apply within 12 months of harvest.
Bearing

Surflan 4AS: 2 - 6 qt/A in 40 gpa

- Beneath bushes before weeds emerge
- Avoid contact with foliage
- Rainfall or 1” irrigation required.
Bearing

Solicam 80DF: 2.5 (light soil) – 5 (heavy soil) lb/A

- Apple to clean soil from fall to early spring.
- Rainfall or 1” irrigation required.
- Do not apply 1st application before 6 months after planting.
Bearing

Princep 4L: 2 - 4 qt/A in 25 – 40 gpa

- Spring before weeds emerge and canes leaf out OR
- Split application in fall and spring (2.5 qt)
- Do not apply when fruit is present
Bearing

Karmex 80DF: 2 - 4 lb/A in 25-40 gpa

• Same conditions as Princep
• Use in blueberry at least 1 year old.

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Devrinol 50DF: 8 lb/A

• Devrinol may be applied to newly planted and established crops.
• Do not apply within 35 days of harvest.
Bearing

Casoron 4G: 100 lb/A (Annuals)
150 lb/A (Perennials)

- Apply in fall before soil freezes.
- If incorporated, apply in fall or early spring.
- Do not apply within 4 weeks after transplanting.

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Bearing

Kerb 50WP: 2-4 lb/A in 20-50 gpa

- Kerb also has postemergence activity.
- Best results if applied in fall after crop is harvested and before soil freezes.
- Best control if T < 55F.
- Make only 1 application / year.
- Do not apply 1st application within 6 months after spring planting or 12 months after fall planting.

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POST Non-Selective Herbicides

Gramoxone Extra 3L: 2 - 3 pt/A

- Use NIS 0.25% or COC 1%.
- Use low pressure to produce coarse spray.
- Best control if applied to actively growing weeds.
- No residual activity, so repeat applications may be necessary.
Pre-Plant Non-Selective Herbicide
Roundup WeatherMax 5.5L: 22 oz/A

- Depending on weed size and density
- PHI = 14 days.
- Max. Rate = 5.3 qt / acre / year.
- Use NIS 0.25% or AMS 1-2%.

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Weed Control Program

New Planting

• Field Preparation: Roundup
• PRE, after soil settles: Gallery and Touchdown, Select or Fusilade.
• POST, directed spray or wiper application: Gramoxone or Rely
Irrigation

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Blackberry

- Irrigation is essential from early spring until after harvest.
- Water usage from top 2 ft of soil.
- Irrigate before plants show signs of wilting.
- Peak water usage is 0.2 – 0.33 in. / day.
- Soil moisture manual test: sample at 10” ball sticky = enough moisture
  ball will not hold = dry soil
Blackberry/Blueberry

Excess moisture is also harmful:
• leads to soft fruit
• Leaches N
• Poor soil aeration

Blackberry responds well to drip irrigation. Blueberry needs irrigation in the first 3 years.

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Water Stress
Severe Water Stress
Bird Control
Bird Netting at UKREC
Homeowner’s Idea
Homeowner’s Idea
Blueberry 2002 Yields
of UKREC Varieties
Princeton, KY

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## Table

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Cumulative Yield 1995-2002 (lbs/bush)</th>
<th>2002 Yield</th>
<th>Percent Ripe Fruit</th>
<th>Berry Size (gr)</th>
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<td></td>
<td></td>
<td>Lbs/bush</td>
<td>June 7</td>
<td>June 21</td>
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<tr>
<td>Sierra</td>
<td>60.9</td>
<td>9.6</td>
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<td>91</td>
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<tr>
<td>Duke</td>
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<td>9.7</td>
<td>63</td>
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<tr>
<td>Nelson</td>
<td>59.3</td>
<td>10.5</td>
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<td>80</td>
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<tr>
<td>Toro</td>
<td>57.4</td>
<td>11.0</td>
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<td>80</td>
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<tr>
<td>Blue Crop</td>
<td>56.5</td>
<td>11.5</td>
<td>0</td>
<td>82</td>
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<tr>
<td>Blue Gold</td>
<td>50.5</td>
<td>8.1</td>
<td>17</td>
<td>100</td>
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<tr>
<td>Sunrise</td>
<td>36.3</td>
<td>7.3</td>
<td>64</td>
<td>100</td>
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<tr>
<td>Patriot</td>
<td>34.2</td>
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<td>100</td>
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<tr>
<td>LSD (5%)</td>
<td>8.7</td>
<td>2.7</td>
<td>6</td>
<td>NS</td>
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Blackberry Varieties
UKREC
Princeton, KY

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Arapahoe, 6-5-03
Kiowa, 6-5-03
## Yield of blackberry in Princeton, KY

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Yield lbs/acre</th>
<th>Percent Ripe Fruit</th>
<th>Berry Size (g)</th>
<th>Harvest Period</th>
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<tbody>
<tr>
<td>Apache</td>
<td>9,800</td>
<td>3</td>
<td>65</td>
<td>6/27-8/1</td>
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<td>Kiowa</td>
<td>7,500</td>
<td>20</td>
<td>70</td>
<td>6/18-8/1</td>
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<tr>
<td>Chickasaw</td>
<td>6,200</td>
<td>15</td>
<td>85</td>
<td>6/18-7/26</td>
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<tr>
<td>Arapaho</td>
<td>3,450</td>
<td>75</td>
<td>100</td>
<td>6/18-7/12</td>
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<tr>
<td>LSD (5%)</td>
<td>3,300</td>
<td>NA</td>
<td>NA</td>
<td>0.9</td>
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