Harvest Report 2003 - Tree Fruit

Cherry

Fruit set was much better than in 2002 in most varieties, though not as heavy as in peak record years. Most cherry varieties produced significant quantities of fruit for harvest. Due to the unusually dry and warm conditions the crop overall was excellent. Lapins and Sweetheart were both very productive on Gisela 5 and Gisela 6 respectively. Recent introductions Hartland, Black Gold and White Gold were moderately productive as well. Rainier is considered a prime quality white fleshed variety, and has been productive on Gisela 5 rootstock in most years when compared with standard rootstocks which often see a lot of fruit drop.

Sour cherries generally bloom and fruit later than sweet cherries. They are softer and more resistant to cracking and to diseases like bacterial canker. Surefire, a newly introduced pie cherry, again produced a good crop. It has dark red juice (unlike Montmorency which has clear juice), which is very attractive when used for jam and pie. Several new introductions also produced fruit and preliminary evaluations were recorded. Glacier produced its first fruit for evaluation in 2003. Recently introduced from WSU, it is a dark, sweet cherry somewhat softer in texture than Bing. Tehranivee and Vandalay are new introductions from Canada that may be promising in the late season, with Lapins and Sweetheart.

New: Varieties that are not yet fruiting include Almaden Duke, Balaton, Coe’s Transparent, Governor Wood, and Sonata.

Discard

- Early Burlat – fully evaluated, productive very early variety
- Hudson/Giesela 6 – too large, replace with trees on Giesela 5
- Sweet Anne – fully evaluated, removed from old block, same type as Rainier but inferior flavor.
- NY 9295 – late ripening, lacks sweetness

Apricot

The 2003 season again saw a poor crop for most apricots at Mount Vernon. No apricot variety we have tested has shown any commercial potential because of lack of productivity. Puget Gold did produce a fair crop this year on some trees. We continue to look for new apricot varieties that might have better potential.

Discard

- NY 604 – unproductive
- Deatrick – unproductive
- Sunglo – unproductive

Peach

In 2003 fruit set was slow in all varieties. Even the usually productive varieties yielded poorly in most cases. Again, we are looking for consistent productivity as well as quality, and are removing varieties and selections that have not measured up. New selections from various breeding programs were planted into a new stone fruit block south of the blueberries in spring 2002. Some of this material includes so-called “crisp flesh” peaches, and other new selections with fruit characteristics that may be very interesting. We look forward to seeing sample fruit from this plot in 2004.

Mature trees of Harbelle, Harken, and Redhaven provided a limited amount of fruit for harvest days. Starfire, about two weeks after Redhaven, was much less productive than usual. Harrow Fair also had some fruit on young, small trees. Harrow Beauty set some fruit on young trees. Of the Harrow peach selections currently on trial, HW 272 is usually productive, though set this year was poor, and the yellow fleshed fruit is high quality.

Nectarine

Bloom conditions for the nectarines were the same as for the peaches, and fruit set in most varieties was very poor. The exception was Hardired, a yellow fleshed nectarine ripe about 10-15 days after Redhaven, which set a good crop of fruit on all 5 trees. At present it is the only nectarine variety on trial here that is a reliable producer from year to year.

Plum

While 2003 was not the best year for plum production, most varieties yielded good crops and the quality was excellent. Later ripening varieties did particularly well. Early Laxton and Hollywood had smaller crops than usual. Oblinaja, from eastern Europe, produced a good yield flavorful fruit, small to medium in size. Imperial Epineuse, Victory and Seneca are all proving to be reliable productive varieties with high quality fruit. Queen Victoria, a classic English variety ripe in mid season, was somewhat overcropped in 2002 and showed it this year with smaller yields, but quality was still very good, and it is a consistent producer. Purple Gage, one of the newer varieties, set a good crop of fruit, purple-blue in color with greenish yellow flesh, rather small but very sweet and juicy.

Trees fruiting for the first time in 2003 included Silver Prune, ripe in mid September, with rather small purple-pink oval fruit, free stone with very sweet flesh. Three Italian prune types from the Vineland, Ontario breeding program looked interesting this year. Vanetta (ripen in mid-August), Veeblue (late August) and Vision (late September) each produced attractive oval fruit, dark purple-blue with dense sweet flesh. All will be further evaluated in 2004.
Discard
- **Allo** – fully evaluated, bland and mushy
- **Kita** – cling stone, drops easily

**Pear**

In 2003 all of the treebred pear trees were very productive. Early ripening varieties such as **Clapp’s Favorite** (including the Bennett strain and Red Clapp’s), **Rescue** and **Bartlett** are best used within 2-4 weeks of harvest. Most of these varieties are good for canning as well. **Rescue** will keep a bit longer to about 6-8 weeks. The **Bosc** pear trial was concluded in 2002 but some specimen trees were kept for harvest this year. Yields for **Starkrimson**, **Bosc**, **Concorde** and **Conference** were very good. Trees of **Comice** were very productive, and some of the fruit was used for making a sample of perry (similar to hard apple cider, made from pear juice.)

Young trees of the russet sport **Taylor’s Gold Comice** yielded heavy crops of very attractive, uniform fruit. This variety appears to have excellent potential for commercial production in cool maritime climates like ours. In the late season, **Abbe Fetel** and **Packham’s Triumph** both had a heavy set of good sized fruit.

Discard
- **Bella de Guigno** – fully evaluated, very early, sweet, productive
- **Highland** – fully evaluated, excellent fall storage pear, productive, flavorful
- **Starkrimson (Red Clapp’s Favorite)** (Kalle strain) – fully evaluated, attractive red skinned early pear, productive, uniform, mild sweet flavor
- **Ubileen** – fully evaluated, early pear, large, attractive, will ripen on tree
- **Sirrine** – fully evaluated, excellent flavor but sprawling tree habit difficult to train
- **Bosc, Golden Russet** – fully evaluated, similar to standard Bosc
- **Bosc, Wenvatch Gold** – fully evaluated, similar to standard Bosc
- **Bosc, Bronze Beauty** – fully evaluated, similar to standard Bosc, heavy dark russet
- **Forelle** – fully evaluated, productive, small, firm, colorful, late ripening

**Asian Pear (Nashi)**

Since we are in the process of relocating the former Asian pear block, some varieties did not have fruit for evaluation this year. Mature trees of most varieties set well in 2003 and some were thinned to improve fruit size. Young trees of **Hamese #1** (yellow skin) ripened earlier than usual in August. **Mishirasu** produced some very large fruit. Although the fruit is heavily russeted and unattractive, the excellent flavor and firm crisp texture make it a good choice for home gardens. **Olympic**, (also known as **Arirang** or **Korean Giant**) and **Shin Li** are sometimes too late ripening in our area but did well in the long hot season of 2003. Their overall suitability, however, is questionable.

Discard
- **Shin Li** - too late, unproductive

**Unusual Fruit**

In 1997 a planting of unusual fruit was established with additions in 2000-02. We are evaluating various kinds of tree and bush fruit to see if they are well adapted to western Washington conditions, and note any specific cultural needs that may apply to growing them in our area. Among the fruit kinds that have been planted are figs, kiwi varieties (both **Actinidia delicosa** and **A. arguta** clones), black, red and white currants, persimmons, paw paws, and seedless grape varieties. Some of the uncommon bush fruits include aronia, mulberry, elderberry, honeyberry, sea buckthorn, mountain ash, cornelian cherry, azerole, and sorbus.

In 2003 there was a very good crop on all the kiwis but particularly the hardy kiwi varieties. **Ananasnaja**, **Hardy Red** and **Ken’s Red** all produced significant crops of good quality. Hardy kiwi have very good potential for commercial production, including organic culture as they are effectively disease resistant. Two plants of **aronia** (**A. melanocarpa**) planted in 1998, have produced consistently heavy yields since 2001. Bushes must be netted to keep birds away, as the berries do not reach full ripeness (20-22 brix) until mid October. Fruit will continue to ripen on the bushes turning to “raisins.” Aronia has potential in our area for an alternative fruit crop in commercial production; its home garden use is mostly for juice and jelly.

Trees of quince **Aromataya** (planted 1999) and **Van Deman** (planted 2000) both produced fruit in 2003 but not as heavily as the previous year. Quinces are primarily used in cooking, as they are very hard and rather inedible direct from the tree. Varieties of mountain ash **Ivan’s Beauty**, **Ivan’s Belle** and **Nevezhinskaya** all produced a crop of fruit for evaluation in 2003. Here again culinary preparation is needed as the fruits direct from the tree are not appealing in texture (rather mealy) and quite astringent in flavor. The trees are very ornamental with attractive deep green leaves, white clustered flowers, and bright red or orange fruit. Varieties of Cornelian cherry (**Cornus mas**) **Red Star**, **Pioneer** and **Elegant** planted in 1998 produced well in 2003. The fruits are red, about 1” long and narrowly oval in shape with a single large seed. They can be eaten off the bush but are somewhat strongly flavored so might more commonly be used in cooking for jelly or jam. The flowers, opening very early in spring (February-March) are a showy bright yellow and cover the bushes before the leaves emerge, making this a spectacular ornamental shrub.

**Apple**

In 2003 the fruit set was very good and hand thinning where needed resulted in acceptable fruit size for most varieties. In determining optimum harvest for a specific variety, we relied extensively on indices of starch conversion, fruit firmness, and soluble solids (sugars) as well as external color. Yields of most varieties were good and fruit quality was high. Evaluation of various **strains of Jonagold and Gala** were completed in 2003. **King**, **Jomured** and **Rubinstar** strains of **Jonagold**, and **Regal** and **Ultrared** strains of **Gala** are being retained in our trial. **Crimson Jonagold** and **Pacific** and **Gale Gala** are still being evaluated.

Trees of **Honeycrisp** were very productive in 2003 and were sampled for both early and late harvest. Some of the early harvest fruit proved to be susceptible to scald, which is often a problem with this variety. Early ripening strains of **Fuji**, **Beni Shogun** and **September Wonder** (**Jubilee**) are looking very promising for our area. **Braeburn** and **Hillwell (red)** strain produced well with little russet. **Hillwell** is definitely preferable to standard **Braeburn**, and we are still evaluating the new strains **Juborn** and **Lochbuie**.

Among the varieties of Japanese origin that we have tested over the years, the ones best suited to our conditions have proven to be **Akane**, **Sansa** and **Tsugaru**
Homei in the early season. In the mid season Hatsuaki and the early strains of Fuji mentioned above, and in the late season Shizuka and Mutsu. Shizuka is very productive, flavorful, and more attractive than Mutsu, which ripens 7-10 days later in most years. Mutsu is of excellent quality but may not ripen fully in cooler areas.

Most of the Japanese introductions are sweet apples. Other good choices in this category include Zestar (Zestal), a Minnesota introduction ripe in the early season, and Sunrise and Silken from Summerland, B.C., are reliable producers of high quality fruit. Aroma from Sweden is less productive, and tends to ripen over a long period. Gala and its strains are noted for sweet flavor. One of the newer varieties in the late season is Ambrosia which in our conditions is usually a bicolor apple with most fruit appearing yellow striped with orange red.

Cider Apples

Trees in a replicated plot of cider apples -selected for hard (fermented) cider production- were harvested for cider production in 2003, again with the cooperation of Drew Zimmerman and the Northwest Cider Society. The varieties Brown Snout, Foxwhelp, Muscadet de Dieppe, Vilberie and Yarlington Mill were fully evaluated (planted 1999) all produced fruit for cider this year. Varietal ciders were made for evaluation as well as blends from cider and standard varieties. These ciders will be evaluated in 2004. For anyone who is interested in hard cider making, see the 2003 Cider Report . For general information on cider apple varieties and culture, click here.
Crabapple

In 2003 data was taken on trees in the established crabapple trial plot, including bloom dates in spring (April-May) and a rating in late fall (November) of scab, mildew, and general tree health. Overall ornamental quality at that time was rated also. Photographs were taken to document the appearance and qualities of promising varieties for use in publications. During the summer of 2003 an area was prepared for planting of the new ornamental tree fruit trial, which will include the existing ornamental crabapples and add stone fruit (ornamental cherry, plum, peach and other Prunus spp.) and ornamental pear cultivars and selections. These are being planted in 2003-04.

Best rated ornamental crabapples include 'Evereste,' 'Golden Raindrops' and 'Red Jewel' which show excellent overall ornamental quality and high disease resistance. Both 'Evereste' and 'Red Jewel' have abundant bright red fruit that persists well into the winter. Fruit of 'Golden Raindrops' is also persistent but yellow, small and less conspicuous. Other white-flowering crabapples with good appearance and disease resistance are 'Adirondack,' 'Christmas Holly,' 'Lancelot,' 'Silver Moon' and 'White Angel.' All of these will fit well to the backyard and urban landscape. 'Silver Moon' is large and vigorous, a fine candidate for public open spaces such as parks.

Three recent introductions show very dwarf tree habit, almost bonsai-sized. 'Guinevere' is a tree of horizontal spreading habit, with greenish bronze leaves and medium pink buds opening to pinkish white flowers. 'Lollipop' and 'Cinderella' have abundant white flowers and clean, small leaves of an attractive light green. The fruit is tiny and pearl-like; 'Cinderella' is yellow and 'Lollipop' is red. Any of these will fit well into a patio pot. 'Lancelot' (see above) is somewhat larger, with mature trees of a very compact upright habit reaching 6'-7' high and about 5' diameter. They would do well as specimen trees in small entry and courtyard areas.

In pink-flowering crabapple varieties, 'American Spirit,' 'Louisa,' 'Candymint Sargent,' 'Pink Princess,' 'Prairifire' and 'Prairie Maid' are proving to be well adapted. 'Prairifire' stands out for its intense deep pink color, though it is somewhat less resistant to scab. We are seeking a replacement that is equally ornamental with better scab resistance. 'Louisa' is an excellent specimen tree, with a strongly weeping habit and pale rose-pink flowers. The graceful limb structure is attractive even in winter when all the leaves are gone. Field resistance to scab and mildew is also very good.

A 2002 introduction originating in the Puget Sound, 'Marilee' is patented by Marvin Jarmin of Mount Vernon. It has pink and white semi-double flowers and a narrowly upright growth habit which would be suitable for street side ornamental planting, especially as it sets no fruit to drop and make a mess. A WSU cross of Alkmene X Prima with white single flowers is immune to scab and produces attractive yellow fruit that hangs on the tree well into winter if not harvested. The fruit is tart but edible, useful for jelly, pickled fruit, and hard cider blending. Pollination trials in 1998 showed that this seedling will pollinate both Jonagold and Fuji. 'Pink Cloud' seedling has highly ornamental pink double flowers, bronze leaves, and large, tart red fruit.

Discard

- Jewelberry - fully evaluated, small delicate trees, non-vigorous, good for limited area planting
- Winter Gem - fully evaluated, good disease resistance but not outstanding in ornamental quality
- Donald Wyman - fully evaluated, good disease resistance but not outstanding in ornamental quality
- Malus Tschonoskii - fully evaluated, ornamental only for its narrowly upright form, no showy flowers or fruit
- Malus Yunnanensis v. veitchii - fully evaluated, ornamental only for its narrowly upright form, no showy flowers or fruit
- Purple Prince - fully evaluated, purple leaf type but color gets dull fast in summer, scab susceptible

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