

Plum Variety Picks for New York

Robert L. Andersen and Jay Freer

Department of Horticultural Sciences
New York State Agricultural Experiment Station, Cornell University
Geneva, NY

The recommended European and Japanese type plum cultivars for New York conditions are listed in order of maturity in 4 categories: (1) JAPANESE, (2) BLUE EUROPEAN, (3) GAGE, and (4) DAMSONS, MIRABELLES, and BULLACES. This article gives a brief characterization of the general attributes of each broad category. Cornell Cooperative Extension and the New York State Agricultural Experiment Station have conducted field evaluations and pilot processing tests on nearly all of these along with hundreds of other less desirable ones that are not listed. Most of the recommended varieties are available from commercial nursery sources. If you can't find a nursery source, the stone fruit program at the Geneva Station will provide the nursery of your choice with a limited supply of virus indexed budwood so that you can contract with the nursery to grow trees specifically for your needs. Contact the program at 315-787-2235 for more information.

Japanese Plum Types

Japanese plums bloom earlier than any other stone fruit crop making them more frost susceptible, and their trees are generally less tolerant to dormant cold than most European plums. This list spans a harvest period of 7-8 weeks from mid-July to mid-September.

Ohishi Wasi – the earliest ripening plum at Geneva and one with a long history of success in Japan and Korea. Fruit is larger than that of Early Golden. Tree is hardy enough to be grown in New York if peach trees flourish on the site. It has a blushed red cheek over golden ground color and good eating quality for this early season. Self-incompatible.

Early Golden – a mid-July plum in Geneva. It is well known in the Great Lakes region as one of hardiest trees and will pro-

duce regularly in cold climates and with harvest starting before Methley or Shiro. It needs multiple pickings and gets very little blush. It has a bland flavor if over-set. Biennial fruiting pattern is common if over-cropped. It requires pollination and Burbank, Ozark Premier, Shiro, and Vanier all pollinate it well.

Methley – This round purple plum with red flesh and small to medium size fruit ripens between Early Golden and Shiro. Quality is mediocre and some people find the flavor objectionable, particularly the bitterness in the skin. It is self-fertile and is hardy. It needs multiple pickings. *It is of doubtful value for farmstands that wish to emphasize high quality.*

Early Magic™ – This new sport, possibly of Santa Rosa, was found in Niagara County, NY and is offered for trial by Hilltop Nursery, Hartford, MI. It has outstanding fruit color (bright red/purple with golden flesh), taste and texture are both very good for an early plum, and handling characteristics are good. We do not know if the tree is hardier than the Santa Rosa (which is marginal for many sites in New York). Although we know cross pollination is necessary we do not know which specific pollinators will work. It has set crops very well when Ozark Premier, NY 1502, and Fortune are its closest neighbors in trials in Geneva.

Shiro – ripens 10 to 12 days after Early Golden in Geneva. It is well known as a hardy all-yellow fruited type. It is self-incompatible. Burbank, Methley, Vanier, and probably Obilinaya will pollinate this variety.

Obilinaya – We have limited experience with this hybrid from the former USSR. It has outstanding fruit size, a beautiful red-purple appearance with bright red flesh under the skin and golden flesh around the pit. The tree is very hardy and an extremely heavy cropper. It will mature fruit that are uniformly nearly 2 inches with good fla-

These plum varieties are recommended for planting in New York. Field evaluation and pilot processing tests were done at Geneva. Many other selection that failed these tests are not listed. These recommended varieties are available from commercial nursery sources or the Geneva Station's stone fruit program.

vor. It ripens between Methley and Shiro. We have no pollination data for it yet.

Ozark Premier – This hardy, spreading tree is often biennial in its cropping pattern. Its fruit is very large and well colored with good flavor when it is thinned. It requires pollination, and Early Golden will not pollinate it. Vanier and Myrobolan rootstock are both excellent pollinators for it. Obilinaya probably is, too, because of its parentage being one-half Myrobolan.

Burbank – This hardy, dependably cropping old variety is valuable as a pollenizer in any Japanese-type plum orchard. It needs careful hand thinning in most seasons to make adequate fruit size. This red skinned variety with yellow flesh has good flavor if not too heavily cropped. The fruit ripens in late August in Geneva. It is self-incompatible, but is good pollenizer for many other varieties.

Vanier – This hardy, upright growing tree sets an adequate crop of firm, bright



Violette, recently released from the Vineland breeding program, is very attractive, crops regularly and appears to be frost tolerant.

red over golden ground color fruit with yellow flesh. It is medium sized, similar to Shiro. It is self-incompatible and ripens with Burbank between Ozark Premier and Fortune. It hangs on the tree and stores very well. It is pollinated readily by Burbank and Ozark Premier.

Fortune – This variety produces the largest fruit of varieties listed here. It has red/purple skin with yellow flesh and ripens about Labor Day in Geneva. The tree is vigorous and somewhat upright similar to Ohishi Wasi in hardiness. It should not be tried in regions that do not have success growing most peach varieties. It is self-incompatible and is pollinated well by Burbank.

European Blue Plum Types

This group of blue and purple/blue plums formerly known as “prunes” spans a 10-week ripening period from mid-July to late September. Many shapes, flavors, and textures are represented. Good eating quality, regular cropping, and good tree longevity were the primary traits used as a basis for their recommendation.

Ruth Gerstetter – This variety is popular in some parts of Europe as one of the first high quality blue plums of the season.

Ersinger – This “German Prune” style of fruit (meaning that it is oblong to oblong-pointed and has blue skin) has excellent flavor! It ripens in July at Geneva with Earliblue and Ruth Gerstetter. It crops heavily and retains its flavor very well but is not firm enough to ship.

Earliblue – is similar to Ersinger in size and shape but has a darker blue color and a slightly blander flavor. It is not firm enough to ship.

California Blue – is a round, medium large, unevenly shaped blue plum that sizes well but tends to drop. It ripens 3 days after Shiro. Flavor is satisfactory, but uneven maturity and drop may make it troublesome to grow.

Valorie – was recently released from the Vineland, Ontario program. It ripens with California Blue and is about 3 days after Shiro. It is self-incompatible and pollenized by Vanette and Valor. This variety is firm enough to pack and ship to wholesale markets.

Vanette – was recently released from the Vineland, Ontario program. It ripens in early August in Geneva. This blue plum with a nice flavor can over-set and be small. It requires pollination; both Stanley and Valor are suitable. This variety does not drop. Vanette will pollinate Valorie but Valorie won't pollinate Vanette.



NY 9 plum selection's tree is pictured in a fourth leaf, semi-commercial trial in Michigan. Its tree is more vigorous and less spreading than that of NY 6, making it somewhat less precocious in early cropping but higher yielding in mature orchards and well suited to shake-and-catch mechanical harvesting

Voyageur – This round-oblong shaped fruited variety with sky-blue color (due to heavy covering of waxy bloom that gives fruit a distinctive appearance). It ripens shortly before Early Italian and Castleton™. It crops abundantly and regularly but has some tendency to drop, and it softens more quickly than Castleton™ and Early Italian. It is self-compatible and is a good pollenizer for Early Italian. It has good eating quality. It is firm enough to pack and ship to wholesale markets.

Early Italian – This well-known variety of blue plum is also known as “Early Fellenberg” and has outstanding fruit quality. It is not self-fertile and sets lighter crops than Castleton™. This variety is firm enough to pack and ship to wholesale markets.

Castleton™ – This new release from Cornell sets exceptionally heavy crops of dark blue-purple plums that are very uniform in size and appearance. They are excellent for fresh use but color early and are often picked before really ready. This variety should replace Early Italian. It is self-fertile and heavier yielding. The tree is moderately vigorous and should be grafted on full vigor rootstock like Myrobolan or one of the Marianna stocks. This variety is firm enough to pack and ship to wholesale markets.

Violette – This recently released selection from Vineland, Ontario, has a very attractive sky-blue fruit with a long oval shape. Tree crops regularly, yields well, and is proving to be frost tolerant. Fruit ripens the last days of August at Geneva, ahead of Seneca and about with NY6. Eating quality is mediocre, but the fruit is firm and well-suited for packing and shipping.

Seneca – This variety was released by Cornell in 1972. The fruit has a maroon/purple skin color, oblong shape with size often one and a half inches thick and two inches long. Its eating quality is unsurpassed! Pollination is required. This variety is firm enough to pack and ship to wholesale markets.

NY 6 – This Cornell breeding selection is currently being tested for possible release. It is dual purpose ripening before Stanley and Italian Prune and crops regularly and heavily. Fruit size is larger than its sister, Castleton™, but can be bland when it crops most heavily. Infant food trials have been exceptionally favorable compared to Stanley because of better color retention in the processed products. It is partially self-fertile.

Longjohn – This 1993 Cornell release is now gaining a reputation for regular crops of very oblong, blue fruit that have very good quality and texture. The tree is more vigorous than Stanley and tends to self-thin and achieves uniform fruit size. A pollinator is required. Longjohn's fruit is firm and well-suited for packing and shipping.

NY 9 – This Cornell selection is being tested as a possible Stanley replacement for dual purpose uses. Its pit is free and non-shattering. Fruit quality is exceptionally good for both fresh and processing. Yield, size, and ripening times are all similar to Stanley. The tree is more upright and more vigorous than Stanley or NY 6 and it is self-fertile. This variety is firm enough to pack and ship to wholesale markets.

Autumn Sweet – This variety, recently released by Washington State University, easily surpasses the yield and fruit quality of Italian Prune. It is partially self-fer

tile and always sets well in Geneva in the company of Stanley and NY 9. Autumn Sweet's fruit is firm and well-suited for packing and shipping.

Italian Prune – This very well established variety is also known as Fellenberg. It has been an important variety with diverse uses including fresh, canning, and drying. Light fruit set in New York limits its value in New York. Autumn Sweet seems much better. This variety's fruit is firm and well-suited for packing and shipping.

Valor – is a large, blue skinned variety with amber flesh of good eating quality. It ripens early in the third week of September in Geneva. The tree crops regularly, is somewhat thorny, and has moderate vigor with a spreading habit. It is self-incompatible but is effectively pollinized by Stanley and Italian Prune. This variety's fruit is firm and well suited for packing and shipping.

Empress – Fruit is large, oval to pointed, and oblong with dark blue skin. It is free to partially freestone and non-shattering. The neck shrinks in droughty seasons and can prematurely break down. In most seasons, it is the best fresh market packing plum in Geneva's trials. The tree is vigorous, somewhat upright, and regularly productive if pollinized well. It is self-incompatible and can be pollinized by Stanley, Victory, Moyer, and French Prune. Undoubtedly, there are many other blue plums that are also suitable pollenizers. Empress blooms mid to late and ripens in late September in Geneva. This variety's fruit is firm and well suited for packing and shipping.

Greengage Plums Types

These are also known as **Reine Claude**-types and date back to their introduction from Armenia into France about 1500 A.D. Usually they have small, round, generally green, yellow, or blushed fruit with special flavors/aromas that are highly prized by connoisseurs. Usually, they have softer flesh texture than most other European-type plums. It is their distinct Gage-flavor that sets them apart as a category of unique plums.

Oullins Gage – These 1-1/2 inch fruit have yellow skin and flesh. The flavor is very good yet not as aromatic as Greengage. Trees are highly productive and not prone to biennial bearing. It is more vigorous than Greengage, Stanley or Italian Prune. It blooms later than most Gage plums and is self-fertile. Brown rot can be a serious problem if multiple pickings are

not strictly made to keep ripe clusters open.

Greengage – This variety originally called Reine Claude, which dates back to the 1500s in France, was renamed Greengage after the Englishman Mr. Gage who imported it from France. It is partially self-fertile and well pollinated by Oullins Gage. The fruit has green skin that turns slightly yellow when tree ripe. Its flavor is considered outstanding by fresh plum connoisseurs. Brown rot can be a serious problem if multiple pickings are not strictly made to keep ripe clusters open.

NY 101 – This Cornell selection is being tested for possible release. This green-yellow plum has exceptionally high sugar content and flavor. It ripens just after Oullins and has a pink/rosy colored blush in most seasons. The tree crops very heavily and retains high quality even with enormous fruit loads. Fruits tend to hide in the foliage, which is abundant on this spreading, but vigorous tree. The tree is brown rot and black knot susceptible. We believe that the fruit quality of this variety is worthy of grower-cooperator trials to see how much of a limitation these susceptibilities are. It is self-incompatible and is readily pollinized by Vanette, Rhine Claude Conducta, Oullins, Polly, and Demontfort.

Reine Claude Conducta – This pink/purple skinned plum with high quality amber flesh is somewhat crisp and very sweet. It ripens with Early Italian and Castleton™ and sets lighter crops than the other gage-types listed above. This plum is so unusual in quality and color that every farm stand should have it. It is self-incompatible and is pollinized by Oullins.

Mirabelles, Damsons, and Bullace

This category of plums includes varieties that are increasingly of interest on two marketing fronts: wine/brandy and fresh snack-foods. While these two uses may seem unusually different to be utilizing the same varieties, the common factor is a very high sugar content with unique aroma or "nose" in wine/brandy terms. An additional common factor is that the Old World names of varieties may increase the marketability of these fruit. For example Herrenhausen Mirabelle has a definite Germanic origin.

French Damson – This processing plum is used for its intense purple pigments and strong flavor that is too astringent for fresh market use. It is usually blended into processed products. Fruit is small and round with blue skin and green flesh. It

ripens in early September in Geneva. There are over a dozen other varieties of blue damson plums and another whole group of yellow and green skinned kinds that have generally been called "Bullace Plums" in the European literature. All have the strong flavor and none are self-compatible. Other Mirabelle varieties and other blue skinned plums from European ancestry will pollinate them.

Herrenhausen Mirabelle – This maroon/purple skinned plum has green/amber flesh that often exceeds 25 percent soluble solids when tree ripe. The round-oblong fruit averages about 1 inch in diameter. Its texture is somewhat crisp when eaten at best fresh market maturity level. It stores very well with sugar increasing in storage. The fruit ripens in mid-September in Geneva. It is self-incompatible and pollinized effectively by French Damson and Castleton™.

Gras Ameliorat – This round-oblong fruit averages about 1 inch in diameter and is red over a golden ground color. The texture is somewhat more coarse than that of Herrenhausen Mirabelle but is still very pleasing with excellent flavor and high sugar levels. Pollenization requirements are not clear, but it is not self-compatible. This variety is firm enough to store and ship to commercial markets.

American Mirabelle – This variety has golden skin with a 20 percent pink blush. Fruit is very slightly necked. The tree crops very heavily and will become biennial. Primary uses are for jam and wine/brandy. It ripens in early September in Geneva. It is self-incompatible and is pollinized well by French Damson and Castleton™.

NY 858 – This Cornell breeding selection is being tested for possible release. It is similar to American Mirabelle except it is round and somewhat later in maturity season. It is self-incompatible and pollinized well by French Damson and Castleton™.

Mirabelle de Metz – This variety is extensively used in Europe for production of high value brandy. It is not currently available as budwood from the Geneva Station.

Robert Andersen is a professor of horticulture at the Geneva Experiment Station. He leads Cornell's stone fruit extension program. Jay Freer is a technician who works with Bob Andersen in the stone fruit program.
