

Red and Yellow Raspberry Cultivars Recommended for Production in Missouri



Types of Raspberries

A raspberry plant can produce for about 10-15 years in Missouri. However, canes of the plants are biennial. This means that they live for two years only, then die. Raspberries produce new canes from roots and from the plant crown. The first year's cane growth is known as the primocane. The same cane in the second year is known as the florican.

Summer-bearing raspberries (also called florican raspberries) produce a fruit crop in early summer on the floricanes. At this time, the primocanes are vegetative only. Fall-bearing raspberries (also called primocane or everbearing raspberries) produce fruit on the primocanes in the fall in addition to a second crop, in early summer, on the floricanes. Fall-bearing raspberries can be managed for the primocane crop only by pruning the plants to the ground in the winter. Or, they can be double cropped (growing two crops on the same plant) on both the primocanes and floricanes.

Two types of raspberries are commercially produced in Missouri: red/yellow and black. Red raspberries can be either summer- or fall-bearing. Red raspberries grow new canes from both roots and crowns. In time, the plants will form a hedgerow. Yellow raspberries have the same growth habits as red raspberries. The second type of raspberry is the black raspberry. The important, commercial black raspberry cultivars are all summer-bearing. Black raspberries produce new canes from the crown only. They have a clump growth habit. A third type of raspberry, the purple raspberry, is a hybrid of the red and black raspberry. Purple raspberries are not commonly grown commercially in Missouri.

Commercial raspberry farmers should consider the following criteria when selecting cultivars:

- **Climatic adaptation:** look for varieties with winter hardiness and a tolerance for high temperatures during the growing season.
- **Disease resistance:** resistance to phytophthora (water molds that damage plants) root rot is important.
- **Cultural system:** if protected culture (e.g., high tunnel, greenhouse) is used, select cultivars adapted to this system. Research and farmer experience show positive benefits (e.g., larger fruit size, firmer fruit, greater productivity) related to this type of raspberry production.
- **Productivity:** Productivity is especially important for farmers that grow for whole sale and for processing. For small farmers that grow for direct marketing, they consider taste over productivity if they have to choose between the two. High productivity combined with good taste is the best choice of all.
- **Fruit taste, size and firmness:** Size and firmness are especially important for easy harvesting and handling and for longer shelf life.
- **Use of the fruit:** most of the Missouri raspberry crop is intended for fresh fruit sales; cultivars adapted to this use are preferred.
- **Marketing plan:** most raspberries commercially grown in Missouri are intended for local, direct market sales; cultivars adapted for this market are preferred.



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Cultivars of red and yellow raspberries recommended for production in Missouri are summarized within.

Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
'Caroline' (* Eden Brothers 2015) 	Primocane	June to frost	2	1,433	The plant is vigorous, with prolific canes, variable height and short laterals. The fruit is high-quality, dark red, conical and flavorful. Excellent yield potential, berry size and fruit quality. <i>(Fisher 2015; Swartz et al. 1998b; Mertie Mae Botanics LLC and Horticulture Talk! 2010)</i>

Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
'Heritage' (* Ison's Nursery and Vineyards 2016) 	Primocane	June to frost	2	4,408	Description The plant is very vigorous, with tall rugged thorny canes. The fruit is of high quality and good flavor. It is large, sweet and firm. <i>(Fisher 2015; Gao 1998; Jones and Strang 2005; Mertie Mae Botanics LLC and Horticulture Talk! 2010; Ison's Nursery & Vineyards 2016)</i>

Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
'Josephine' (*University of Maryland Extension 2016) 	Primocane	Fall-bearing	3 to 4	1,699	The plant is upright and vigorous. It fruits later than 'Heritage'. The fruit is large and very firm, with good flavor. <i>(Fisher 2015; Striegler 2016; Swartz et al. 2001; University of Maryland Extension 2016)</i>

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Raspberry Cultivars (continued)

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Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
'Polana' <i>(*Ison's Nursery and Vineyards 2016)</i>	Primocane	Early June to frost	2	15,808	<p>This is a high-yielding variety. The plant is vigorous with canes shorter than those of 'Heritage'. The fruit is large, glossy, cohesive and flavorful.</p> <p><i>(Hanson et al. 2005; Striegler 2016; Mertie Mae Botanic LLC and Horticulture Talk! 2010; Ison's Nursery & Vineyards 2016)</i></p>



Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
'Autumn Bliss' <i>(*Victoriana Nursery Gardens 2016)</i>	Primocane Semi-erect	September to frost	2.9	7,783	<p>The plant is of medium height. It has sparse canes and few spines. The fruit has a mild flavor. It is large and somewhat soft.</p> <p><i>(Swartz 2014; Keep 1989; Weber et al. 2004; Victoriana Nursery Gardens 2016)</i></p>



Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
'Prelude' <i>(*Lakeview Farms 2016)</i>	Florican	Late May to July	2 to 2.5	7,000 to 10,000	<p>The plant is hardy and vigorous, with sparse but noticeable spines. It is easy to harvest and provides a long fruiting season. The high-quality fruit is firm, red and sweet.</p> <p><i>(Indiana Berry & Plant Company 2014; Weber 2012; Sanford et al. 2001; Mertie Mae Botanic LLC and Horticulture Talk! 2010; Lakeview Farms 2016)</i></p>



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Raspberry Cultivars (continued)

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Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
'Autumn Britten' (*Scenic Hill Farm Nursery 2016)	Primocane	June to July	2 to 3	13,600	The plant is vigorous, with good yield. The fruit is medium large, sweet and of excellent quality. <i>(English 2005; Fisher 2015; Jones and Strang 2005; Mertie Mae Botanics LLC and Horticulture Talk! 2010; Scenic Hill Farm Nursery 2015)</i>



Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
'Canby' (*Lakeview Farms 2016)	Florican semi-erect thornless	Late May to July	2	2,914	The plant is vigorous but not winter hardy for Missouri. But several reports indicate that the variety grows well in the Midwest. The fruit is large, firm, sweet, full of flavor and of excellent quality. <i>(Hanson et al. 2005; Weeks Berry Nursery Inc. 2014; Weber 2012; Lakeview Farms 2016)</i>




Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
'Reveille' (*Lakeview Farms 2016)	Florican erect	Late May to July	3 to 4	17,000 to 22,000	The plant is vigorous, very productive and winters well. The fruit is large and of excellent quality; however, it is somewhat soft. <i>(Hanson et al. 2005; Ison's Nursery & Vineyards 2016; Jones and Strang 2005; Striegler 2016; Lakeview Farms 2016)</i>





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Raspberry Cultivars (continued)


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Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
<p>'Titan' (*<i>García-Salazar 2009</i>)</p> 	Primocane semi-erect	Early July to Frost	4 to 6	12,000 to 15,000	<p>The plant is tall, vigorous and prolific. It has very sparse, small spines concentrated at the base of the canes that are absent on the upper portions of the canes. The plant is moderately hardy. It is very productive, with a long harvest season. The fruit is large, firm and cohesive, with a mild flavor.</p> <p>(<i>Sanford et al. 1985; Striegler 2016; Weber 2012; García-Salazar 2009</i>)</p>

Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
<p>'Lauren' (*<i>Swartz et al. 1998c</i>)</p> 	Florican semi-erect	Mid-June to August	3.5 to 5,000	3,000 to 5,000	<p>The plant is vigorous, with dense thorns. It is winter hardy. It blooms earlier than Titan, for one to three weeks. The fruit is firm and cohesive. It has excellent flavor and good quality.</p> <p>(<i>Nourse Farms 2016; Robbins 2005; Weber 2012; Swartz et al. 1998c</i>)</p>

Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
<p>'Nova' (*<i>Lakeview Farms 2016</i>)</p> 	Florican erect	Mid-July to Mid-August	2 to 3	13,000 to 16,000	<p>The plant is thornless and very hardy. It has medium-tall canes and few spines. It is high-yielding and adapts well to all climates.</p> <p>(<i>Indiana Berry & Plant Company 2016; Nourse Farms 2016; Robbins 2005; Lakeview Farms 2016</i>)</p>

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Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
<p>'Anne' <i>(*Lakeview Farms 2016)</i></p> 	Primocane	June to Mid-October	4 to 8	817	<p>Large fruit size, with good flavor, firmness and appearance. Sweet berry. Lower yields primarily due to late ripening, with yields potentially limited by fall frost. Tall, upright canes require high plant density. Fruits on the upper quarter of the canes.</p> <p><i>(Swartz et al. 1998a; Weber et al., 2004; Mertie Mae Botantics LLC and Horticulture Talk! 2010; Lakeview Farms 2016)</i></p>

Cultivar	Flowering Habit	Harvest Time	Size g/berry	Yield (lbs./acre)	Description/Reference
<p>'Kiwigold' <i>(*Daylily Nursery 2016)</i></p> 	Primocane	Early June to frost	2 to 3	3575	<p>Tall rugged canes with prominent thorns. Extremely sweet. Good size yellow berry with a good taste.</p> <p><i>(Thomas 2000; Brushway et al. 2008; Weber et al. 2004; Jones and Strang 2005; Swartz et al. 1998; Daylily Nursery 2016).</i></p>

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