Plums for Your Fruit Stand

Plums take prominent place among the other modified continental deciduous fruit species around the world, though that might not be the case in our own backyard. Interest in growing plums should derive from their high nutritional and prophylactic value of the fruit. Plums are self-contained “power-bars” just loaded with minerals, vitamins, fiber, anthocyanins and other antioxidants. In today’s health-conscious consumer environment they can definitely find their place on the market shelf.

Some twenty years ago, Dr. Chuck Kestner established first plum variety collection block at the North West Michigan Horticultural Station in Traverse City. Over the years more than 200 varieties have been monitored for their suitability for growing in Michigan. The old block has since been replaced with the best varieties from the first round of testing and man new varieties and elite selections that are yet to be scrutinized.

The current list of recommended varieties could be divided into two major groups: Japanese plums and European plums.

Japanese Plums

Japanese type plums have relatively short dormancy period and are among the first fruit to bloom. This may present a problem with early frost damage thus it is necessary to provide a very good and protected site if we are to have any success growing them. There are two other important observations regarding tree management: pruning and fruit thinning. Japanese plums need to be pruned just like peach trees…leaving selected number of strong one-year old shoots that would produce the fruit and at the same time head-cutting the lower positioned shoots to a few buds for developing the replacement wood for the next season. Thinning fruit will improve the fruit size and minimize over cropping and biennial bearing by insuring the return bloom.

Following is a short overview of the recommended varieties in the order of ripening season.

**Early Golden** – Tree is vigorous with upright but open growth habit. Tree is hardy and produces well in our northern climate. It does have tendency to biennial cropping if allowed to over crop. Ripens in the second part of July. It is very similar to Shiro though it has much firmer fruit that does not brose as easily as Shiro does. Fruit is small to medium size (28 gr.) firm, freestone, sweet, mild testing, and good quality for the season. It is self-sterile and requires another variety for pollination. Good source of pollen are:
Ozark Premier, Santa Rosa, Burbank, Shiro, and Vanier. It is sensitive to leaf spot.

**Methley** – This is well known variety that has been present on the market stands for a long time. Tree is hardy and tolerates our cold winters quite well. Fruit is small, purple and a “true plum connoisseur” will say of “questionable” if not mediocre quality. It is self-fruitful. Ripens in early July.

**Early Magic** – Tree is moderately vigorous with open, spreading growth habit. It is precocious and productive. Fruit ripens around mid July. Requires multiple picking. Fruit size is medium. Skin is purplish-red and covered with waxy bloom giving it a bluish cast. Flash is amber-yellow, firm, juicy, sweet and very good tasting. It is self-sterile. Early Golden, Ozark Premier, Fortune are some of the varieties that will pollinate it.

**Shiro** – Well known variety. It will tolerate our northern weather conditions in most years. Tree is moderately vigorous with open and more spreading growing habit. It is very heavy cropper. Fruit is all yellow, small, and very sensitive to bruising. It is self-sterile. Burbank, Mathley and Vanier will pollinate it.

**Ozark Premier** - Tree shows medium vigor and spreading growth habit. It is very prolific cropper. Fruit is generally large but when the fruit set is too heavy, the fruit is medium – small. Another observation has to do with the taste; it declines with the very heavy load. Fruit is nearly round; skin is red, firm; pit is small and clingstone; flesh is yellow, fine-grained, and juicy; taste is very good. Requires multiple picking. Peak harvest is in the second week of August under normal conditions. Good tasting fruit. Does not show severe winter damage. Shows sensitivity to bacterial leaf spot. Vanier will pollinate it.

**Burbank** – This is well known old variety. Tree exhibits moderate to vigorous, open growth habit. It is precocious and heavy producer; it may break the limbs under the crop load. It has tendency to biennial cropping if allowed to over crop. Fruit is large if thinned, otherwise it is small to medium. It has attractive orange-red color that covers most of the surface. Base color is amber-yellow. Flesh is yellow, fine-grained, firm and juicy, sweet and very good tasting. Though self-sterile, it is excellent source of
pollen for most other Japanese varieties. Vanier will pollinate it. Requires multiple picking. Peak harvest is in the second part of August-beginning of September. It is very sensitive to bacterial spot and mites.

**Red Giant** - Tree has very upright growing habit, almost columnar; tree appears to be more than 15’ tall and only about 9-10’ wide. It has, what I would call, genetic predisposition for the higher density systems. Crown is open providing plenty of sun to the fruit. It has very heavy crop. Fruit is quite large with the average weight of 52 g. It has very attractive red skin covered with waxy bloom making it appear “dusty rose”. Flash is yellow, firm consistency, juicy, very sweet (17% brix) with just a touch of acid making it very refreshing. Fruit has very small pit. It would be excellent for the farm-market situations. It is ready for harvest by the end of August – first part of September. May require multiple pickings.

**Redheart** – Tree is upright, open and spreading, very vigorous. It has relatively low chilling requirements which may predispose it for early spring frost in years when we have January-February warm-up followed by the sudden drop in temperatures. Fruit resembles Duarte. It is large (averaging at 40 gr), smooth, round to heart shaped with dark purplish red skin covered with golden specks, it is covered with moderately heavy grayish waxy bloom. Flash is blood red, juicy, firm, fine-grained, sweet, aromatic, very good tasting. Brix are averaging over 17%. Pit is small, almost free and takes up only @3% of the total weight of the fruit. Among the varieties that we have in collection, good pollinizers are Burbank, Santa Rosa and Elephant Heart. It ripens with Ozark Premier in Traverse City area.

**Vanier** - Tree is upright with moderate vigor. In relatively normal years it did show good tolerance to cold winter spells. However, the winter of 1994 (the coldest winter in 100 years) was too much for it. Trees did not dye immediately but continued to decline over the next few years. It requires good and frost-free sites. It is precocious and prolific bearer. Limbs will break under the crop load. When thinned fruit can rich nice size. Fruit is flame-red with yellow flesh. Taste is not exceptional, but good. Ripens with Ozark Premier and Burbank. Requires multiple picking. It will drop if not picked at the proper stage of maturity. It is better to pick it when it is still rather firm and a bit on a “green” side; it will develop very good taste after being stored for a while. Fruit holds well in storage. Peak harvest is in the first week of September. It
is self-sterile; good pollinizers are Burbank, Ozark Premier, and Santa Rosa. Vanier will pollinate Ozark Premier. It is sensitive to bacterial spot and mites.

**Caroline Harris** – Tree is medium-sized with open - upright growing habit. Fruit is large averaging at 48 gr, roundish, asymmetrical. Skin is maroon-purple, flesh is red, firm, juicy, excellent eating plum. Brix are 17%. Pit is small with percent pit at 2.5%, clingstone. During the winter of 1994, it suffered from severe winter damage from which it did not recover. It requires the very best sites in order to survive and insure regular cropping. Potential for farm market situation mainly in the Southern part of the State. Ripens during the first week of September.

**Simka** - Tree shows medium vigor and open - upright growth; it exhibits regular and heavy productivity as well as partial self-thinning. Fruit is large, uniform, very shallow suture, somewhat cordate shape, very attractive and good tasting; sweet, excellent firm texture; freestone when fully mature. Skin is very dark red almost ebony; flesh is very light green to slightly yellow. Good pollinizers are Early Golden, Burbank, Ozark premier, Fortune, Early Magic and Santa Rosa. Ripens in the second week of September. Experience during the winter of 1994 indicates that it might be prone to winter/low temperature injuries. It requires better and more protected sites.

**Fortune** – Tree is very vigorous, it has upright, open growing habit. Fruit is large with bright red colored skin on the yellow background, very attractive; flesh is yellow, firm, juicy, very good tasting. Pit is small and semi-cling. It is self-incompatible. Burbank will pollinate it. Ripens about the same time with Frier, Simka and Caroline Harris. It is excellent choice for growers looking for a large bright red plum in mid to second part of September. Sensitive to leaf spot.

**Alderman** – Three is medium - sized with an open growing habit. Fruit is very attractive. It has nice brilliant orange-red skin color and orange-yellow flesh. Skin is very firm, shiny, waxy-like. Fruit is medium to large often 2”-2 1/2” in diameter. It has good texture and taste. Very good late plum. Ripens in the third/fourth week of September. Though self-fruitful, it will benefit from external pollinators like Toka and South Dakota. It appears to be winter-hardy.
**Angeleno** – Tree is moderately vigorous with open, spreading growth habit. It is precocious and productive. Very late-ripening plum. Fruit is medium to large, roundish-ovate; skin is dark purple-blue, almost black; flesh is yellow-amber, firm, smooth textured, juicy, sweet, excellent testing. Pit is small and semi-free to freestone.

### European Plums

European plums or blue plums also known as “prunes” provide some 9 weeks of “eating pleasure”. The season starts in late July early August and ends in the first part of October.

**Mount Royal** – Tree is moderately vigorous. It has open and somewhat upright growth habit. Fruit is dark purplish-maroon with light waxy bloom. Flesh is amber with characteristic red color bleed radiating just below the skin; fruit is small, about 1” in diameter or 23 g; pit is small contributing with slightly more than 3% in the total weight of the fruit. Fruit has very good taste; it is juicy and sweet with the average brix of 14%. It has a tendency to hang on the tree even when fully ripe. It is self-fruitful. Canadian sources indicate sensitivity to black knot.

**Opal** - Tree is pyramidal, wide spreading, moderately vigorous growth. Spur bearer. It is self-fruitful and very productive. Fruit has maroon skin covered with very light waxy bloom; it is round, medium in size, firm, juicy, sweet to mildly tart. It has a tendency to drop when fully ripe. It is tolerant to fungal diseases and, by European account, tolerant to PPV. Very sensitive to mites (5)*.

**NY 68011** – Tree has open but very upright growing habit reminiscent of NY9. It has very large leaves. It is drought sensitive, possibly the most sensitive of all. It shows burned margins resembling the leafhopper burn. Early ripening season, with Opal. Fruit is large, of good quality.
**Oullins** – Very old European variety originated in France. It is very similar to Yellow Gage, Imperial Gage and other varieties in the Gage group. Most likely is a seedling of Reine Claude. Tree is very vigorous with upright, open growth habit. It is quite hardy. It has attractive large flowers. It flowers after the leaves appear on the tree. It is self-fruitful. Very productive. Fruit is medium to large, round, symmetrical. Fruit skin is greenish to yellow covered with light waxy bloom; there are numerous cream to whitish colored small dots mainly around the stem-end. Flesh color is yellow, quite firm, sweet, very good tasting. Brix are averaging 14%. Requires multiple harvests. It produces fruit in grape-like clusters that may cause serious problem with brown rot if the ripe fruit is not harvested on time. Over-ripe fruit will fall victim to brown rot and spoil the rest of the fruit in a cluster. It is sensitive to mites (5)*and moderately sensitive to bacterial leaf spot (3)*.

**Valorie** – It was tested as V 70031. It is a seedling of (Valor X California Blue). Comes from Vineland, Ontario, Canada. Tree is upright with medium to medium-high vigor. It is self-sterile and is pollinated by Bluefre, Italian, Stanley, Valor, Veeblue, Vanette, Victory, Voyager, Vision, and Earlyblue. It is regular and prolific cropper. Produces medium to large fruit, clingstone, fare quality. Fruit skin color is blue, flesh is yellow. If not picked in time, fruit has a tendency to drop. Taste is mild, not enough acid. It tastes better when picked before it reaches biological maturity; in other words, when it is still on a green side. Normal harvest is in the second part of August. Trees are moderately hardy…in the cold winter of 1994, trees had suffered significant damage. It is suited for good, frost-free sites. Its best quality is that it is so early and has larger fruit than any plum at that time. Mostly for farm-market situation. Mites are major problem; in certain years trees are almost defoliated by September. It is moderately susceptible to bacterial leaf spot.

**Vanette** – It was tested as V 66071. Tree is moderate to vigorous with very upright growing habit. It is moderately heavy producer. Fruit is purple-blue, freestone, large. It has good sugar/acid ratio that accounts for excellent taste. It is self-sterile; good pollinizers are Stanley, Voyager, Vision, Valor, Verity and Veeblue. Most years ripens in the third week of August. It is very good dual-purpose plum; one of the best fresh market plums. Mites could be heavy on leaves but the leaves are still hanging on the trees. It has very little bacterial spot. Excellent all around plum. Cooks well, good choice for home canning. In 2005 had symptoms of B deficiency manifested as dry crack scars on the fruit.
V 70032 - Comes from Vineland breeding program. It is a seedling from *Valor x California Blue*. Tree is small, on a dwarf side. It is very precocious and productive. In early years would benefit from heaving a support due to the very heavy crop load. It is self-sterile. Valerie, Valor, Vanette, Victory, Voyager and Veeblue are some of the varieties that will pollinate it. It ripens early (August). Fruit is round and small @ 25g. Skin is dark blue. Flesh is yellow, juicy and good tasting. Average brix are > 13%. It is very sensitive to bacterial leaf spot and mites.

PP 6975-2 – Tree has moderate vigor and exhibits very open growth habit. It had suffered quite a bit from winter damage in 1994 that resulted in canker development and dieback. This plum requires good protected sites in order to survive the harsh winters. It is self-sterile; good pollenizors are Italian, Vision, President and Valerie. It produces very heavily. Fruit is large, purple with heavy bloom, very good quality. Taste is sweet with just a touch of acid, very pleasing and refreshing. Normal harvest is in the second week of September. It is very sensitive to mites (5)* to the point that will defoliate by mid summer; mite protection is “a must”! Moderately sensitive to bacterial leaf spot (3)*.

DeMonfort - Tree is vigorous and spreading. Very productive. Fruit is medium sized 26 - 30 g, oval; skin is reddish-maroon covered with heavy waxy bloom making it appear blue. It has very characteristic irregular – squiggly tan lines, which makes it very attractive. Flesh is greenish-yellow, very sweet (>18% brix), juicy, rich-flavored. Pit is small with 2.6% in the total weight of the fruit. Requires multiple picking. Starts ripening in mid August; peak harvest is in 3 week of August.

Voyageur – Tree is Moderately vigorous with upright but open growth habit. Fruit is small to medium @30 g; elliptical; base skin color is dark blue-purple, covered with heavy waxy bloom making it appear light blue; flesh is yellow, firm, juicy, sweet (>16% brix), very good quality; pit is relatively large and makes @ 5% of the total weight of the fruit. It is self-fruitful, though in some Canadian literature there is reference of it being self-incompatible. It would be best if planted with other varieties that would cross-pollinate it. Good pollenizors are Stanley, Italian, Vision, Verity, Valor, Valerie, Vanette, Veeblue, Bluebell, and Early Blue. It has tendency to over crop; it would benefit from thinning. Ripens in
the third week of August. It is quite tolerant to bacterial canker and black knot, sensitive to mites (5)* and bacterial leaf spot (5)*.

**Castleton** - It is very good dual purpose plum; suitable for fresh and processing. Definitely my favorite when it comes to home canning. Makes excellent burgundy jam. Tree exhibits low to medium vigor and spreading growth habit. It is precocious. In commercial blocks this variety has performed well. It does require more rigorous pruning in order to balance vegetative growth and cropping. Heavy crop load will stunt the tree not allowing for necessary new growth to maintain the vigor. Also, in early, formative years, pruning to “stiffen-up” the tree and create the framework is absolutely “a must”. Otherwise, the tree will bend under the crop load and will be too “flimsy” and scrawny-looking with no ability to support the load and sustain itself. It is self-fruitful. Produces heavily. It has well distributed bearing wood. Fruit is medium-sized, dark blue, oblong, and freestone. Taste is sweet to mildly acid. The average brix content is 16% or above. Ripens by the end of August first part of September. It is suitable for mechanical harvesting. It is more sensitive to bacterial spot than the other selections and varieties in this group. Moderately sensitive to mite damage. It is quite tolerant to black knot (2)*.

**N.Y. 6 or N.Y. 66.609.6** - Tree is medium-sized with open growth pattern. The tree requires more rigorous pruning even beyond its formative years. It starts cropping very early, which makes the young limbs bend and bow. If not pruned back, the tree will acquire more “weeping” shape and in time will have trouble with inadequate vigor. Needs heading cuts to encourage the new growth. This tree is genetically lower vigor tree that has a tendency to over-crop year after year, thus restraining the vigor even more. It is imperative that the crop load and vigor are regulated through pruning practices. This selection is suitable for baby-food. It fared very well in the baby-food trials done by Gerber and Heinz. Taste is very mild which makes it excellent choice for mixing with other fruit. It has very limited potential for fresh market. It is partially self-fruitful; good pollenizors are Stanley, Castleton, and Italian-Demaris. Ripens in the second week of September. In trial for relative susceptibility to black knot, this selection has shown moderate tolerance against the disease under the tremendous pressure. It is sensitive to bacterial canker (*Pseudomonas sp.*).
J.G. 501 - Tree is moderate to vigorous with the upright growth habit. It is heavy producer. Fruit is large (> 76 g), purple with orange-yellowish flesh; it is juicy, sweet, very good tasting. It has more than 14% brix. Pit is small, only 3% pit in the total weight of the fruit; it is cling to semi-cling. Good tasting plum that ripens in the second week of September. It is heavily infested with mites (5)* but does not lose a lot of leaves. Quite tolerant to bacterial spot (3-4)*. Requires multiple pickings. Fully ripe fruit has a tendency to develop brown rot and drop. Might be of interest for smaller operations and road side markets.

Seneca - Tree is somewhat dwarf with open crown, medium to heavy bearing. Fruit is large with reddish-purple skin and yellow-orange flesh. Good tasting plum. Normally, it is harvested in the second week of September. Fruit has a tendency to crack when exposed to heavier rain near or at maturity. Moderately susceptible to brown rot.

NY 58.900.7 - It is a good size tree approximately 15’ high and 12’ wide. It has open growth habit. Strong lateral limbs form about 50 - degree angle with the leader. Produces regularly and heavy. Fruit is very large with the average weight of 56 g. Skin is maroon and covered with waxy bloom that makes it appear bluish. However, it is not as blue as Stanley, which might be perceived as a negative trait. It has interesting shape; it is sort of “flattened” at the cheeks; the widest point is at the suture. Flesh is orange-yellow. It is sweet with just a touch of acid. It has over 14% brix. Very good eating plum. Ripens in the first part of September. Shows very little sensitivity to bacterial leaf spot (0-1)*. Very sensitive to mites (5)*.

N.Y. 9 or N.Y. 58.900.9 - Tree is very vigorous with upright growth habit. Requires minimum pruning (mainly thinning cuts) past the early formative years. Fertilization program need to be customized to satisfy the needs for maintaining the good tree health and the crop load and yet not to encourage natural flare for the vigorous vegetative growth. On most of the trees we have noticed more than 3 feet of new growth!?! In the last few years commercial blocks in Hart and elsewhere have given us many good signs. Young trees, produce a lot of fruit on two and three-year old wood that appears hidden inside the canopy. Once the trees “settle-down”, they assume regular and ample
cropping. Pruning, from thereon, should be restricted to mainly thinning and some bench cuts. It is self-fruitful. Ripens in the first week of September. Fruit size varies due to the crop load and goes from small to large. Fruit skin is purple, covered with waxy bloom so it appears blue. Flesh is green. It has mild taste, rather sweet. Though, it is processing variety, when picked when the flesh color starts changing from green to amber, it has just enough acid to make it well eating plum. Soluble solids range from 15 to 20% averaging at >16 %. Based on the Gerber trials on the fruit shipped from New York, this selection is outperforming all the others. It seems to tolerate mites and bacterial spot better than the N.Y. 6 and Castleton.

**Long John** - Tree is not very vigorous but rather small, reaching only about 10-12 ‘ in height. It has open growth habit. It appears that the bearing wood is primarily concentrated on the younger wood, up to 4 years old. Older wood does not have very many spurs and could almost be called blind wood. This would indicate a need for more rigorous pruning treatment that would provide constant renewal of the branches. It has excellent cropping history. Fruit is large (above 50 g) and has interesting shape: it is quite long and bit “flattened”. Skin is dark maroon, almost black and covered with the waxy bloom, which gives it nice blue color. Flesh is orange, firm and pleasantly tart. It is freestone. Could be of interest for the farm market situation. It ripens with Stanley, but larger and better quality. It is partially self-fruitful. Good pollinators are Stanley, Polly, and Castleton. It is quite sensitive to mites (5)* that may cause bronzing. Shows relative tolerance towards bacterial spot (1-2)*. Appears to be more sensitive to canker.

**Violette** – Tested as V 72.511. It was developed in Vineland, Ontario, Canada. Tree has moderate vigor. It is very heavy bearer. Produces large to very large fruit. Flesh is amber-greenish, firm and good tasting. It is self-sterile. Good pollinizers are Stanley, Valor, Voyager and V 72.521.
**V 72.521** – Elite selection from Vineland, Ontario, Canada. Tree is very vigorous and has upright, semi-spreading growth. New shoots are maroon, tips are burgundy. Buds are “sitting” on a bench-like structure just above the leaf scar; buds are pointed, narrow, very tight with a few large bud scales tightly wrapped around. Leaves are smooth, shiny. Tree is precocious. Previous experience with this plum indicates that it is somewhat sensitive to winter damage and would require better and more protected sites. It is regular and very heavy producer. Bearing wood is well distributed on both young and older wood. Fruit is large to very large. It has interesting skin color; reddish-maroon, covered with waxy bloom. Flesh is greenish-yellow, good, firm consistency, juicy, sweet with a touch of tartness; it has very pleasant taste. Average brix are >20%. Pit is freestone and large represented with @ 3.5% in the total weight of the fruit. Ripens in the 4th week of September. It is sensitive to mites (4)* and moderately tolerant to bacterial leaf spot (3)*

**Polly** - Tree is moderately vigorous to vigorous and spreading. Has a tendency to self-thin providing regular cropping and large fruits. Fruit is very large and has characteristic kidney-like shape, flat; diameter at the suture is greater than cheek to cheek. Skin has green ground color covered with purple-red color on the top. When fully ripe, it is purple-red. Flesh is orange-green, medium firm; flavor is quite mild, not enough acid. Matures with Stanley. Major advantage is that it is self-fruitful and has abundance of excellent pollen compatible with wide range of European plums. Taste is acceptable.

**Ariel** – Tree has moderate vigor and upright but open growth habit. It is very precocious, in the third leaf. It is productive. Fruit is oblong to round. Base color is yellow-orange with a very nice red blush covering most of the fruit surface. It is covered with moderate waxy bloom. Flash is amber-yellow, very firm, juicy, sweet with a touch of tartness making it very palatable and enjoyable. It has very high brix in access of 23%. Ripens late in the last week of September - first week of October. Susceptibility to bacterial leaf spot is rated at 3-4. It is sensitive to mite damage (5). This is one of the best plums that seem to have everything to seduce the consumer: eye-appeal, size, firmness and great taste.
Valor - Tree has moderate vigor. It is quite winter - hardy. Produces regularly and heavy. Fruit is large and very good tasting. It is self-sterile; good pollenizers are Stanley, Italian, Vanette, Vision, Verity, Bluefre and Earliblue. The average harvest date falls in the fourth week of September; just ahead of Italian Prune. Fruit is medium large; dark purple, speckled, quite attractive; flesh is greenish- yellow, semi-freestone. Mites have not been a problem even under the heavy mite pressure; they just do not seem to like it.

Vision –Tree has high vigor and somewhat upright open growth habit. It is very prolific cropper. It is pollinated by Bluefre, Stanley, Valor, Victory and Dampson plums. Sets and produces heavy crop, even when the weather during pollination is not favorable. Fruit is large to very large <56 g, purple with amber flesh, freestone. Pit is rather small and makes only 2.6% of the total weight of the fruit. Brix are greater than 17%. Taste is exquisite! This is one of the best tasting plums in our collection. It harvested in the fourth week of September first of October. In the cold winter of 1994, trees suffered significant winter damage. It is best suited for the very good and protected sites. Quite tolerant to bacterial leaf spot (1-2)* and sensitive to mites (5)*.

President - European type plum. This is well known old variety. Tree shows medium vigor and upright growth. Requires cross-pollination; good source of pollen are Empress, Italian and Vision. Fruit is large, elliptical, semi-cling. Skin is purple with heavy bloom that makes it appear blue. Flesh is orange. Very good but very late plum. In Traverse City area, fruit is harvested in the first part of October though many years it would be still green. Would be of interest for the southern part of the State.

Empress - It is well-known European plum variety. Tree is medium size, upright with the open crown. It is self-sterile; good pollenizers are Stanley, Vision, President and Italian. It has large, elliptical, symmetrical fruit of very good quality. Skin is purple, covered with heavy waxy bloom; flesh is greenish-yellow; semi-cling. The problem is that ripens very late (first part of October) and most years we are not able to ripen it at the NWMIHR Station. Probably, should not be grown North of Grand Rapids.

* Sensitivity scale: 1-5; 1- quite tolerant with symptoms showing <5%; 5-very sensitive