

# **BRAMBLE CULTIVAR RECOMMENDATIONS**

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“Brambles” is a collective term for all of the caneberries, including red, purple, and black raspberries, thornless and thorny blackberries, and the so called “hybrid berries.” There are a large number of quality bramble cultivars available for commercial production today, both old dependable standards and exciting new releases. Each of these has a specific set of characteristics, including yield, vigor, flavor, fruit size and firmness, and cold hardiness, which make each unique and adapted to a specific set of environmental conditions.

## **Considerations**

When choosing a cultivar, it is therefore critical to keep in mind the climatic, geographic, market, and labor aspects of your particular commercial operation. There are great differences in cold hardiness and heat sensitivity among cultivars, so it is very critical to choose cultivars that will be adapted to the climate and microclimate of your farm. Soil types, ranging from light sandy loams to heavy clays affect the vegetative vigor and disease susceptibility of the plants. Sandy loam soils are the best for caneberry growth, but irrigation must be supplied to overcome low water holding capacity; heavier soils do not require as much irrigation, but the root rot diseases become more a problem if there is poor drainage.

The potential markets and available labor force are very critical considerations when planning your planting. If you have a strong (Pick-Your-Own) opportunity, it is critical to choose cultivars that have good flavor and fruit quality that your clientele will come to request by name. If you are going to ship your fruit for fresh market, they must have commercially acceptable size as well as adequate firmness and shelf life to withstand the transport and post-harvest handling. Picking fruit for the commercial market also requires access to a dependable labor pool. Finally, the bramble season can be concentrated during a critical marketing period of spread nearly from mid-June through frost with the proper selection of early spring bearing through late primocane-fruiting cultivars. Obviously, with caneberry plantings being a multi-year commitment, thorough consideration of the specific factors of your operation is critical for optimal operational efficiency. The following is an overview of the advantages and disadvantages of the bramble cultivars that are recommended for New Jersey.

## **Summer Bearing Red Raspberry**

Spring fruiting raspberries have a biennial habit in which the cane grows vegetatively the first season (primocane) and fruits the following spring, while the next crop of primocanes is suckering from the crown. They require selective removal of the spent floricanes from in between the new primocanes. The red raspberries have a great diversity between and within seasons.

### **Recommended Varieties.**

‘**Reveille**’ is a favorite of the early season, especially for Pick Your Own. It has good flavor and a long picking season, but can be slightly soft if picked in the heat.

‘**Lauren**’ (CDH-1), the first release from the Cooperative MD, NJ, VA, WI Breeding Program has fruit as large as ‘Titan,’ with good cohesiveness and flavor. It fruits in the early season and productivity has been good. The canes have good cold temperature tolerance. Some winter cane dieback has been observed in moderate sites (coastal New Jersey and Maryland), where fluctuating winter temperatures are experienced, however, the surviving buds exhibit good yield compensation.

‘**Boyne**’ is an early season variety that should be grown where cold hardiness is a priority. The fruit has good cohesiveness and flavor, but size is relatively small; productivity has been good.

‘**Newburgh**’ is an old standard for the mid-season, with excellent fruit firmness, and resistance to anthracnose, spur blight, and *Phytophthora* root rot.

‘**Sentry**’ has excellent flavor and can be used both for Pick Your Own and fresh market, although its size may be limiting in some locations. Plants may be hard to find.

‘**Taylor**’ has very good flavor and good production, but is cold sensitive in some locations and is susceptible to *Verticillium* wilt.

‘**Latham**,’ in contrast, is very consistent over many environments and has good tolerance to *Phytophthora*, although its fruit quality and size is only average.

### **Recommended for Trial.**

The advanced breeding selections ‘**Claudia**,’ ‘**Esta**,’ and ‘**Emily**’ have also shown great promise in regional commercial trials. All are very large fruited (equal or greater than ‘Titan’), and have shown good productivity and high quality. ‘**Prelude**’ and ‘**Encore**’ are new early and late varieties, respectively, which have shown promise.

### **Black and Purple Raspberries**

Black raspberries are not produced as widely as the reds due to their susceptibility to *Verticillium* and various viruses, but have excellent flavor and firmness. ‘**Bristol**’ is the standard, with excellent quality and fruit firmness. In some locations it may suffer winter tip dieback, although the remaining cane compensates to produce a good crop even after severe winters. ‘**Jewel**’ has excellent flavor, fruit size, and production; it also has good resistance to powdery mildew. ‘**Haut**’ warrants a trial because of its excellent flavor and production.

If you are considering purple raspberries, **'Royalty'** is a variety with excellent fruit size and production. **'Royalty'** is highly recommended for its high vigor and good quality fruit that can be picked slightly immature as a firm red raspberry, or fully mature as a sweet purple. It is also resistant to the raspberry aphid, tolerant to *Phytophthora*, but susceptible to spur blight.

### **Primocane-Fruiting Red Raspberry**

Primocane-fruiting or "fall bearing" red raspberries produce fruit on the current seasons growth in the late summer. These are grown in a system where the fall fruiting canes are mechanically mowed in the late winter, after which new canes sucker from the crown. This system is much more labor efficient and, also reduces disease pressure since all canes are removed each winter. The harvest season extends from early August through frost.

**'Polana'** is the earliest of red primocane-fruiting varieties. It has good fruit flavor but the fruit size is relatively small.

**'Caroline' (JCR-F1)** is a new, highly productive, red primocane-fruiting variety from the Cooperative Breeding Program. It has cohesive conic shaped fruit with excellent flavor and shelf life. **'Caroline'** is typically one to two weeks earlier than **'Heritage,'** with 20% larger fruit size. It has good vegetative vigor, but only low-medium suckering.

**'Autumn Bliss'** and **'Autumn Britten'** were selected in Scotland for their fine flavor firm fruit. Plant and fruit productivity has been variable. They are resistant to powdery mildew.

**'Heritage'** has been the standard cultivar primocane variety. It has good quality fruit, consistent production, and a long harvest season. It is adapted to Pick Your Own or commercial production, for fresh or processing. The biggest drawback of **'Heritage'** is that it begins fruiting late in the summer, and typically a percentage of the crop is lost to frost. This can be overcome somewhat by the use of floating row covers in the early spring. Fruit size is also less than desirable.

**'Josephine' (JEF-F1)** is a new, highly productive, red primocane-fruiting variety from the Cooperative Breeding Program. It has a very large, cohesive, conic-shaped fruit with very good flavor and shelf life. **'Josephine'** is the same season as **'Heritage.'** It has good field resistance to leafhoppers and good vegetative vigor. It has been the top primocane performer over the past two seasons in commercial plantings.

### **Recommended for Trial.**

**QQ-F1 and QEG-F1** are new, highly productive, red primocane-fruiting varieties from the Cooperative Breeding Program. They have very large, cohesive, conic-shaped fruit with very good flavor.

**ND-F1** is a new, extra large, red primocane-fruiting variety from the Cooperative Breeding Program. It is very late and is only recommended for trial under protective cover (high tunnels) or in areas where first fall frosts are very late in the year.

### **Blackberries**

There have been many good adapted thornless blackberry cultivars released through the USDA and Arkansas Breeding programs.

**‘Chester Thornless’** produces a large crop of berries that have very good shelf life. It is also the most hardy of the group.

**‘Triple Crown’** is a new release that is earlier than **‘Chester’** with excellent fruit quality and comparable cold hardiness.

**‘Dirksen Thornless’** has also shown to have good hardiness and **‘Hull Thornless,’** a third sib, has good quality, but the fruit tends to be soft, which limits its use to Pick Your Own.

### **Recommended for Trial.**

**‘Navaho,’ ‘Arapaho,’ and ‘Kiowa’** are erect thornless varieties released from Arkansas. They have high-quality fruit with good shelf life, but their general adaptation to the Mid-Atlantic is unknown.

There are also some good quality thorny blackberries available, which are typically grown when the thornless will not make it through the winter.

**‘Chesapeake’** is the new release from the Cooperative Breeding Program. It has exceptionally large, sweet fruit and warrants a trial.

**‘Illini Hardy’** comes from a thorny x thornless cross and has good hardiness.

**‘Shawnee,’** a thorny, upright from Arkansas, is very productive and has large fruit.

**‘Choctaw’** the latest release, comes in very early, but also has soft fruit that restricts its use to Pick Your Own.

### **Hybrid Berries**

The only widely grown raspberry x blackberry hybrid grown in the east is the **‘Tayberry.’** It has a trailing habit that is sometimes hard to manage, but produces very large fruit with strong raspberry character. It is, however, very cold tender and production is limited to southern regions or areas protected by less extreme marine climates. There are many highly productive hybrids coming along through the Cooperative Breeding Program that soon will be available for evaluation of hardiness and quality.

## **Summary**

There are a large number of excellent quality, early to late raspberries, blackberries, and primocane-fruiting berries available for a long season of commercial berry production. The right choices can only be made after careful consideration of all of the aspects that are critical to your operation. Contact your county extension agent for specific site analysis and recommendations for your location. With proper planning and preparation you can look forward to many years of profitable caneberry production.