**Blueberry Cultivars for Missouri**

Patrick Byers  
Regional Horticulture Specialist  
MU Extension – Webster County

---

Today’s Outline

- Types of blueberries  
- The perfect blueberry for Missouri  
- Choosing the right blueberry cultivar  
- Standard blueberry cultivars  
- Up and coming blueberry cultivars to consider  
- Summary

---

Types of Blueberries

- **Northern highbush**  
  - Northern highbush blueberries (*Vaccinium corymbosum*) are native to much of the eastern and northeastern United States, from the Appalachian Mountains to the Atlantic Ocean.  
  - Plants grow 5 to 9 feet tall.

- **Southern highbush**  
  - Complex hybrids of *V. corymbosum* and a native, evergreen Florida species (*V. darrowii*).  
  - The plants grow about 6 to 8 feet tall.

- **Half-high**  
  - Result of crosses between northern highbush and lowbush blueberries.  
  - The plants grow from 3-4 feet tall.
**Types of Blueberries**

- **Rabbiteye**
  - Rabbiteye blueberries (V. virgatum syn. V. ashei) are native to the SE United States.
  - The plants grow from 6 to 10 feet tall.

- **Lowbush**
  - Lowbush blueberries (V. angustifolium) are native from Minnesota to Virginia and to the northeastern United States and the Maritime Provinces of Canada.
  - The plants are low-growing shrubs.

**Chilling requirements** – most blueberries require a certain amount of cold weather during winter in order to leaf and flower normally the following spring. 45°F is the general threshold temperature.

- High chill (900 to 1200 hours) – most northern highbush and half high cultivars
- Mid chill (400 to 900 hours) – higher chill southern highbush
- Avoid low or no chill blueberry cultivars in MO

**The Perfect Blueberry for Missouri**

- **Adapted to growing conditions**
  - High pH soils
  - Mineral soils that have low to moderate organic matter
  - Soils that have drainage issues

- **Hardiness**
  - Plant hardiness
  - Flower bud hardiness

- **Heat tolerance**
- **Drought tolerance**

**Disease resistance**
The Perfect Blueberry for Missouri

• Bush characteristics

Choosing the Right Blueberry Cultivar

• Ripening date
• Yields and duration of harvest
• Berry characteristics – flavor, berry size, firmness
• Type of market to be used
• Availability of labor for harvest
• Intended use of fruit
• Potential for mechanical harvesting

Standard Blueberry Cultivars

• Duke
  – 1987 USDA release.
  – Early ripening.
  – Fruit medium size, medium blue, firm with small, dry stem scar and good flavor.
  – Moderate yields.
  – Upright, spreading, open bush.
  – Sensitive to high pH soils

• Brigitta Blue
  – Midseason ripening.
  – Fruit medium to large, medium blue, very firm with small, dry stem scar and good flavor. High yields.
  – Upright, spreading, dense bush.
Standard Blueberry Cultivars

• **Berkeley**
  – 1949 USDA and New Jersey release.
  – Midseason ripening.
  – Fruit large, very light blue, firm with large stem scar and good flavor. Loose fruit clusters. Very high yields.
  – Upright, spreading bush.

Photo credit: [https://www.americanmeadows.com](https://www.americanmeadows.com)

Standard Blueberry Cultivars

• **Bluejay**
  – Midseason ripening.
  – Fruit medium size, light blue, and very firm with small stem scar and good flavor.
  – Moderate yields.
  – Upright, spreading bush.

Photo credit: [https://www.ecrater.com](https://www.ecrater.com)

Standard Blueberry Cultivars

• **Blueray**
  – 1955 USDA and New Jersey release.
  – Midseason ripening.
  – Fruit large, light blue, firm with medium stem scar and good flavor.
  – Small, tight fruit clusters.
  – Moderate yields.
  – Upright, spreading bush.

Photo credit: [https://www.burpee.com](https://www.burpee.com)

Standard Blueberry Cultivars

• **Bluecrop**
  – 1952 USDA and New Jersey release.
  – Midseason ripening.
  – Fruit medium, very light blue, very firm with small stem scar and good flavor. Loose fruit clusters.
  – High yields and consistent producer.
  – Upright, spreading, open bush.
  – Issues with overbearing

Standard Blueberry Cultivars

• **Legacy**
  – 1993 USDA and New Jersey release.
  – Midseason ripening.
  – Fruit medium to large, medium blue, firm with small stem scar and good flavor. High yields.
  – Upright, spreading, open bush.
  – Considered a southern highbush cultivar, so it may be cold tender in northern climates.

Photo credit: [https://www.burpee.com](https://www.burpee.com)

Standard Blueberry Cultivars

• **Sierra**
  – Midseason ripening.
  – Fruit medium to large, medium blue, firm with small stem scar and good flavor. Moderate yields.
  – Upright, spreading, open bush.

Photo credit: [https://www.ecrater.com](https://www.ecrater.com)
Standard Blueberry Cultivars

- **Chandler**
  - 1994 USDA release.
  - Mid to late ripening.
  - Fruit large to very large, light blue, firm with small, dry stem scar and good flavor.
  - High yields.
  - Upright, spreading, open bush.

- **Nelson**
  - 1988 USDA release.
  - Late ripening.
  - Fruit medium to large, light blue, firm, good flavor. High yields.
  - Upright, spreading, open bush.

- **Jersey**
  - 1928 USDA release.
  - Late ripening.
  - Fruit small, medium blue, firm with medium stem scar and good flavor. Loose fruit clusters. Moderate yields.
  - Upright, spreading bush.

- **Darrow**
  - 1965 USDA and New Jersey release.
  - Late ripening.
  - Fruit medium, light blue, firm with medium stem scar and good flavor. High yields.
  - Upright, spreading, open bush.

- **Coville**
  - 1949 USDA and New Jersey release.
  - Late ripening.
  - Fruit large, very firm with medium stem scar and good flavor but tart until ripe. Loose fruit clusters.
  - Very high yields.
  - Upright, spreading bush.
Standard Blueberry Cultivars

- **Lateblue**
  - 1967 USDA and New Jersey release.
  - Late ripening.
  - Fruit medium, light blue, firm with medium stem scar and good flavor. Loose fruit clusters. High yields.
  - Upright, spreading bush.

- **Elliot**
  - 1973 USDA release.
  - Late ripening.
  - Fruit medium, light blue, very firm with small stem scar and good flavor. Loose fruit clusters. Moderate yields.
  - Upright, spreading bush.

---

Up and Coming Cultivars

- **Gupton (SH):** early
- **New Hannover (SH):** early/mid
- **Blue Ribbon:** early/mid
- **Top Shelf:** mid
- **Ozarkblue (SH):** mid/late
- **Eschota:** mid/late
- **Aurora:** late
- **Liberty:** late
- **Cargo:** late

---

Others to consider...

- **Early**
  - Hannah’s Choice
  - Misty (SH)
  - O’Neal (SH)
  - Revielle (SH)
  - Draper
  - Huron
  - Ivanhoe

- **Midseason**
  - Cara’s Choice (SH)
  - Hardyblue
  - Calypso

- **Late**
  - Bluegold
  - Last Call

---

In Conclusion...

- The tried and true cultivars are still good!
- Consider on farm trials before planting large numbers of new cultivars
- Choose blueberry cultivars based on your realities!
- Be careful with low chill or no chill cultivars
- Be careful with southern highbush cultivars in northern regions
Up and Coming Cultivars

**Up and Coming Cultivars**

- **Gupton (SH)**
  - 2012 USDA/ARS release
  - Early season
  - Fruit light blue, firm
  - Bushes upright with narrow crowns
  - Susceptible to mummy berry!
  - Possible machine-harvest cultivar.

  *Photo credit Dr. Bill Cline, NCSU*  

- **New Hanover (SH)**
  - 2005 NCSU release
  - Early to midseason
  - Large-fruited cultivar for hand harvest. Very productive. Some stem tearing will occur.
  - Bush spreading

  *Photo credit Dr. Bill Cline, NCSU*  

- **Blue Ribbon**
  - Fall Creek Nursery exclusive
  - Early to midseason
  - High yields of firm, flavorful large berries and good post-harvest shelf life
  - Spreading bush

  *Photo credit Dr. Bill Cline, NCSU*  

- **Top Shelf**
  - Fall Creek Nursery exclusive
  - Midseason
  - Very large, flavorful, firm fruit

  *Photo credit Dr. Bill Cline, NCSU*  

Up and Coming Cultivars

Any Questions?

Patrick Byers  
MU Extension  
417-859-2044  
ByersPL@Missouri.edu
Up and Coming Cultivars

- **Ozarkblue (SH)**
  - 1996 UA release
  - Midseason to late
  - High yields of quality fruit
  - Plants are semi-upright and vigorous,

Photo credit: https://www.simmonsplantfarm.com

Up and Coming Cultivars

- **Echota**
  - NCSU release
  - Mid to late season
  - Light blue high quality fruit
  - Bush vigorous, upright

Photo credit: Bill Cline, NCSU

Up and Coming Cultivars

- **Aurora**
  - 2003 Release
  - Late ripening
  - Berries medium blue, firm, tart
  - Bush rounded, spreading, vigorous

Photo credit: http://www.fallcreeknursery.com

Up and Coming Cultivars

- **Liberty**
  - 2003 Release
  - Late ripening
  - The berries are slightly flat, sky-blue in color, and have a balanced appealing flavor.
  - Open, Upright, Vigorous bush

Photo credit: http://www.fallcreeknursery.com

Up and Coming Cultivars

- **Cargo**
  - Fall Creek Nursery exclusive
  - Late season
  - Berries round, uniform and maintain their firmness and flavor during refrigerated and freezer storage.
  - Narrow crown, upright, vigorous

Photo credit: Bill Cline, NCSU

Up and Coming Cultivars

Others to consider...

- **Early**
  - Hannah’s Choice
  - Misty (SH)
  - O’Neal (SH)
  - Revielle (SH)
  - Draper

- **Midseason**
  - Cara’s Choice
  - Hardyblue

- **Late**
  - Bluegold