Some Favorite Tree Fruit Varieties for the Michigan Climate Bill Shane, Michigan State University Extension

Peaches

Peaches are generally self-fertile, with a very few exceptions. Brown rot disease and oriental fruit moth are common problems of all peaches and nectarines and require spray programs to keep these problems at bay. Estimated harvest times for peaches is commonly expressed as days before (-RH) or after (+RH) Redhaven, a midseason peach that harvests approximately the last week in July to the first week in August in southern Michigan. Peaches are particularly sensitive to mid-winter low temperature damage. More winter hardy varieties of somewhat so-so quality are Reliance (-0 RH), Madison (+28 RH) and Harcrest (+28 RH) but even these do not fare well when temperatures reach -13F or below. Redhaven is relatively tough as well, has good reputation for flavor but tends to have split pits. Other varieties with reputation for good flavor but less hardiness are Desiree (-26 RH), Summer Serenade (-10 RH), Starfire (+3 RH), PF Lucky 13 (+6 RH), Bellaire (+3 RH), John Boy (+3 RH), Loring (+12 RH), Coralstar (+12 RH), Messina (+17 RH), Sweetstar (+20 RH) and PF24C (+24 RH). These are all yellow melting flesh peaches. Varieties ripening before Redhaven tend to be clingstone, after tend to be freestone. Varieties commonly found in Michigan area garden supply stores include Redhaven, Elberta, and Redskin. Elberta (+30 RH) is moderately hardy, somewhat fuzzy, so-so red skin coloration, medium sized, with good firmness and medium eating quality. Redskin (+28) has decent hardiness, medium size, good quality, and moderately attractive medium colored fruit, sometimes irregularly-shaped fruit. Non-melting flesh peaches are clingstone and are suited for canning because the slices stay firm. Popular peach varieties of this type for Michigan are Vinegold, Virgil, Venture, Catherina, Babygold 5 and Babygold 8. The two Babygolds are prone to bacterial spot on sandy sites. Vinegold and Virgil, two earlier season varieties have good bacterial spot resistance but are somewhat prone to split pits.

A unique peach to consider is Saturn, a white flesh peento = flat doughnut peach variety. This variety is small, requires extra labor to thin and pick, has a tendency to split skin at the stem and is prone to brown rot, but has excellent flavor and very productive most years. Rutgers University has several newer peento peach varieties including Buenos II (non-melting), TangOs (yellow flesh, somewhat non-melting), and TangOs II (cream white/slight green). North Carolina (Galactica) has not shown sufficient winter hardiness.

The choices for nectarines are more limited because of the tendency of nectarines to have disease (brown rot and bacterial spot), surface blemish and small fruit size problems. Some of the more popular yellow and or promising yellow melting flesh types are June Glo (-7 RH), PF11-Nectarine (+0 RH), Flavortop (+12 RH), and Fantasia (+31 RH).

For the Michigan climate the recommended rootstock for peaches and nectarines are Bailey, Lovell, Tennessee Natural, Rutgers Redleaf, and slightly less desirable Halford. Guardian and Siberian C have shown some problems in the Midwest climate and the rootstocks Citation and Nemaguard are definitely poorly suited for the Michigan climate. Trees on Halford tend to be slightly smaller than those on Bailey, Lowell, or Tennessee Natural. Krymsk 86 is a new clonal rootstock reputed to have better tolerance to heavier soils and higher pH, but experience in Michigan conditions is limited.

Plums

European prune-type plums are generally incompatible with Japanese plum types. Some plum varieties are partially self-fruitful but would benefit from a compatible pollen partner. Plums with a reputation for being partially self-fruitful include Stanley, Italian, Santa Rosa and Methley

Japanese type plums such as Early Golden, Methley, Shiro, Elephant Heart, Simka, and Red Heart bloom relatively early in Michigan and are subject to spring frost problems. Bacterial spot is a common disease problem of Japanese and European plums in sandy sites exposed to windstorms.

European plums are more suited to the Michigan climate. Damson types, the #2 plum in Michigan, are small, have a tart flavor and are used mainly for processing. Stanley, the #1 plum, is medium quality but relatively hardy. Best opportunities for higher quality European plums in Michigan are the NY9, Castleton, Vanette, Victory, Vision, and Empress. Unlike Stanley, which was sour around the pit, these plums are sweet throughout. Stanleys have nice flavor but ripen quickly from sour, to just right, to soft.

Pluots, aprium, plumcots are hybrids among plums and apricots. Many of these are very sweet. These hybrids tend to be more prone to winter damage than European plum.

Rootstock for Japanese plums are Myrobolan and Marianna 2624, and for European plum use Myrobolan. Dwarfing rootstock are generally not available for plums.

The big nemesis for plums is the fungal disease brown rot. Pluots (Plumcots)

These are crosses between plum and apricot, are becoming available from nurseries. Some of these are very sweet, but generally are prone to winter damage to wood and fruit bud and for this reason are generally not grown commercially in Michigan to any large extent.

Tart Cherries

The standard pie cherry is Montmorency. Unusual tart cherry types to investigate include Balaton®, Jubelium®, and Danube™. These are morello types with red flesh and juice compared to Montmorency with yellow flesh and clear juice. Danube and Jubelium ripens before Montmorency and Balaton slightly after. They may be more prone to light cropping problems due to low winter temperatures and/or earlier bloom than Montmorency. Northstar and Surefire are two tart cherry selections with Montmorency characteristics, more reliable cropping than Montmorency, but have smaller fruit size. Cherry leaf spot disease is a significant problem causing leaf loss, especially in wet years. Montmorency tart cherry is very susceptible. Tart cherry varieties with better leaf spot resistance include Northstar and Meteor. Dwarfing rootstock are available for tart cherries.

Sweet cherries

Probably the biggest recent development in the sweet cherry arena has been the introduction of the Gisela® dwarfing rootstock. These rootstocks allow growers to reduce tree size and greatly

increase the early bearing of sweet cherry varieties. G5 is the most dwarfing, G6 is intermediate, and G12 is the least dwarfing, resulting in a tree slightly smaller than on standard rootstocks such as mazzard or mahaleb. G5 is too dwarfing on sandy soils. Mahaleb rootstock is preferred over mazzard unless the site tends to have wetter soil, a situation for which mazzard is better suited.

Some of the better older sweet cherry varieties still worthy of planting are Cavalier, Viva, Viscount, Schmidt, and Ulster. Cavalier is somewhat shy bearing. Newer ones that had performed relatively well are Attika, Summit, Kristin, and Regina. Much newer ones with promise include Burgundy Pearl and Black Pearl, both from New York. A few varieties such as Stella and Sweetheart are self-fertile, but most varieties are self-infertile, and so need a companion variety to provide pollen. Sweet cherry varieties are generally less susceptible to cherry leaf spot than tart cherries but still need some fungicide protection post bloom in wet years.

Pears

In Michigan European pears are generally not or only partially self-fruitful. Pollination partners are generally needed for all pear plantings.

The greatest challenge to the European pear industry has been the extreme susceptibility of Bartlett, Bosc, and D'Anjou to the bacterial disease fire blight. The new Canadian variety Harrow Sweet ripens two weeks after Bartlett and has extremely good fire blight resistance, excellent fruit quality, and very good storage life for a relatively early pear. Fruit size of Harrow Sweet is the same or slightly smaller than Bartlett and may have a slightly rougher finish. Early thinning of Harrow Sweet is important to obtain good fruit size. Another new variety with fire blight resistance is Gem, a variety that is crisp at harvest but softens in storage. Other flavorful varieties to consider are Flemish Beauty, Seckel, Moonglo, and Kieffer. Dwarfing rootstock are generally not available for European pear, although some dwarfing is seen with OHXF 87 rootstock compared to most other pear rootstock.

Asian pears

These are sometimes called "apple pears" because several of these varieties have round shapes and crisp, crunchy flesh. Some Asian pears are partially self-fruitful. Yields improve with a compatible pollinating variety. Dwarfing rootstock are generally not available for Asian pear.

Fruits must be handled carefully to avoid bruising the delicate flesh. Of the many Asian pear varieties, only a few (including New Century, Twentieth Century, and Chojuro) so far have proven to perform well under Michigan conditions although many varieties remain to be tested. The mild, unique flavor of Asian pears is quite variable from year to year. Like apples, they must be harvested when they are ready to eat and overripe fruit is sometimes unpleasant--experience with each variety is needed to determine the best timing. Both European and especially Asian pear varieties make excellent dried fruit slices.

Apricots

Although relatively winter hardy, this fruit type tends to have problems in the Michigan climate

due to early bloom. Some of the better ones for the Michigan climate are: Curtis, Goldcot, Harcot, Hargrand, Harlayne, Haroblush, Harogem, and Veecot. The best rootstock is Manchurian. Apricots grow relatively rapidly on the various common peach rootstocks but do not generally live as long as those on Manchurian. Apricots are generally self-fertile but yields improve with a compatible pollinating partner. Brown rot can be a problem, especially during warm wet years.

Apples

Dwarfing rootstock are available for apples. A few self-fruitful apples are "Golden Delicious, Jonathan, Red Rome, Winesap, Gala, Fuji. Some apple varieties are partially self-fertile; they will set some fruit without a pollinator variety, but bear a heavier crop when cross-pollinated. Even apples considered self-fruitful often bear more fruit when pollinated. Crabapple, if situated close to apple trees can serve as a pollen source, if they bloom at the same time.

There are many hundreds of apple varieties available to backyard gardeners that do well under Michigan conditions.

Numbers in parentheses following the variety name is the harvest days before (-) or after (+) compared to Red Delicious, which typically ripens approximately September 20 in southwest Michigan.

Less fungicides sprays are needed for scab resistant apple varieties, but sprays may be needed for other diseases and for insects.

Scab resistant varieties of decent to good quality

Pristine (-67) early yellow, smooth skin, will get fire blight

Williams Pride (-50) early Red Delicious type, productive, good flavor

Crimson Crisp (-10) Red, medium sized, smooth finish, nice sweet / acid balance, nice eating quality, will get fire blight

Pixie Crunch (+5) Medium sized red apple on light green ground color, juicy, with crunch, mild flavor Enterprise (+15) large bicolored cooking apple, okay eating fresh eating quality

Goldrush (+45) very late, very firm yellow / green apple with russet tendency, medium size, with excellent storage characteristics, excellent slice and sauce apple

Novaspy (+10), bicolored, Northern Spy-like, but ripens about 2 weeks earlier, not quite as good as Northern Spy for pies, crisp, very firm

Scab tolerant (still will need some fungicide treatment)

Honeyerisp(-5) large, bicolored, mild flavored, crisp, and juicy, but prone to fruit blemishes. Several redder versions such as Royal Red are now available. A newer earlier strain Premier ripens about 1 month earlier than the original, with flavor nearly the same as the original.

Akane (10) also called Prime Red, somewhat Jonathan like in flavor, not as prone to fire blight

Well-known, adapted to Michigan environment, some with higher disease susceptibility, all susceptible to apple scab

Galas (–23) many varieties available, medium sized, sweet, with some spicy characteristics tracing back to Cox's Orange Pippen, good for fresh and for pies, medium shelf life, susceptible to fire blight, Fulford is somewhat larger, earlier, Imperial is older still popular variety, Many newer varieties are available that have more red skin color but otherwise not much better than Imperial. A few earlier ripening Gala varieties are available including Wildfire.

McIntosh (-20) many varieties are available. Ruby Mac, Linda Mac, Miracle Mac are some of the newer strains with better skin color. Ruby Mac is the most popular of these.

Jonagold (-10) large, dual purpose eating and cooking, sweet, juicy, somewhat tart, medium shelf life, medium fire blight susceptibility. Some of the older varieties have a green skin background that may be considered unattractive. Some of the better coloring Jonagold varieties are Jonagored, Rubinstar, and Crimson. However, ripening time and flavor of most Jonagolds are similar.

Jonathan (-7) mainly cooking apple, medium size, sweet / acidic, favorite for pie and applesauce, fire blight and powdery mildew susceptible, many varieties including the popular Jonee, Nured, and Ruby Jon

Early season Fuji varieties (-3) ripening approximately 1 month before standard Fuji – varieties include Rising Sun, Early Auvil, Daybreak, Nickell, Morning Mist. Not quite the quality of standard main season Fujis, but particularly useful in more northern areas with shorter growing seasons. Shorter storage life than main season fujis.

Main season Fuji varieties (+20) firm, productive, older strains with greenish hint to the background when ripe, sweet, become sweeter in storage, tend to pick up odors if stored for long time in refrigerator with vegetables. Newer Fuji strains such as Banning and Aztec have more red skin than the older BC2, Top Export and Coe but similar taste and storage characteristics.

Other varieties that do well in the southern growing areas of Michigan include Cameo and Braeburn. These varieties and Fuji ripen too late to be successful in the northern areas of the Michigan lower peninsula.

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