

Suitable Blueberry Cultivars for Production in Missouri



Proper cultivar selection is a critical decision and can be the difference between success and failure with blueberry production in Missouri. Several types of blueberries are commercially produced in Missouri. Northern highbush blueberry cultivars (varieties) are well adapted for production across Missouri. The hardiest southern highbush blueberry cultivars are hardy enough for production in southern Missouri. Half-high blueberries are of low stature and adapted to container culture. Lowbush blueberries are not recommended for production in Missouri. Less hardy southern highbush and rabbiteye blueberry cultivars are not hardy enough for consistent production in most of Missouri.

Commercial blueberry farmers should consider the following criteria when selecting cultivars (Fuqua et al. 2000, Gauthier and Kaiser 2013):

- Adaptation to climate, especially, winter hardiness and the ability to withstand high temperatures during the growing season.

- Tolerance to high soil pH (measuring the amount of acid or alkaline.) Avoid cultivars that are overly sensitive to high pH soils.
- Disease resistance, especially, resistance to Phytophthora root rot.
- Cultural system.
- Harvest season; late ripening cultivars are exposed to high summer temperatures and high numbers of spotted wing drosophila.
- Productivity.
- Fruit taste, size and firmness.
- Use of the fruit; most of the Missouri blueberry crop is intended for fresh fruit sales. Cultivars adapted to this use are preferred.
- Marketing plan; most blueberries commercially grown in Missouri are intended for local, direct market sales. Cultivars adapted for this market are preferred.

**Dr. Touria Eaton**

State Extension Specialist
- Horticulture

Partick Byers


Associate Extension Professional &
Horticulture Specialist, Greene County
Southwest Region, University of Missouri


900 Chestnut Street, Allen Hall
Jefferson City, MO 65101
(573) 681-5543


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Types of cultivars of blueberries adapted for growth in Missouri.

Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Berkeley' (*Nature Hills Nursery 2017) 	Northern Highbush	Mid-June	2-2.5	9-8	Midseason ripening. Large fruit, very light blue, firm, with a large stem scar and fair flavor. Loose fruit clusters. Very high yields. Upright, spreading bush <i>(Fuqua 2000; Nature Hills Nursery 2017).</i>


Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
"Bluecrop" (*Gurney's Seed & Nursery Co. 2017) 	Northern Highbush	Mid-June	1.5-2	10-20	Midseason ripening. Medium fruit, very light blue, very firm, with a small stem scar and fair flavor. Loose fruit clusters. High yields and a consistent producer. Upright, spreading, open bush. Standard midseason cultivar <i>(Fuqua 2000; Gurney's Seed & Nursery Co. 2017; Sciarappa and Pavlis 2005)</i>


Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Bluejay' (*Stark Bro's 2017) 	Northern Highbush	Mid-June	1.5-2	10-20	Midseason ripening. Medium fruit, light blue and very firm, with a small stem scar and good flavor. Moderate yields. Upright, spreading bush <i>(Fuqua 2000; Stark Bro's 2017; Daisy Farms 2017).</i>


* = Photo courtesy of this publisher.

Blueberry Cultivars (continued)

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Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Blueray' (*Burpee 2017) 	Northern Highbush	Mid- June	2-2.5	10-20	Midseason ripening. Fruit large, light blue, firm with medium stem scar and good flavor. Small, tight fruit clusters. Moderate yields. Upright, spreading bush <i>(Burpee 2017; Fuqua 2000; Eden Brothers 2017; Sciarappa and Pavlis 2005).</i>


Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Bluetta' (*Chris Bowers & Sons 2017) 	Northern Highbush	Mid- June	1.5-2	9-20	Early ripening. Fruit medium, light to medium blue, firm with large stem scar and fair flavor. Moderate yields. Short, compact, spreading bush. Susceptible to Botryosphaeria (stem blight) canker <i>(Fuqua 2000; Chris Bowers & Sons 2017; Blueberry Croft Farm and Nursery 2017; Sciarappa and Pavlis 2005).</i>


Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Brigitta Blue' (*Willis Orchard Co. 2017) 	Northern Highbush	Mid-June	1.5-2	13-20	Midseason ripening. Medium to large fruit, medium blue, very firm, with a small, dry stem scar and good flavor. High yields. Upright, spreading, dense bush <i>(Fuqua 2000; Willis Orchard Co. 2017; Garden Express 2017).</i>


* = Photo courtesy of this publisher.

Blueberry Cultivars (continued)

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Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Chandler' <i>(*Chris Bowers & Sons 2017)</i> 	Northern Highbush	Mid-June	2.25	5-10	Late ripening. Large to very large fruit, light blue, firm, with a small, dry stem scar and good flavor. High yields. Upright, spreading, open bush <i>(Byers, 2015; Chris Bowers & Sons 2017; Smart Gardener 2015).</i>


Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Collins' <i>(*Pense Nursery, Inc. 2017)</i> 	Northern Highbush	Mid-June	1-2	7-9	Late ripening. Large to very large fruit, light blue, firm, with a small, dry stem scar and good flavor. High yields. Upright, spreading, open bush <i>(Byers, 2015; Chris Bowers & Sons 2017; Smart Gardener 2015).</i>


Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Coville' <i>(*Burpee 2017)</i> 	Northern Highbush	July-August	2-2.5	5-8	Late ripening. Large fruit, very firm, with a medium stem scar and good flavor but tart until ripe. Loose fruit clusters. Very high yields. Upright, spreading bush <i>(Burpee 2017; Fuqua 2000; Sciarappa and Pavlis 2005).</i>


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Blueberry Cultivars (continued)

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Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Darrow' (*Chris Bowers & Sons 2017) 	Northern Highbush	Mid-June	1-2	8-15	Late ripening. Large to very large fruit, light blue, firm, with a small, dry stem scar and good flavor. High yields. Upright, spreading, open bush <i>(Byers, 2015; Chris Bowers & Sons 2017; Smart Gardener 2015).</i>


Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Duke' (*Nourse Farms 2017) 	Northern Highbush	Early July	1.5-2	10-15	Medium fruit medium blue, firm, with a small, dry stem scar and fair flavor. Moderate yields. Upright, spreading, open bush. Standard early season cultivar <i>(Fuqua 2000; De Groot, Inc. 2017; Nourse Farms 2017; Sciarappa and Pavlis 2005).</i>


Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
'Earliblue' (*Stark Bro's 2017) 	Northern Highbush	Mid-June	1-1.5	8-15	Early ripening. Small fruit, light blue, firm, with a medium stem scar and fair flavor. Loose fruit clusters. High yields but not consistent. Upright, spreading bush <i>(Fuqua 2000; Stark Bro's 2017; TreesAnd-PlantsDirect.com 2017; Sciarappa and Pavlis 2005).</i>

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Blueberry Cultivars (continued)

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Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
<p>'Elliot' <i>(*Stark Bro's 2017)</i></p> 	Northern Highbush	Mid-June	1.5-2	10-20	Medium fruit, light blue, very firm, with a small stem scar and fair flavor. Loose fruit clusters. Moderate yields. Upright, spreading bush

Cultivar	Flowering Habit	Harvest Time	Size (g/berry)	Yield (lbs./bush)	Description/Reference
<p>'Jersey' <i>(*Chris Bowers & Sons 2017)</i></p> 	Northern Highbush	Mid-June	1-1.5	7-10	Small fruit, medium blue, firm, with a medium stem scar and fair flavor. Loose fruit clusters. Moderate yields. Upright, spreading bush <i>(Fuqua 2000; Chris Bowers & Sons 2017; Gurney's Seed & Nursery Co. 2017; Sciarappa and Pavlis 2005).</i>

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