

Blueberry Varieties for New England

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Several new blueberry varieties have been released in the last decade and even more may become available in the next ten years. This is good news for growers because more choices are available, but choosing the best varieties for your location is challenging because we do not know as much about newer types as older varieties.

A primary need for New England sites is winter hardiness. New England ranges in USDA hardiness zones from 7a (0 to 5 °F minimum) along coastal regions in southern states to 3b (-35 to -30 °F) in northern interior locations. Most northern highbush blueberries do best in USDA hardiness zones warmer than 5b. Zones 5a or colder may result in periodic winter injury. In very cold locations growers may have success with half-high blueberries. These are hybrids of highbush blueberries (*Vaccinium corymbosum*) and lowbush blueberries (*Vaccinium angustifolium*). Plants are shorter (2 to 5 feet tall) but more hardy than most highbush varieties. Remember that minimum winter temperatures (hardiness zones) do not fully predict variety performance. For example, colder locations also tend to have relatively short growing seasons, and blueberries do best with more than 160 frost free days. Local topography also influences the likelihood of winter and spring cold damage. Once you have identified varieties that should tolerate your climate, you can begin to narrow your choices based on other traits, such as productivity, fruit quality, harvest season, and disease tolerance.

Descriptions of varieties that should do well in much of New England are given in Table 1. To narrow your choices, learn what your state's Extension service recommend and, if possible, what varieties have performed well for other growers in your area. Make sure to consider varieties that are adequately hardy for your location. We have also included descriptions of newer varieties. These are recent releases that have not been tested adequately to recommend, but should be trialed on a small scale.

Early-season

'Duke' is the best early variety for warmer areas, and has replaced older types such as 'Earliblue' and 'Bluetta' in most areas. It is high yielding and produces large firm fruit that store well, have a nice mild flavor and can be machine picked. It is less hardy so may not do well in zone 5 or colder. 'Bluejay' is another good choice for warmer areas, although yields can be inconsistent. Berries have excellent overall quality and bushes are upright growing and harvest well mechanically. 'Northland' and 'Patriot' are two older very hardy types for cold areas. They grow about 4 feet tall, and are very productive but berries are soft. 'Northland' is earlier than 'Patriot' but berries are small and darker in color. 'Patriot' produces larger berries with a nice flavor. 'Polaris' and 'St Cloud' are two other hardy half-high types that mature in the early season and produce firmer fruit than 'Northland' or 'Patriot'. Polaris fruit are large and flavorful. Bushes can grow to about 4 feet tall.

Newer early-season types that show promise include 'Blueribbon', which was released by Fall Creek Nursery in Oregon in 2012. Blueribbon matures between Duke and Draper and reportedly has high yields and exceptional flavor. Blueribbon is expected to be about as hardy as Legacy, which would be a problem in most of New England. 'Sweetheart' was developed in

New Jersey (2011) as a very early type with good firmness and superior flavor, but fruit may be somewhat small, variable in color and soft. Huron was developed at MSU (2009) as an early midseason type (between Duke and Draper) that appears hardier and a more consistent producer than Duke, with medium to large flavorful berries. Like 'Duke', 'Huron' blooms late to avoid spring frost damage.

Mid-season

There are several excellent varieties to choose from in this season. 'Bluecrop' is still worthy of planting in warmer locations. It is very high yielding, with large berries, acceptable flavor, but at short storage longevity. The bushes are moderately hardy, 4-6 feet tall and somewhat spreading. 'Draper' is a newer variety that ripens a little before 'Bluecrop'. The strength of 'Draper' is fruit quality. Berries have excellent flavor and firmness, and store for a long time. 'Draper' can be machine harvested. The bushes are somewhat slow growing and less vigorous than most varieties, but appear to be as hardy as 'Bluecrop'. 'Sierra' and 'Toro' are good mid-season types for warmer New England locations.

Mid-season types to consider for cold locations include the highbush 'Blueray' and the half-high 'Chippewa'. 'Blueray' is hardier than 'Bluecrop' and productive, but berry quality is not as high and the bushes produce many canes and take extra time to prune. 'Chippewa' is very hardy and grows to 4-5 feet. 'Superior' is a newer (2009) half-high from Minnesota that matures in the late mid-season. It is very hardy, with good fruit quality and grows to 5 feet tall.

New mid-season types include 'Razz' (New Jersey, 2011) and 'Top Shelf' and 'Clockwork' (Fall Creek Nursery, 2012). Reports indicate 'Razz' is a reliable producer with medium to large fruit. Berries have average firmness and may not store well. The name relates to the flavor, which has raspberry overtones. Hardiness of 'Razz' is not known. 'Top Shelf' and 'Clockwork' ripen with 'Draper'. 'Top Shelf' is meant for hand picking and has excellent size and flavor ('Draper' is a parent). 'Clockwork' was developed for processing because berries are smaller and ripen all at once for machine picking. Hardiness of 'Top Shelf' and 'Clockwork' is not known but based on their parentage, they are expected to be similar to 'Legacy'.

Late season

Some varieties to consider for the late season, in order of ripening, include 'Nelson', 'Jersey', 'Legacy', 'Liberty', 'Elliott' and 'Aurora'. Nelson has excellent overall quality but is a little less hardy so yields have been site specific. Jersey is a reliable hardy producer but berries are small and soft. 'Legacy' is a very productive, high quality variety that matures with Nelson but has a long picking season. Hardiness is limited; 'Legacy' will do well only in the mildest New England locations. 'Liberty' is a newer type that ripens a little before 'Elliott' but has much better flavor and storability. 'Liberty' should do well in warmer locations. Elliott is very late maturing and extremely productive, and as hardy as Jersey, but berries have marginal flavor. 'Aurora' is the latest variety available. It is as hardy as the other late types and productive. Berries are somewhat tart.

Two new late-midseason types released by Michigan State University in 2013 are 'Osorno' and 'Calypso'. 'Osorno' has yielded very well in various locations and has exceptional fruit quality. 'Calypso' also has shown high yields and quality in diverse test locations. 'Osorno' and 'Calypso' are hardier than 'Legacy', but may not do well in very cold sites. Fall Creek Nursery just released 'Cargo' for fresh and processed uses. 'Cargo' ripens a little before 'Elliott' and has a mild, tart flavor. 'Cargo' is expected to be about as hardy as 'Legacy'.

Table 1. General characteristics of blueberry varieties.

Cultivar	Season ¹	Hardiness ²	Yield potential ²	Fruit quality		
				Size ³	Firmness ²	Flavor ²
Aurora	VL	***	****	M	****	**
Bluecrop	M	**	***	M-L	***	***
Bluejay	E-M	**	**	M	****	***
Blueray	M	***	***	L	**	**
Bluetta	E	***	**	M	*	**
Bonus	M	*	**	VL	**	***
Chippewa	M	****	**	M	***	***
Draper	E-M	***	***	L	****	****
Duke	E	**	****	L	****	***
Elliott	VL	***	****	M	****	*
Huron	E-M	***	***	L	***	***
Jersey	M-L	***	***	M	**	***
Legacy	M-L	*	****	L	****	****
Liberty	L	***	***	L	****	****
Nelson	L	***	***	L	****	****
Northblue	E-M	****	**	M	**	**
Northcountry	E-M	****	*	VS	*	****
Northland	E-M	****	****	M	*	**
Northsky	M	****	*	VS	*	***
Patriot	E-M	****	****	L	**	****
Polaris	E	****	**	M	***	****
Rubel	M	***	**	S	**	***
Sierra	M	**	**	M	***	***
St. Cloud	E	****	**	M-L	**	****
Superior	M-L	****				
Toro	M	***	***	L	***	***

¹E = early, M = mid-season, L = late

²Attribute increases with * number

³Size ratings very small (VS), small (S), medium (M), large (L), and very large (VL).