ASPBERRY VARIETY CHOICES FOR MICHIGAN

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Many raspberry varieties are available today. This fact sheet reviews the strengths and weaknesses of older varieties and provides descriptions and initial observations of some new varieties. Summer-fruiting (floricane-fruiting) and fall-bearing (primocane-fruiting) types are described separately.

SUMMER-FRUITING REDS

BOYNE Manitoba, Canada, 1960. (Chief X Indian Summer). This older red fruited variety has been used in colder areas due to its extreme hardiness. Berries are flavorful and ripen early, but tend to be dark, small, and soft, but flavorful. Freeze well. Plants have moderate vigor with thorny, upright canes, and some tolerance of Phytophthora root rot. Boyne is a good choice for home use or PYO in cold locations.

CANBY Oregon, 1953. (Viking X Lloyd George). This variety has been used for many years for fresh fruit in warmer Michigan locations. Berries ripen in the early midseason, with excellent flavor, a light red color, and moderate firmness. Plants have moderate vigor and resistance to aphids and some viruses. Canes are thornless, marginally hardy and susceptible to crown gall and *An-thracnose*.

ENCORE New York, 1998 (Canby X Cherokee). This season variety has become popular throughout Michigan and much of the Midwest because it is relatively hardy and produces large, firm fruit with very nice flavor. It is probably the best late season variety for commercial growing. Plants are vigorous and sucker freely. Encore produced numerous double berries grown as potted plants in high tunnels.

HAIDA Vancouver, BC, 1973 (Malling Promise X Creston) is a late midseason variety that has been grown to some extend in the Midwest, although it is just marginally hardy for colder sites. Fruit are, medium to large with good firmness, and are suited for fresh and processed uses. Plants produce numerous spiny, upright canes and have resistance to raspberry aphid and spur blight.



Fig. 1 Double berry on 'Encore' in high tunnel pot culture

K81-6 Nova Scotia (mixed parentage). This late season variety has been grown commercially in Michigan and several areas of the Midwest. It has been very productive in Michigan trials, with large to very large, conical shaped fruit. Flavor is very good, but firmness is only average. Fruit tend to settle in containers, so it is perhaps best suited for PYO marketing. Canes are not hardy enough for cold sites in Michigan. Plants are very susceptible to fire blight.

KILLARNEY Manitoba, Canada. 1961. (Chief X Indian Summer) is an early midseason variety that has been useful in parts of Canada and the upper Midwest because canes are very hardy. Fruit are bright red and glossy, medium in size, somewhat soft, and flavorful. Berries ripen over a long period and yields can be moderate to high. Canes are vigorous, numerous, upright and thorny. Plants may have some tolerance of Phytophthora root rot. Killarney is best for PYO and home use in cold locations.

LATHAM Minnesota 1914 (King X Louden). This midseason variety had been popular in colder areas of the Midwest for many years due to its high vigor, reliable yields and extreme hardiness. Berry quality is only fair though. They tend to be medium in size, darker red, and can become soft and crumbly. Plants have Phytophthora root rot tolerance and canes are nearly thornless. Varieties with better fruit quality than Latham are now available.



Fig 2. fruits of 'Nova' raspberry

NOVA Nova Scotia, 1981 (Southland X Boyne). This early season variety has become popular with commercial growers through the Midwest. Fruit are round, very firm, glossy, and have a long shelf life. Yields are high and plants tend to produce some fruit in the late fall on primocanes, particularly in high tunnels. Canes are very hardy, tall, tolerant of some diseases, and have small spines. We did not observe double fruits in 'Nova' in potted raspberries grown in high tunnels.

OCTAVIA England. 2002. (Glen Ample X EM 5928/114). This is a new very late season floricane producing variety from East Malling, UK. It is reported to be very productive with excellent fruit quality. Performance in Michigan and most other states is not known. Winter hardiness may be a concern. May have tolerance to gray mold, but susceptible to Phytophthora root rot.

PRELUDE New York 1998 (Durham X September). This very early season variety is commonly used in Michigan and other areas of the Midwest for reliable yields, hardiness and good quality. Fruit are

medium to large, fairly firm, and tasty. Prelude produces some late fall berries on primocanes, particularly in high tunnels. It can be marketed by PYO or as picked fruit.

REVEILLE Maryland, 1966. (selection X September). This early season red type produces high yields of large berries that are suited for fresh eating and processing. Fruit are cohesive with good flavor, but somewhat soft, so they are not recommended for shipping. Plants produce numerous vigorous canes. Reveille may not be hardy enough for the coldest Michigan locations.

TAYLOR New York 1935 (Newman X Lloyd George). This old variety is still available. Fruit ripen in the mid to late season, are large, attractive, and have excellent fresh eating quality. Canes are vigorous and abundant. Taylor is not be hardy enough for colder Michigan locations. Best for home and PYO use.

TITAN Geneva NY,1986. (Hilton X selection). This later mid-season variety is known for very large conical fruit with good firmness. Flavor, however, is marginal, and berries need to be fully ripe to detach easily. Plants produce relatively few canes, and are susceptible to crown gall and Phytophthora root rot. Yields and fruit quality have been inconsistent in Michigan.

TULAMAGIC Switzerland, (Autumn Bliss X Tulameen). This is a new mid-season floricane fruiting type from Europe that is reported to have firm, medium to large fruit with a light red color. Plants are vigorous and may have tolerance to Phytophthora root rot. May produce some primocane fruit in tunnels.

TULAMEEN Vancouver, BC, 1991 (Nootka X Glen Prosen). This is a late season variety with very high quality berries. They are very large and attractive, with a good shelf life and excellent fresh eating quality. The primary limitation is hardiness. Canes regularly suffer significant winter injury in Michigan. There are conflicting reports on hardiness. Some growers in northern Wisconsin indicate hardiness is adequate. The plants are also resistant to aphids and crown gall.

FALL-FRUITING RASPBERRIES

ANNE New Jersey/Maryland, 1998 (Amity X Glen Garry). Anne matures 7 to 10 days before Heritage. Yield potential is high and berries are large and easily removed. Flavor is quite different and more delicate than red raspberries, but most people rate it as good to excellent. Plants have medium vigor and produce fewer canes than most varieties. Anne appears to be the best yellow fruited variety for Michigan. When grown in pots in a southwest MI high tunnel, Anne had relatively high levels of gray mold.

AUTUMN BLISS England, 1984. This early maturing variety (2-3 weeks before Heritage) has become less popular as newer early varieties are available. Fruit are large with a pleasant mild flavor, but they are very susceptible to gray mold, somewhat soft, and have a tendency to be crumbly. Plants produce relatively few canes that are medium in height.



Fig. 3 'Anne' fall raspberry

AUTUMN BRITTEN England, 1995 (sibling of Autumn Bliss). This variety matures about the same time as Autumn Bliss (2-3 weeks before Heritage), but fruit quality is better. Berries are large, medium to darker red, and more firm and flavorful than Bliss. Berries



Fig. 4 'Caroline' raspberry

are prone to gray mold. Cane vigor and number are low to average. Yields are low to average. Autumn Britten has been grown successfully in high tunnels. Autumn Britten produced a high percentage of double berries during the hot 2012 season in the potted raspberry high tunnel trial.

CAROLINE New Jersey/Maryland, 1998 (Autumn Bliss X Glen Moy). Caroline is a popular early mid-season variety in the Midwest. Berries are medium to large, with a medium red

color and excellent flavor. Yields in tunnels and open fields are very high. Fruit are tolerant to gray mold, slightly soft and best suited for direct marketing. Plants produce abundant, vigorous canes and are tolerant of Phytophthora root rot. Fruit size may decline as plants get older.

CRIMSON GIANT New York 2012 (Titan X NY950). This new variety was introduced for very late fall production (appears to be 2 weeks later than Heritage), and may be too late for open field production in Michigan. Fruit have a mild flavor, are blunt conical in shape, very large, and do not hold their shape well. Canes are very vigorous, thorny and stout. In pot culture in a high tunnel in southern Michigan, berries have been very large, but flavor ratings were low. Fruit are also susceptible to Botrytis gray mold.



Fig 5. 'Crimson Giant' raspberry

CRIMSON NIGHT New York 2012. This variety was just released to provide a unique deep red fruit with intense flavor. Although it is similar in color to purple raspberries, black raspberry is not in its background. It is reported to be very productive in high tunnels, and is suggested for farm marketers and homeowners.

DOUBLE GOLD New York 2012. This new variety was just released primarily for its unusual golden champagne-colored berries. Berries are reported to be conical in shape and somewhat delicate. Double Gold is suggested for farm marketers and homeowners looking for a unique colored berry.

ERIKA Italy. 2002 (open pollinated Autumn Bliss). This is a proprietary variety (not currently available to the public) that reportedly produces large, lighter red berries. Harvest is very late; about a week after Heritage. Canes are thorny. Erika is being tested in pots under high tunnels in southwest MI. Berries were bright red, moderately firm, and had very nice flavor. Powdery mildew was moderate on this cultivar in fall of 2012 in the high tunnel trial.



Fig. 6 'Himbo Top' raspberries

HERITAGE Geneva NY, 1969 [(Milton X Cuthbert) X Durham]. This variety has been a standard fall-fruiting type in the Midwest and many areas of the world because it is a consistent producer of flavorful but small berries. Heritage is a later fall bearer (begins in early September in southern MI) so it yields poorly in short-season areas. Fruit are medium red, firm, and have tolerance to *Botry-tis* gray mold. Canes are thorny, erect and numerous. Heritage is being replaced in much of the Midwest with newer varieties that have an earlier ripening times and/or larger berries.

HIMBO TOP Switzerland. Himbo is a mid-season type (one week before Heritage). Fruit are medium to large, easy to pick, light red and do not darken after harvest. Flavor is pleasant but mild, but berries are quite soft. Himbo Top has been grown in high tunnels in several Midwestern locations and produced high yields. Canes are very tall with long fruiting laterals. Himbo is resistant to *Phytophthora* root rot, but appears to be relatively susceptible to *Botrytis* gray mold.

JACLYN Maryland/New Jersey. 2001(numbered selection X Caroline). This is an early midseason variety (1-2 weeks earlier than Heritage). Fruit are large and firm with an attractive, long conical shape and a dark red color that tends to darken further in storage. Berries are firmly attached to the receptical and tend to be somewhat difficult to pick. Flavor is excellent. Yields were only moderate in pot culture under a high tunnel in southwest Michigan.



Fig. 7 'Jaclyn' raspberries

Berries were rated high for flavor, very firm and uniform in shape, but the dark color is a limitation. Plants have average vigor and appear susceptible to yellow rust. Traces of late leaf rust were found on foliage in the high tunnel pot culture trial but never affected the fruit.

JOAN IRENE. England. 2007. (Joan J X numbered selection). This variety is new to North America and appears to mature very late; 1-2 weeks after Heritage. Fruit are large, conical shaped, darker red in color (lighter than Joan J), and flavorful. Based on observations in pot culture under a high tunnel in southwest Michigan, Joan Irene is too late for field production in Michigan. Some late leaf rust appeared on foliage but not fruit in late September. Berries sometimes adhere tightly and are difficult to pick.



Fig. 8 Joan J' raspberries

JOAN J England 2002 (Joan Squire x Terri-Louise). Joan J is an early season variety (about 2 weeks before Heritage) that produces large, firm berries with a conical shape and darker red color. Flavor is very good. Plants are vigorous and canes are thornless. Joan J has potential as an early season fruiter for Michigan. The biggest limitation is the dark red fruit color which seems to darken further after picking. Yields and berry size in high tunnels have been very good.

JOSEPHINE Maryland 2001(Amity X Glen Gerry). This variety matures later than Heritage so it has little value for open field production in Michigan. Berries are very large, blunt conical in shape, firm and cohesive, medium red in color, and tend to darken in storage. In potted culture under high tunnels in southern MI, yields were good. Berries were very

large with above average flavor and firmness; seeds are somewhat larger than average. Berries have a dull surface rather than glossy. Traces of late leaf rust appeared on foliage of this cultivar in late September, but fruit was not affected.

NANTAHALA North Carolina. 2010. (NC 245 (Algonquin×Royalty) X Rossana). Nantahala is late ripening (about a week after Heritage), but fruit are very large and light red in color with an excellent flavor. Canes are vigorous and thorny. This variety has only been observed in pot culture under tunnels in southwest Michigan. Fruit quality is excellent, but harvest time is likely too late

for field planting in Michigan. Production on floricanes has not been tried but hardiness may be limited. Powdery mildew was moderate on this cultivar in in the potted trial in high tunnels. Some doubling of fruit also occurred in fall, 2012.

POLANA Poland, 1991. Polana is an early varieties (2 weeks or more before Heritage) with glossy bright red color berries and good flavor. Yields were low in a field trial in southwest Michigan. Canes were numerous but short. Growers note that Polana may need more nutrition to grow taller canes. Trials in WI and PA suggest it performs better in some areas of the country.

POLKA Poland. (open pollinated seedling of Autumn Bliss). Polka is an early mid -season variety (7-10 days earlier than Heritage). Fruit is medium to large, blunt conical in shape, and flavorful. Plants produce abundant medium length thorny canes. Polka has been productive with good flavor and vigor in several Midwest and Northeast locations. Plants are very attractive to potato leafhopper which can cause severe stunting. Significant potato leafhopper injury was observed on Polka in the potted high tunnel trial in southwest Michigan.

ROSSANA Italy (? x Mauling Promise). This variety may be too late for field production in Michigan (2-3 weeks after Heritage). Fruit are larger than Heritage, somewhat softer, but with excellent flavor. Canes may be hardy enough for floricane production in Michigan.

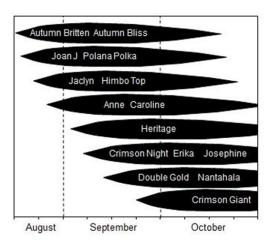


Fig. 7 typical fall fruiting periods in southern Michigan for some commonly grown fall raspberries

A selection of fall raspberries grown in pot culture in high tunnels in Michigan





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