



the Urban Scion Post

a publication of the Seattle Tree Fruit Society,
a chapter of the Western Cascade Fruit Society

President's Letter

I haven't seen many of you since February. This new reality has put a bit of a damper on our club activities. However, the "shutdown" has provided new opportunities. Most notably, the chance to explore our neighborhoods, as well as our own property. Here's some of what I have "discovered" over the past few months:

- More neighbors are working in their yards/gardens. Nurseries seem to be busier than ever.
- There are many fig trees in northeast Seattle, where I live. I've recently seen several being harvested from sidewalks.
- There is a huge, productive Loquat tree in the International District. We collected some seeds from it.
- There seems to be less Spotted Wing Drosophila activity this year. At least that's what I've noticed at my property.
- There is nothing like popping a fresh, perfectly ripe, raspberry in your mouth, right after you pick it. Of course, I already knew this. But, it was strongly reinforced.
- There is a Serviceberry shrub in Maple Leaf that is extremely productive, with very tasty berries. It hung out over the sidewalk, almost hitting people in the face as they walked. No one seemed to be picking it, so I did, for about two weeks.
- My Japanese Wineberry that I thought had died is well and thriving.
- It's so nice to have several Alpine Strawberry plants tucked in, here and there, on your property. There is just so much flavor in those tiny berries.
- Many residents still let their apples drop in their yards, on the sidewalks, and on the streets. I've picked up some of these and made use of them. I really wish everyone would acknowledge the value of these trees and make use of their productivity.

I hope you are also taking advantage of this period of time to make some "discoveries."

I had the pleasure of visiting gardens/orchards of two members over the past month – one in Duvall, and one in the Wallingford. I received some tasty fruit samples from each. I, and a few other members, have been monitoring the demonstration orchard at Magnuson Park. There has been a recent heavy fruit drop, and we are in the process of cleaning it up. The fruit set on several of the trees is very optimal. The thinning at our recent work party paid off nicely.

I've been in contact with Seattle Parks and Recreation, trying to get a sense of when the facilities might open again for our meetings, the first of which is scheduled in September. At this time, they are unable to assess when the facilities might become active again. We'll just keep abreast of any developments, and act accordingly. Our fingers are crossed that we will at least be able to have some type of fruit show in October.

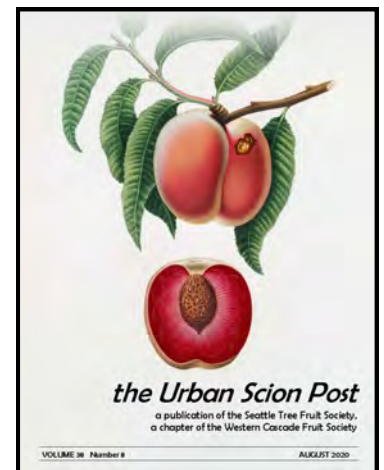
I recently traveled up to Mount Vernon to honor Jacky King via her "drive-through" retirement party. Jacky has spent pretty much her entire working life (40+ years) at WSU's Northwest Washington Research and Extension Center. Her contributions have been enormous, and we will continue to benefit from her body of work. Fittingly, an orchard at the Mt. Vernon facility has been named in her honor. Thank you, Jacky!

Sincerely, *Mike Ewanciw*

Urban Scion Post

Inside this issue:

President's Letter	2
August 2020 by M. Tilbury	3
Blood Peaches	4-5 8
Peaches In America	6-7
A Damson, a Bullace & a Gage	10-11
Kiwifruit Propagation	12-14
Fruitful Kitchen	15
Officers, Directors & Membership	16



On the cover

Illustration of "Pesca Carota" from the *Pomona Italiana* by Giorgio Gallesio (1817-1839)

August, the Watering Month

by Marilyn Tilbury

Folks who have lived here for some years often refer to the last week of July and the first week of August as “summer.” Temps tend to be toasty and precipitation to be zero or nearly so, irrespective of whatever the preceding weather was like.

It follows that this summer period is when plants really appreciate a good soaking. The equivalent of 1” of water a week will do. Keep it up if August continues to be dry.

NOAA is now guessing that our winter will be a *la Niña*, cool and damp, ideal for moving plants when dormant in November and for seeding perennial flowers now. There are more and more reports about fewer insects and birds in our environment with special concern on lower counts of pollinating insects. Growing flowers in areas now dedicated to turf grass will help them. Oddly, leaving just a square yard of sunny garden area bare of plants is also beneficial for the little known ground nesting insects which pollinate, or prey on pest species.

The early apples are ripening. People joke that a Yellow Transparent can be unripe one day, ready to pick the next and over ripe one day later. This is only a slight exaggeration. Keep an eye on your summer pears. When a pear readily separates from the tree when held at 90°, it’s ready to spend a couple weeks in a cool area such as a basement to finish ripening. Do keep any fallen fruit picked up and buried under several inches of soil or heated before composting.

The first part of August still offers time to summer prune fruit trees to downsize. Water sprouts can be cut to the last couple spurs to allow a bit more fruit or cut flush to the branch. For semidwarf and larger trees, ladder bays can be re-established. For very overgrown trees, think about removing no more than a third of growth a year; this can be a

multiyear project. Check the base of trees for suckers. If they can be yanked out, there is less chance of regrowth. Otherwise, prune them out with loppers reserved just for ground work.

When pruning, be on the lookout for apple anthracnose. New hits in our wet spring now look like reddish brown patches of sunken bark which may be elongating. You can see a small crack visible between the living bark and the now dead bark in the middle. Try Greg Giuliani’s innovation of applying a coat of petroleum jelly on the diseased area now which may prevent infection from spreading when wet weather returns.

The old floricanes of summer bearing raspberries and blackberries should be pruned out now before the new primocanes grow thru them and increase pruning difficulty. Have you noticed that suckers have regrown around your fruit trees? Good time to rip out or prune them too.

WSDA is all excited—an Asian giant hornet was found drowned in a bait trap in the Birch Bay area near the Canadian border on July 14. Now they are scurrying to deploy traps

which will keep any trapped hornets alive so they can mount a tiny tracker on them and hopefully follow them home and destroy the nests.

Based on Japanese research, where this insect is endemic, workers increase in number in August and September but new queens and drones for the following year start to be produced beginning around mid-September. They very much want to prevent this from happening in our state. WSDA is publicity conscious and has an excellent, current website at agr.wa.gov/hornets.

Long time STFS members will know the name Jacky King. She’s worked 40 years at the WSU Mt. Vernon station, with many of those years in tree fruit. She’s an excellent photographer and her reports are always accurate, clearly written and informative. We wish her a most happy retirement.





BLOOD PEACHES

A Tale of Wandering Fruit

Story by Laure Jansen
Photo by Tom Conway

How does a fruit from China become a native American icon? And I mean native American in both senses of the word: The Cherokee and other tribes were so well-known for their peach orchards that the most exotic cultivars is named for them: . And Georgia is still considered the peach state,

Probably brought by the Spanish explorers in the late 16th century (see The Peach in America on page 6), the seed of this new abundant fruit spread northward along indigenous trading routes, and peach plantings cropped up around many villages and tribal settlements throughout the Deep South, Mid-Atlantic, and Northeast.

By 1683, William Penn observed the Lenape tribe growing peaches around what is today Philadelphia: "Here are also Peaches, and very good, and in great quantities, not an Indian Plantation without them ... one may have them by Bushels for little; they make a pleasant Drink and I think not inferior to any Peach you have in England, except the true Newington." A few years later, John Banister declared "...for the Indians have, and ever had greater variety and finer sorts of them than we... I have seen those they call the yellow plum-peach that have been 12 or 13 inches in girth," adding "Peaches and Nectarines I believe to be Spontaneous ... for the Indians have, and ever had greater variety, and

finer sorts of them than we."

So the key to the spontaneous development of wildly diverging cultivars of peach was in its amazing success at growing from seed. The climate along the eastern seaboard and the southern colonies was much milder than that of the peach's homeland in China. Areas of sandy loam soil were quickly taken over by the peach seedlings. The seedling grew rapidly in the mild winters, and began to bear fruit as early as the second and third year. When the trees produced fruit, it was in such abundance that much of it rotted on the ground. The peaches also fed the feral razor-back hogs, who distributed the seeds over large areas, just as the horse promoted the spread of apples from the wilds of Kazakhstan to the cities of Europe. The trees were shortlived, but very productive. And there were always new seedlings, some of which were superior, to replace the old.

So many generations of peaches in rapid succession resulted in great diversity in peach phenotypes. The Cherokee, Choctaw and other tribes began selecting for the best qualities of health, fruit quality and size, and for unique qualities. The most unusual of these is the **Cherokee Blood Peach**, a red-fleshed cultivar that still grows wild in areas of Arkansas, Mississippi, Ohio, Georgia, Virginia and the Carolinas.

The peach orchards of the Cherokee, Lenape, Iroquois, and others did not resemble the orchards we are familiar with. They were not populated with grafted trees. Indigenous peoples throughout eastern North America, as well as early colonists, planted orchards by the thousands with seedling trees. We know that peaches were also imported by the English colonists and the French explorers in the centuries following the Spanish arrival, so it is likely that additional peach genetics were absorbed into the gene pool.

Tracing the historic path of the blood peach is like doing family genealogy. The peach has only 8 pairs of chromosomes compared to 17 for apple, and the genome size of peach is less than half that of apple. The peach is the only species of cultivated *Prunus* that does not have a functional gametophytic self-incompatibility system (it doesn't need another cultivar to cross-pollinate) and behaves as **self-pollinating**. This self-pollination is the major factor that explains the low level of genetic diversity of peach. If we take this fact into account, it becomes clear that there must have been multiple importations of peaches by the European explorers and colonists, of different cultivars that contributed a variety of divergent genetic material. Although they are self-fertile, peaches will cross-pollinate with trees planted nearby. So I speculate that there must have been a good deal of peach-pit trading going on between the aboriginals and the Europeans, including some blood peach-pits.

*"Peaches and nectarines I believe to be spontaneous, somewhere or other on that continent, for the Indians have, and ever had greater variety, and finer sorts of them than the English. The best sort of these **cling to the stone**, and will not come off clear, which they call plum nectarines, and plum peaches or clint stones".*

"History of Virginia." Beverly Robert. 259, 260. 1722. Reprinted in Richmond 1855.

A further consideration of historic red-fleshed peach varieties gives us some insight into the possible origins of the Indian blood peach. Red-fleshed peaches are mentioned in Chinese literature as early as 1084, and there currently exist many Chinese cultivars that are red-fleshed, both free-stone with soft flesh and clingstone with firm flesh. It is most likely that the blood peach was carried west along the silk route to Europe with other peach cultivars.

In France, the blood peach was first described as Pêche Betterave (beet) by Friar Triquel in 1659, a peach having dark red flesh, rather dry, bitter, not very agreeable; free-

stone, and ripe in early October.. Other blood peaches found in France are: "Dugelay Sanguine", "Sanguine de Manosque", "Sanguine de la Thomassine", "Sanguine Pilat", "Sanguine Précoce", "Sanguine Tardive", "Sanguine Vineuse" are all free-stone, and most have melting (soft) flesh.

In Italy in the early 19th century, we find a blood peach called "Pesca Carota" illustrated in the Pomona Italiana (1817-1839). By that late date, the English had already begun breeding their own blood peaches, notably Sanguinole Pitmaston (1841) and Monkton.

Some genetic traits, like freestone and soft flesh, are dominant, whereas clingstone and soft flesh is recessive. The quality of the Cherokee blood peach, which is clingstone with firm flesh, is the most recessive. There are other blood peach cultivars, and as you would expect, only a few have the clingstone with firm flesh qualities.

In modern Portugal, there exists a red-fleshed peach that is clingstone with firm flesh, called "*Preto carnudo*" or "Black Marigold". So far this is the only clingstone blood peach I have found with firm flesh. Perhaps it was the Portuguese explorers who brought the blood peach to America?

In American, one "Blood" peach tree was sent Jefferson in 1807 by the Washington nurseryman Thomas Main. In 1810 Jefferson planted forty-one stones of the "black plumb peach of Georgia" in the "New Nursery." These likely came from William Meriwether, who had passed on "black soft peaches of Georgia" in 1804 and "Georgia black" peaches in 1809. When pomological writers such as Philip Miller, William Coxe, A. J. Downing, and U. P. Hedrick discussed the Blood Cling peach, they attributed its origin to a French variety known as Sanguinole, a curiosity suitable mostly for preserving.

As with red and pink fleshed apples, it appears that there are two genetic pathways. One produces fruit that is not red-fleshed in immaturity, but only when mature. The other produces fruit that has red flesh as soon as it begins to develop. A classic rootstock cultivar, "Harrow Blood", is of the second type. A Chinese cultivar, "Wu Yuen Xian", is of the first type.

We might consider the first type that is not red-fleshed in immaturity to be a white peach that develops red pigment. Many of the peach discussed here are this type. Only a few seem to be the second type, that is dark-fleshed from the very first: "Indian Blood", "Black Boy" and possible "Preto Car-

Continued on page 8

THE PEACH IN AMERICA

(excerpted from "Peaches of New York" by U.P. Hedrick)

One of the first fruits of the heroic age of Spanish discovery in America was the naturalization in the New World of animals and plants which the discoverers brought with them. Most notable of these are the wild horses of the western plains and the Indian peaches of southern forests. Long before the English, Dutch, French or Swedes planted colonies in America, peaches, introduced by Spaniards, were common property of the Indians in southeastern and southwestern America. The Spaniards came to the New World to conquer and brought swords more often than fruits, but a cheery note in the long dirge of human woes suffered by the Aztecs is found in the rapid dissemination of the peach, among other domesticated plants.

The peach was known at an early period in Mexico. Which of the Spanish conquerors brought the peach or when it came does not appear but we have record that less than fifty years after Cortez conquered the country the peach was, apparently, commonly grown in Mexico. The beginnings of peach-culture on this continent are, then, to be sought in the region south of the Rio Grande. Spanish book published by Molina in 1571, in which three peaches are described in Hispano-Aztec compound words as follows: " xuchipal durazno, 'red-colored peach,' cuztic durazno, 'yellow peach,' and xocotlmelocoton , ' peach fruit.' " " That the peach is to be found everywhere in Mexico, cultivated and as an escape from cultivation, where climate permits, is common knowledge to pomologists.

Tracing further the history of the peaches that early came to Mexico, we find evidence that in a comparatively short time they had been taken northward into New Mexico, Arizona and the Californias. It is barely possible that from the same source the peach was eventually carried as far eastward as the Mississippi, for early explorers found naturalized peaches in the valley of this great river. No doubt the Jesuit and Franciscan fathers, chief representatives of the Roman Catholic Church in the early settlement of Mexico and southwestern America, early carried the peach from place to place, for, as advance guards of civilization, these men usually planted fruits, grains, vegetables and flowers at the missions they founded.

Therefore, it is hardly too much to say that the history of the peach in the southwest follows the establishment, one after another, of the old missions, beginning in America with the settlement of Sante Fe (sic) in 1605 and continuing until Spanish rule passed into that of the United States. The padres of the early religious orders planted gardens and orchards as they planted the cross of Christianity among the Indian tribes.

The antiquity of peach-culture among southern Indians, from Mexico to Florida, is shown by the fact that, among the prominent tribes of this region, there is a distinct name for the peach but the names of other introduced fruits, and of some native ones, are derived from that of the peach. Thus, according to W. R. Gerard, who gave careful study to Indian names of plants in at least four Indian languages, the name of the peach is the radical while that of several plums is the equivalent of " little peach," " deer's peach " and " barren peach " while the cultivated apples and pears were by some Indians called " big peach." These Indian peaches are the source from which came a number of (modern) varieties.

In many parts of the South, from the Ohio to the Gulf and from the Atlantic to the Great Plains, the peach is naturalized and has run into many varieties of a peculiar and well-recognized type. This is the "Indian Peach" of this vast region, the chief distinguishing characters of which are: trees with long, spreading limbs; young growth with purplish bark; small, flat, comparatively persistent leaves; blossoms large; season sometimes covering several weeks; fruit small, streaked with red beneath the skin, giving it a striped appearance, heavily pubescent; flesh usually yellow ; ripening very late, season long, and of poor or indifferent quality. The trees of these Indian peaches have a smack of wildness which the best of pruning does not wholly subdue.

No doubt the Spaniards planted peaches in their first settlement of Florida at Saint Augustine in 1565. We have no record of the fact but early Indian traders found the natives of northern Florida and the neighboring states growing peaches in and about their villages in such quantity and with such familiarity as to suggest that the several tribes had long known this fruit. Hilton, an Englishman, who visited Florida a hundred years (c. 1664) after the Spaniards established themselves at Saint Augustine, records that " the country abounds with grapes, large figs and peaches." John Bartram, America's first great botanist, a man of note among all American naturalists, in the account of his trav-

els through this region in 1765-1766 frequently mentions the peach as wild or as having been cultivated by the Indians. He mentions, at the ruins of the ancient famous town of Sticoe, old Peach and Plumb orchards; some of the trees appeared yet thriving and fruitful. And again, discussing the ruins of a French town near Mobile, Alabama, he says: "I ascended the bank of the river, and penetrating the groves, came presently to old fields, where I observed ruins of ancient habitations, there being abundance of Peach and Fig trees, loaded with fruit, which affording a very acceptable dessert after the heats and toil of the day, and evening drawing on apace, I concluded to take up my quarters here for the night." And still again, he found on Pearl Island: "Besides the native forest trees and shrubs already noted, manured fruit trees arrive in this island to the utmost degree of perfection, as Pears, Peaches, Figs, Grape Vines, Plumbs, &c." Bartram in his travels found the peach so widely and abundantly naturalized that he was inclined to believe America to be its habitat. At least Kalm, the Swedish naturalist, who visited Bartram in 1748-1749 reports that Bartram "looked upon peaches as an original American fruit, and as growing wild in the greater part of America." In 1758 Le Page Du Pratz, who lived on a plantation in Louisiana for several years and wrote a history of the French colony, says that the natives had peaches and figs when the French settled in Louisiana in 1698. He probably errs, however, in stating that the natives got their trees from the English colony of Carolina since the English did not settle in Carolina until 1670. No doubt the Indians had long before had peaches and figs from the Spaniards of Florida or Mexico. The account which this historian gives of early peach-culture in Louisiana is worth printing in full: "The natives had doubtless got the peach trees and fig trees from the English colony of Carolina, before the French established themselves in Louisiana. The peaches are of the kind which we call alberges; are of the size of the fist, adhere to the stone, and contain so much water that they make a kind of wine of it. The figs are either blue or white; are large and well enough tasted. Our colonists plant the peach stones about the end of February, and suffer the trees to grow exposed to all weathers. In the third year they will gather from one tree at least two hundred peaches, and double that number for six or seven years more, when the tree dies irrecoverably. As new trees are so easily produced, the loss of the old ones is not in the least regretted."

A little later we have reliable information that the peach was naturalized in parts of the Mississippi Valley at least, for Thomas Nuttall, leading botanist of his time and a thoroughly reliable reporter, traveling in Arkansas in 1819, writes: "The thermometer towards noon rises to seventy degrees and the peach and plum trees, almost equally naturalized, have nearly finished blooming." And, again, "The peach of Persia is already naturalized throughout the forests of Arkansas." From this we may picture wild peaches as having grown for generations in parts of Arkansas and, no doubt, of the now famous Ozark region, where, we are told, peach-trees in abundance now decorate, with flower and fruit, primeval forests.

Reserving the best description of Indian peaches to the last we now turn from Arkansas to the Carolinas. Here, in 1700, John Lawson, a surveyor, who in his work had ample opportunity to know the country, wrote about the wild and cultivated plants of the region. Lawson, although not a trained naturalist, was a keen observer, a lover of nature and much interested in the agricultural development of the Carolinas:

"All peaches with us are standing; neither have we any wall fruit in Carolina, for we have heat enough, and therefore do not require it. We have a great many sorts of this fruit, which all thrive to admiration, peach trees coming to perfection, with us, as easily as the weeds. A peach falling to the ground brings a peach tree that shall bear in three years, or sometimes sooner. Eating peaches in our orchards makes them come up so thick from the kernel, that we are forced to take a great deal of care to weed them out, otherwise they make our land a wilderness of peach trees. They generally bear so full that they break great part of their limbs down. We have likewise very fair nectarines, especially the red, that clings to the stone; the other yellow fruit, that leaves the stone. Of the last I have a tree that most years brings me fifteen or twenty bushels. I see no foreign fruit like this, for thriving in all sorts of land, and bearing its fruit to admiration. I want to be satisfied about one sort of this fruit, which the Indians claim as their own, and affirm they had it growing amongst them before any Europeans came to America. The fruit I will describe as exactly as I can. The tree grows very large, most commonly as big as a handsome apple tree; the flowers are of a reddish, murrey color, the fruit is rather more downy than the yellow peach, and commonly very large and soft, being very full of juice. They part freely from the stone, and the stone is much thicker than all the other peach stones we have, which seems to me that it is a spontaneous fruit of America; yet in those parts of America that we inhabit, I never could hear that any peach trees were ever found growing in the woods; neither have the foreign Indians, that live remote from the English, any other sort. And those living amongst us have a hundred of this sort for one other. They are a hardy fruit, and are seldom damaged by the north-east blast, as others are."

KNOWN CULTIVARS OF BLOOD PEACHES

“Sanguine de Savoie”: red skinned with deep red flesh. Juicy, incredibly sweet, intensely perfumed, and slight spicy. Heavy cropper. Vineyard variety. (*Frank P. Matthews Nursery*)

“Sanguine de Manosque”: Named for the locality of Manosque in Basses-Alpes, France, Large flowers; fruit large, roundish-oblong; skin streaked with violet; flesh red, melting, juicy; stone large, russet, obovate, **freestone**; ripens in August. (*Hedrick, 1917*)

“Black Boy”: this is not a single modern cultivar but a group of similar types. Beet red flesh, clingstone.

“Blood Free” (Indian Free): a free-stone white peach with red streaked & mottled flesh. raised by John M. Ives of Salem, Massachusetts, while somewhat the nature of Blood Cling, is nevertheless a different sort. (*Hedrick, 1917*)

“Indian Blood” (Blood Cling): skin dull greenish -white, entirely overspread with dingy pink mingled with splashes and stripes of darker, clouded red, mottled; fuzzy, coarse, tough skin. Flesh red, becoming lighter colored next the stone, juicy, coarse, stringy, tough and meaty, brisk, pleasantly flavored; fair quality; stone clinging (*Hedrick, 1917*)

“Pesca Carota”: the carrot peach. See cover of this issue. (*Gallesio 1817 - 1839*)

“Sanguine de Manosque”, a mildly red-fleshed peach. A blood-red color near the skin, fading and streaking toward the pit, free-stone with firm flesh. Good for fresh eating or preserving. (*LeRoy, 1867*)

“Sanguinole Pitmaston”: Leaves with reniform glands; flowers large; fruit small, dark red; flesh melting; ripens at the end of September. (*Hedrick, 1917*)

“Pêche sanguinole” (pêche betterave , pêche cardinale, pêche druselle). Flesh is a red-violet or “lees-of -wine” color; firm and not very juicy. Freestone. Late season, October. Flavor is a bit tart and bitter, not pleasant, but is preferred for compotes, and also for peach wine. This variety is generally grown in the vineyards, and in certain locales, is found growing wild. (*Simon Louis, 1895*)

“Pêche de Vigne”. (Sanguine de Jouy) This is an old seedling found in a vineyard at Jouy-aux-Orches near Metz, France. Fruit medium in size, ovoid, flesh marbled with red, melting, sugary; quality good; **stone free**, small; ripens from the middle to the end of September. (*Hedrick, 1917*)



Sanguine de Manosque
Photo: Dave Benson



Indian Free
photo: Steve Frazer



“Indian Blood”
photo: wordofmouthmendo.com

nudo”.

Peaches can still be found wild in rare places even centuries after their immigration to America. Wild peaches resembling the “Indian Blood” and “Fleenor” varieties are naturalized all over the hills of southern Indiana. The hill country of South Carolina and Georgia is another place where naturalized “Indian Blood” type peaches can be seen, alongside others resembling the old New Jersey heirloom variety “Stump the World.” In Mississippi, near Natchez, there is an infamous stretch along the river that is thickly grown with volunteer blood peaches, the fruit untouched by human hands. An interesting short documentary film, “Blood Peaches”, describes the local cultural taboo of this burial site of as many as 20,000 native American who were brutally slaughtered by the American military.

Several nurseries carry blood peaches. “Indian Blood Cling” can be found at Dave Wilson Nursery, Trees of Antiquity, Rolling River Nursery, and Greenmantle Nursery. “Indian Free” can be purchased from Raintree Nursery, One Green World, Burnt Ridge Nursery, and Dave Wilson Nursery.

As new cultivars of red-fleshed apples are being created through the world, so too are red-fleshed peaches and nectarines a target of commercial development.

The “Black Boy” peach is one of the few 20th century blood peach cultivars. McGrath Nursery imported six different peche de vigne red-fleshed peaches and cross-pollinated them. The results are a number of dark fleshed peaches with the tough skin and firm flesh qualities that make “Black Boy” a good preserving peach. In our locale, “Black Boy” can be obtained from Raintree Nurseries.

Recently in France, breeder René Monteux-Caillet and a couple of local producers were able to see the extraordinary potential of a red-fleshed nectarine and adapted it to the needs of today’s market, retaining special qualities. Combining the benefits of a modern product, the nectarine, with the typical, rustic and traditional vineyard peach (peche de vigne), they created an unique piece of fruit: the nectavigne, a red flesh colored nectarine. It offers the same characteristics as its forebearer, except for its downy skin. It has retained the wine-red color on the skin, the traditional red flesh and the subtle aroma and scent, sweet yet fresh. The skin has an unmistakable speckled skin, an indicator of its high sugar content. We hope to see this incredible fruit grow in the US in the future.

Sources and Resources:

“Peaches were America’s First Invasive Species”. Max Paschall. Sept 5, 2018. [www. Shelterwoodfor-estfarm.com](http://www.Shelterwoodfor-estfarm.com)

Rare & Heritage Fruit Cultivars: Red-Fleshed Peaches. Leaves of Gold Press. (2020)

Dictionnaire de Pomology. Vol. 5. Fruit auz Naoyeaux. Leroy, Andre. (1867)

Amateur des Fruits. Simon Louis Frères. Chez Berger-Levrault et C., Paris (1895)

Peaches of New York. U.P. Hedrick. J.B. Lyon Company. Albany, NY (1917)

Pomona Italiana. Giorgio Galesio. (1817-1839)

“Molecular genetics of blood-fleshed peach reveals activation of anthocyanin biosynthesis by NAC transcription factors” Zhou, Hui Lin-Wang, Kui Wang, Huiliang Gu, Chao et al. The Plant Journal. Wiley Online Library (2015)

A View of Cultivation. William Cox. M. Carey & Sons, Philadelphia. (1817)

“Evolutionary Genomics of Peach and Almond Domestication”. Velasca, Dianne & Hough, Josh & Aradhya, Malli and Ross-Ibarra, Jeffrey. G3. Bethesda, Maryland. (2016)





A Damson, A Bullace and A Gage walked into a bar....

by Laure Jansen

For many people, “fruit” means “sweet”. But there are many kinds of fruit that have flavors with much more complexity: a touch of bitter, a balance of sharp, and flood of aroma. The 21st century seems like a good time for us to expand our palates and try some new kinds of fruits, and maybe even some other exotic foods.

I have recently become interested in damson plums. Now the season for asian plums has arrived. Although many people rave about the Shiro plum, I find it only sweet and insipid. The Italian prunes that ripen in September are flavorful, a good balance of sweet with tart, if picked when approaching ripeness. But these types of asian and european plums just don't appeal much to me. Sometimes I tell people I don't really like plums. But then I find an obscure type that I do really enjoy. A Mirabelle of perfect ripeness is an explosion of intense flavor. Wild plums have that delicious tangy flavor with just an edge of bitterness. That is the direction I am heading in my search for an interesting fruit. And the damson plum is right in that target zone. Sadly, damsons are pretty difficult to find in western Washington. Hopefully people will become more familiar with the damson cultivars that are available at local nurseries like Raintree and One Green World.

The damson (*Prunus domestica insititia*) was first cultivated in the area around the ancient city of Damascus, capital of modern-day Syria, thus its name. The Romans took the damson to Europe and on to England; where it proliferated in the mild weather. The Roman cook Apicius provided a recipe for a damson, lovage, cumin, celery seed and vinegar broth to accompany roast duck that sounds delicious.

Evidence of damson is found in many British archaeology site. The Anglo-Saxons used the damson skins for dying wool. In later centuries, Market Drayton in Shropshire was famous for its annual Damson Fair, where Lancashire mill owners would buy the fruit to make dye for their cotton and woolen cloth. The color varied according to the mordant (fixing agent) used. For example, ammonia turned the cloth green and army uniforms in WWI were dyed khaki with damsons. An acid modifier was used with damson skins to make blue-grey dye for RAF uniforms in WWII and for the hat trade.

The English damson has also long been prized as the quintessential culinary plum, and was widely grown in medieval monastery gardens. Damsons were most commonly grown in northwestern England, but the scarcity of sugar during and after World War II for making preserves resulted in a significant decline in the cultivation of damson in England.

There are several other types of prunus fruits that are similar to damsons. Sloes generally found in the wild, have a very distinct green flesh with their blue-bloomed dark purple skin, as do damsons but sloes fruits are about half the size of the damson. Sloe foliage has wicked thorns, whereas the damson is almost thorn-free, making it a friendly garden tree. The subspecies of prunus domestica frequently interbreed in the wild, so if you find a slightly thorny oversized “sloe” bush, then it may be a bullace. These hybrids fall between damsons and sloes and are thought to be another man-made cultivar. Research through old plant catalogues suggests there were types available in different areas but all broadly identifiable as bullaces. Damsons are to this day available in many varieties from commercial nurseries. But ‘wild’ damsons, bullaces and feral plums are can be found growing along stream banks and other suitable habitats.

Damson trees were brought to California by the early 1850s and used for home orchards. Damsons work well in smaller gardens as the trees are much smaller than other plum trees, from 12 to 15 feet. They are self-fertile and require only moderate pruning for maintenance. The damson trees and fruits have few pests and diseases. They do well in warmer climates like Syria and California, but also grow fairly happily in milder, wetter climates like England and the Pacific Northwest.

Damsons are clingstone, with soft, yellow flesh and a rich indigo blue, red, or purple skin. The fruits are generally oval-shaped and slightly pointy at one end. There are several cultivars of damson, each of which has a slightly different color and taste. It's hard to pinpoint one particular flavor of damson because they vary so much. The flavor can be either sweet or tart, depending on the cultivar, but all have at least a slight edge of bitterness, a unique flavor which differentiates them from all the other European plums.

The canton of Jura in Switzerland is famous for its damsons. As with most things Swiss, the harvest of damsons is highly regulated. During the harvest season of late July to early August, the damson must never be picked, as picking the fruit affects its flavor when making damassine. This is why local farmers have to wait until the ripe damsons fall into nets, suspended like swings, from the branches of the trees, before they can gather them. Damsons gathered during the first collection of the morning tend to be used more often in the production of damassine., the local eau-de-vie. Farmers harvest ripe damsons almost as soon as the aroma of the falling fruit fills the hot air in the last weeks of July. The harvest period invariably ends in August, when autumnal mists descend on the hills of the La Baroche region of Jura. The trees whose plums give the best eau-de-vie are like vines: the older plants product the best wine.

Damsons are also distilled into slivovitz, each region of eastern Europe having its specific local damson, and its own recipes, sometimes including herbs and spices. The famous damson brandy of Trojan, Bulgaria has been distilled in the Trojan monastery since its founding in the 14th century and is made from local damson and their pits. Poland, Slovakia, the Czech republic, Moravia and Serbia all produce damson brandies that are a part of their cultural traditions.

The damson is most commonly used to make a specialty preserve, but can be preserved in many other ways. Damson cheese is similar to quince paste, and is typically eaten as an accompaniment to cheeses. It can be molded into intricate, decorative shapes, and can be aged for at least five years, like a fine wine, retaining its fruit character while developing a darker, mysterious flavor.

If you are now convinced that a damson tree is required in your own orchard, certain cultivars can be purchased from Raintree Nursery, One Green World, Dave Wilson Nursery, Stark Brother Nursery, among others.

Sources:

"The Fruit Manual". Hogg, Robert. Cottage Garden Office, London (1860)

Bug Woman, Adventures in London: Wednesday Weed-damsons.
www.bugwomanlondon.com

"Guide to Damsons". Daiv Sizer. Self published. Oct 2013

DAMSON CULTIVARS

The **"Shropshire damson"** (Prune Damson, Long Damson, Damascene, Westmoreland Damson, Cheshire Damson) is a very old cultivar, with oval, blue-purple fruit, known for its full, rich, astringent flavor. Particularly suitable for canning.

"Aylesbury Prune" (Bucks Prune, Michaelmas Prune) is a somewhat feral damson from the area of Buckinghamshire and Berkshire. Relatively large-fruited, but poor for canning.

"Frogmore Damson" is a cultivar developed in the 19th century at the Royal Gardens at Frogmore, raised by the head gardener Thomas Ingram. The fruit is sweet, roundish, purplish-black and ripens in early September.

"King of the Damsons" (Bradley's King) is a late-season cultivar from Nottinghamshire. The tree is very vigorous and spreading. The fruit is medium to large, oval and purple with somewhat dryish flesh.

"Merryweather damson" is also from Nottingham. It was developed by Henry Merryweather in 1907, and although the parentage is not known, it may also have some domestic European plum ancestry. The fruit is large, deep blue, and noticeably sweet when ripe, although it does have the typical damson astringency.

"Early Rivers" was raised by Rivers' Nursery from a seed of St. Etienne, released in 1871. This is one of the earliest damsons, ripening in mid-August. The fruit is small, roundish, red-purple with a chalky bloom. It is very juicy but does not have a true damson flavor.

"Farleigh" (Crittendon's Prolific, Strood Cluster) is a compact tree, with small, round, black fruit with a blue bloom, ripe in mid-September. A very heavy bearer. It is named for the village of East Farleigh in Kent, England, where it was raised by James Crittendon about 1871. Best known as a cooking plum.

"Blue Damson" (as offered by Willis Orchards) Round to oblong, smooth, shiny deep purple to black skin. Firm amber flesh; spicy, tart flavor.

KIWIFRUIT PROPAGATION

By Kiwibob Glanzman

Author's Note: Throughout this article, the terms Kiwi or Kiwis are used to describe any of the 54 currently recognized species in the Genus Actinidia.¹

There are three main methods of propagating Kiwis available to the Home Gardener. They are propagation by seed, by grafting, and by rooting cuttings. As with most things in life and certainly in gardening, timing is everything. In plant propagation, it is also mandatory to know the specific needs of the plants you are working with which vary widely from genus to genus, species to species, and even cultivar to cultivar within a given species!

Growing From Seed

Kiwis can be grown from seed which can be useful **mainly to establish a species which isn't currently** available in the USA², and to create rootstock for future use as a graft host. Those of you who have tried **growing Kiwis from seed and failed likely didn't know** that Kiwi seeds need stratification (a period of chilling between 32°F and 45°F for about 30-90 days) in order to germinate! Stratification is best done by extracting seeds from the fruit (actually all Kiwis are berries), washing the pulp from the seeds, allowing them to dry, and putting them in a closed container in the refrigerator for the required time. The alternative is to sow the seeds in seed flats or pots in late Autumn or early winter and keep those pots outdoors letting Mother Nature do the stratification for you. They need **to germinate in the spring so if you're late in sowing** the seeds, the seedlings will be too weak to withstand the first Winter, or may not germinate until the following year!

Unlike annual vegetable seeds and some fruiting plants, **Kiwi seeds do not grow "true to the parent variety"!** The Actinidia Genus is dioecious (separate male and female plants) so you can expect roughly a 50/50 split between male and female seedlings but even that can vary widely. My experience growing Kiwis from seed indicates that about 95% of seedlings will be inferior to their parents in either fruiting or blossoming characteristics, so growing seedling Kiwis is probably not a good idea for the home gardener.

It often takes 8-20 years from germination to first bloom when you finally find out what sex the seedling is! The time to first bloom can be shortened by a number of years if you graft scions of a seedling to an es-

tablished host Actinidia plant the first year that suitable scions can be taken.

Grafting Kiwis

Although Kiwis can be grafted in many ways; onto same sex or opposite sex host plants, onto same species or different Actinidia species, hardwood to hardwood or softwood, and softwood to softwood or hardwood, timing is everything! Since Kiwi sap starts flowing anywhere from mid-January to mid-February depending on species and continues flowing until about mid-May, hardwood cuttings must be taken in dormancy or the plant will drip like a leaky faucet, often for several days or weeks before it seals over, sometimes developing an orange mold at the cut and down the branch.

Store the dormant scions in a refrigerator in a sealed plastic bag, within another sealed plastic bag that contains a moistened paper towel so the



Initial budbreak of a softwood scion grafted to previous season's growth.
Photo: kiwibob Glanzman

scions don't dehydrate nor get too moist causing mold to develop.

When sap flow has ceased around mid-May, graft onto hardwood or softwood using your favorite technique for the best cambium to cambium match you can get. It does help to wrap the entire scion and onto the host just below the graft union with parafilm or "Buddy Tape" so that the scion doesn't

lose moisture necessary for the graft to heal. Done this way, your scion should begin sending out buds about ten days after grafting. It is possible to graft dormant scions onto softwood (the current season's growth) **before sap flow ceases as softwood doesn't bleed, but it may take longer for the graft to heal in the cooler early spring weather.**

Grafting dormant scions during dormancy works too!

If you want to do softwood scions, take them after sap flow has ceased, carefully cut the leaf petioles off as close to the scion as possible, and graft them the same day you cut the scionwood, making sure to wrap the scion and graft union as above to avoid drying out. Healing time for softwood grafts is about ten days provided you do it by mid-June. Grafting later with the possible exception of chip budding will reduce your chance of success.

Cutting Propagation

Again, timing is everything! Success of Kiwi cutting propagation is highly dependent on your methodology and the tools you have available. It's also mandatory to know the needs and quirks of Kiwis in order to succeed. You may be familiar with how some woody plants root at the leaf nodes while others are capable of sending out roots at many locations through the bark. As a general rule, Kiwis **don't do either!!! Kiwi roots emerge from a callus** that forms at the basal end of the cutting.

My earliest Kiwi cutting propagation was a "passive" rooting method using hardwood cuttings, cut as long whips before sap flow started, and kept dormant in the shade of the North side of my house until around late March to mid-April. I would then cut the whips into about 3-bud cuttings, dip them in a powdered rooting hormone, then stick several of the cuttings into a pot filled with sand. Those pots went back into the shade of my house and got occasional watering as needed. By July those cuttings that took root would be leafing out and starting to grow slowly, but **success wasn't high enough for commercial production.** Besides, it was a nightmare pulling them apart when it came time to grow them in individual pots!

Still using a "passive" rooting method, softwood Kiwi cuttings root much faster than hardwood so I began taking cuttings of the various species about a week after blossoming was finished for that species. My preferred cuttings were from the middle of the new growth whips, not the soft tips and not the hard base but a happy compromise in the middle. I would cut them into 2-5 bud cuttings, remove all but the top leaf or two, and in the case of the fuzzy Kiwifruit (*Actinidia chinensis* var. *deliciosa*) I cut half of the top leaf off to reduce moisture loss through the leaves. The cuttings went into sealable plastic bags with a few drops of water to prevent dehydration and were kept in the refrigerator for three days before dipping in powdered rooting hormone and sticking in a perlite/sand mix in individual pots and kept in the shade as above. Softwood cuttings done this way often will



Basal end callus is needed for root formation to start. Photo courtesy of Christian DeKezel



Softwood *A. deliciosa* (ready for rooting, and one flat of previously rooted hardy kiwis)
Photo: kiwibob Glanzman



Kiwi seedlings
Photo: kiwibob Glanzman

send out new buds within two weeks of potting and will be farther along in the rooting process by the end of July than hardwood cuttings with the added bonus of an increased success ratio.

There are many variations of "active" rooting methodology that can improve cutting propagation success but they require using technology.

Bottom heat applied to the cuttings at about 75°F with ambient air temperature around 70°F greatly increases success if you can control the temperatures. **Don't use electric resistant heat mats unless** they are buried in about two inches of sand to dissipate the heat as they tend to overheat in spots and cook some of the cuttings if in direct contact with the rooting pots.

Circulating water heat works much better as a bottom heat source than electric resistance heat but requires a higher level of technology. One long time Kiwi growing friend of mine in Winlock Washington made his water heat system using a crock pot on the lowest heat setting as his heat source and an aquarium pump to push the heated water in a closed loop through surgical tubing under his growing trays, then back into the crock pot. For the home gardener that could be an option but it requires constant monitoring to make sure it's functioning properly.

Other Propagation Methods

Air-layering works well with many woody plants. Not so well with Kiwis! That callus that the roots emerge from rarely forms properly if at all in an attempted air-layer.

Tissue Culture is another possibility but most Home Gardeners lack the tools and facilities that are required.

The bottom line is much like going fishing. You can assemble the gear required or rent it, take the time to go fishing, enjoy your time out in Nature, and maybe you will catch some fish or maybe return home empty handed. Although it isn't nearly as much fun, you can go to the fish market, buy the fish, spend far less time and money in the process. You can even go out and do something else that you enjoy with the time you saved.

Kiwis are like that so unless you are trying to obtain a species or cultivar that isn't available from any Nursery, you'll have better success at less cost if you just buy the plants at a Nursery!

Whatever method you choose,

Happy Growing! "Kiwibob"

Website: <https://kiwifruitsalsa.wordpress.com>



Rooting dormant cuttings
Photo: growingfruit.org

References:

(1) "The Genus ACTINIDIA, A World Monograph". HUANG Hongwen. Wuhan Botanical Garden, Chinese Academy of Sciences. Wuhan, China, 430074

(2) **USDA; FOR INFORMATION AND ACTION, DA-2010-11, November 10, 2010**

SUBJECT: Federal Order for *Pseudomonas syringae* pv. *actinidiae*, bacterial canker of kiwifruit.

TO: STATE AND TERRITORY AGRICULTURAL REGULATORY OFFICIALS

"This Federal Order is being issued to prevent the introduction and dissemination of a bacterial canker of kiwifruit (*Pseudomonas syringae* pv. *actinidiae*) into the United States. The Animal and Plant Health Inspection Service (APHIS) will prohibit importations of *Actinidia* spp. Plants for planting (including pollen but excluding fruit and seed) hosts of *P. syringae* pv. *Actinidiae* (bacterial canker of kiwifruit) from all countries. This Federal Order is effective November 10, 2010."

from the Fruitful Kitchen:

Peach-Thyme Iced Tea

Ingredients

½ cup plus 2 tablespoons honey
1 tablespoon chopped fresh thyme
2 cups room temperature water
6 cups boiling water
6 cups peach slices, fresh or frozen
10 regular size black tea bags
2 tablespoons fresh lemon juice
9 ounces of bourbon, optional

Instructions

Place honey, thyme, room temperature water and 4 cups of the peaches in a saucepan. Cover and bring to a simmer; stir and reduce to low heat. Cover and simmer, stirring occasionally, for 30 minutes. Let cool completely. Strain mixture into a bowl, pressing solids to extract juices.

Place tea and remaining 2 cups peaches in 3-quart heatproof pitcher. Add boiling water and let steep 15 minutes. Discard tea bags. Stir in lemon juice, peach syrup and bourbon.

Serve over ice, garnished with thyme sprigs and lemon slices.

Roasted Chicken Thighs with Peaches, Basil and Ginger

Ingredients

½ pound hard peaches (about 1 large or 2 to 3 small ones, can be any stage of ripeness, but firm is easier to pit and slice)
1 pound boneless, skinless chicken thighs, cut into 1-inch strips
2 tablespoons extra-virgin olive oil
2 tablespoons dry sherry, white wine or dry vermouth
2 tablespoons chopped fresh basil
2 garlic cloves, minced
1 (1-inch) piece fresh ginger root, grated
½ teaspoon kosher salt
½ teaspoon black pepper
½ teaspoon Aleppo pepper, optional
Crusty bread or rice, for serving

Instructions

Heat oven to 425 degrees. Halve peaches, remove pits and slice fruit 1/2 inch thick.

In a 9-by-13-inch pan, toss all ingredients except 1 tablespoon basil. Roast until meat is cooked through and peaches are softened, about 20 minutes. Garnish with remaining basil. Sauce will be thin, so serve with crusty bread for sopping or over rice.

STFS: Who Are We and What We Do

Western Cascade Fruit Society, our parent organization, is a 501(c)(3) nonprofit organization. The WCFS was founded in 1980 and is made up of chapters throughout Western Washington whose members are aspiring hobby orchardists and backyard fruit growers. Our primary objective is to bring together new and experienced fruit growers who will promote the science, cultivation and pleasure of growing fruit bearing trees, vines and plants in the home landscape. Local chapters disseminate information through education, fruit shows, orchard tours, meetings, workshops, and publications.

WCFS is the parent organization to nine affiliated chapters. WCFS publishes a quarterly BeeLine newsletter to inform members of events, tours, articles, and reports. Members receive automatic membership in WCFS after joining an affiliated Chapter. WCFS provides other member services, including a member forum, a chapter-wide event calendar, and a home for chapter sites. These can be found at www.wcfs.org.

Seattle Tree Fruit Society (STFS) is a chapter of WCFS, one of nine chapters in Western Washington. STFS brings together amateur growers – beginners to experts – from the Greater Seattle area who share an interest in growing fruit and nut trees, berries, kiwis, grapes, and other fruit. We offer information on adapted varieties, up-to-the-minute growing techniques, and share our own experiences growing fruit.

We meet each month from September to May, usually on a Saturday morning. Programs explore topics tailored to Western Washington growers, such as grafting, pruning, pest control, recommended varieties, nurseries, suppliers, home wine and cider making, and more.

STFS members receive both The Urban Scion Post, our monthly newsletter, and The BeeLine, an on-line quarterly from Western Cascade Fruit Society. Both feature a wide variety of useful articles about fruit, and announce upcoming events. Find us on [Facebook](#) and on our website www.seattletreefruitsociety.com.

The function of our STFS **membership** is to **be** the Seattle Tree Fruit Society. This is your organization. Please let us know what is most important to you. STFS can always do more! If there is a way that any of our members feel that STFS can be better, let us know. How can the board of directors be of further help to you as members? Please let board members know. And, some extent, the question is what can you, as a part of our organization, do to make STFS better, be it for your community, your local chapter, or for WCFS, our parent organization. Get involved. Remember, STFS is **you**.

SEATTLE TREE FRUIT SOCIETY

Email: seattletreefruitsociety@gmail.com

STFS OFFICERS:

PRESIDENT: Mike Ewanciw (2021)
(206) 683-9665 seattletreefruitsociety@gmail.com

VICE-PRES. Tracey Bernal (2021)
(206) 913-3778

SECRETARY Sue Williams (2021)

TREASURER Trent Elwing (2021)
(206) 517-3118

MEMBERSHIP: Trent Elwing (206) 517-3118
HOSPITALITY: Judy Scheinuk (206) 363-5038
TECHNOLOGY: Mark Lee (206) 434-1693

STFS DIRECTORS:

#1 - Rick Shultz (2020) (206) 327-4730
#2 - Laure Jansen (2019) (206) 743-2348
#3 - Linda Sartnurak (2021) (425) 271-6264
#4 - Vacant
#5 - Gudrun Utz (2021) (206) 491-2133
#6 - Trent Elwing (2021) (206) 517-3118
#7 - Vacant (2019)

USP EDITORS:

Laure Jansen seattleorchardist@gmail.com
Tracey Bernal tmjbernal0216@gmail.com

STANDING COMMITTEES & CHAIRS

Orchard Committee - please volunteer
Events Committee - please volunteer
Programs Committee - please volunteer