

Uncommon Fruits for Western Washington

Jacqueline King WSU-NWREC, Mount Vernon

http://extension.wsu.edu/maritimefruit/unusual-fruits/







Evaluation of Uncommon Fruit

- Begun in 1997 initiative from Western WA Fruit Research Foundation
- Select and test fruiting trees and shrubs not usually included in orchard trials
- Tested over 50 different varieties and species, trees, shrubs, and vines (*=tested at NWREC)
- Consistently productive and grower friendly
- Commercial potential: hardy kiwi, quince, haskap (blue honeysuckle), aronia, currants
- * Research and breeding trials continue in Oregon, B.C., Saskatchewan, and elsewhere

Hardy Kiwi Actinidia arguta

- Highly vigorous vines require strong support and annual pruning.
- Need male plant for pollination, 1 for every 8 female plants.
- Fruit are flavorful, high in sugar (up to 29%) and are eaten like grapes.
- Most varieties will grow and produce fruit in the Puget Sound region
- Very productive, up 50 to 150 lbs. per vine
- Potential for farm markets

Kiwi flowers



Female [L] and male [R] flowers on separate plants

Hardy kiwi



Fruit are grape-sized with smooth skin, eat them like grapes without peeling

- Ananasnaja (Anna)*
- Issai (self fertile)*
- Ken's Red*
- Jumbo*
- Hardy Red*
- Geneva
- Meader
- Dumbarton Oaks
- Arctic Beauty (A. kolomikta) more cold-hardy than A. arguta or A. deliciosa

Fuzzy Kiwi Actinidia deliciosa

- Highly vigorous vines require strong support and annual pruning.
- More sensitive to cold temperature than A. arguta, later ripening
- Need male plant for pollination, 1 for every 8 female plants.
- Fruit are flavorful, but fuzzy skin must be peeled.
- Not as well suited to home gardens.
- Very productive, up 50 to 150 lbs. per vine

Fuzzy kiwi





Aronia melanocarpa

- Ornamental edible shrub native to N. America, introduced to eastern Europe.
- Cultivars developed with better flavor, fruit size, and productivity.
- Plants 4-6 ft. high, deciduous, showy white flower clusters in spring.
- Purple-black fruit high in sugar, astringent, used for juice and culinary.
- Highly productive, few pests, very well adapted to home gardens.
- Choose plants that have been selected for fruit production, NOT ornamentals.







- Viking*
- Nero*
- 🔖 Rubina
- Raintree Select
- Iroqois Beauty
- McKenzie developed as a windbreak, may be up to 10 feet tall
- Autumn Magic is a commonly available ORNAMENTAL, not the best for fruit production.

Pawpaw

Asimina triloba

- Small deciduous tree native to N. America.
- Fruit has sweet custard-like flesh similar to banana or mango.
- Poor pollination and resulting low production is a major problem.
- Flowers are not self-pollinating; fetid odor attracts flies and beetles, not bees.
- In home gardens, hand pollination is recommended.
- Choose earlier-ripening cultivars suited to our cool maritime climate.
- Kentucky State University is the site of Asimina species research and gene bank.



- Pennsylvania Golden* early
- NC 1 from Canada, early
- Overleese* selected 1950, early
- Davis* selected 1961 from Michigan
- Allegheny earliest ripening of the Kentucky selections
- Maria's Joy bred in Indiana
- Shenandoah patented, from Kentucky, mid season

Cornelian Cherry Cornus mas

- Large deciduous shrub of the dogwood family native to Europe & western Asia.
- Used as a fruit crop for over 7,000 years.
- Flowers bright yellow in dense showy clusters very early in spring.
- Fruits are fleshy, one-seeded berries, edible but astringent, good for jelly, syrup, preserves.
- Flesh adheres to the seed so most recipes start with boiling fruit then separating seeds.
- Choose plants that have been selected for fruit production.



- Red Star*
- Elegant*
- Pioneer*
- Kazenlak
- Raintree Select
- Redstone
- Portland Self-Fertile
- Variegated green and white variegated leaves, outstanding ornamental edible

Quince Cydonia oblonga

- Small deciduous tree native to western Asia with fragrant yellow fruit similar to apple in size and shape.
- Extensive history in Mediterranean cuisine for both sweet and savory dishes.
- Used in Colonial America as a source of pectin and for jam, juice, and pie.
- Fruits are very hard even when ripe and not for fresh eating.
- Trees are well adapted to our climate, are productive, and have large showy white flowers in spring.



- Aromatnaya*
- Van Deman*
- Pineapple
- Portugal
- Smyrna 💝

Japanese flowering quince (*Chaenomeles* spp.) are related to true quince but usually grown for ornamental early spring flowers. Fruit is much smaller than true quince but just as hard.

Oriental Persimmon Diospyros kaki American Persimmon Diospyros virginiana

- Biggest challenge in the Puget Sound region is getting the fruit to ripen – choose early cultivars.
- Oriental persimmon is native to China; American persimmon is native to eastern and Midwestern U.S.
- Small deciduous tree with drooping leaves and branches, susceptible to wind damage.
- Very sensitive to microclimate and do best in warm, sheltered sites.
- Trees grown in cooler areas should have full sun.
- Some cultivars have astringent fruit that can be ripened off the tree; non-astringent fruit are ready to harvest when fully colored.



- Nishimura Wasi*[Coffee Cake] (Oriental)
- Jiro* (Oriental)
- Chocolate (Oriental)
- Saijo* (Oriental)
- Meader* (American)
- John Rick* (American)
- Early Golden* (American)
- Prairie Star (American) self fertile
- Yates (American)

Fig Ficus carica

- Deciduous small tree native to the Mediterranean region and western Asia.
- One of the earliest domesticated plants (11,000 years ago).
- Figs produce fruit on one-year wood (early breba crop), main crop on current growth seldom ripens in our climate.
- Select varieties for early ripening:
 - Desert King*
 - Brown Turkey*
 - Contessina*
 - Neveralla*
 - Nordlund*



Sea Buckthorn Hippophae rhamnoides

- Deciduous thorny shrub native to coldtemperate areas of Europe and Asia.
- Very tolerant of drought and poor soils but intolerant of shade.
- Male and female plants needed for pollination.
- Used for food, cosmetics, traditional medicine; windbreaks and site restoration.
- Very productive, small yellow fruit with citrus flavor, mainly used for juice.
- Plants are well adapted to our climate, but harvest may be difficult.



- Leikora*
- Hergo*
- Titan
- Frugana
- Russian Orange
- Golden Sweet
- Star of Altai
- Askola
- Pollmix* male pollinators

Haskap/Honeyberry Lonicera caerulea subspecies

- Deciduous shrub native to circumpolar regions, similar to blueberries.
- Japanese subspecies *emphylocalyx* (Haskap) is best suited for our climate later bloom and larger fruit.
- Russian subspecies do well in Canadian plains but often yield poorly in our climate.
- High nutritional and medicinal value.
- Small, sweet berries can be eaten fresh or used in baking, jelly, jam, and fruit leather.



- Berry Blue*
- Blue Pacific
- Blue Velvet
- Blue Moon
- Hoka (M. Thompson, OSU)
- Kaidu (M. Thompson, OSU)
- Kawai* (M. Thompson, OSU)
- Kapu* (M. Thompson, OSU)
- Keiko* (M. Thompson, OSU)

Mulberry Morus species

- Small deciduous tree with subspecies found in Europe, Asia, and N. America.
- Self fertile, some need no pollination, bear early, fruits resemble blackberry in shape.
- Cultivars have been developed from crosses between *M. alba* (Asia) and *M. rubra* (N. America).
- M. nigra (Europe & western Asia) considered best flavor, but less suited to cool climates or humid summers.
- All mulberries but the white will stain so plant trees away from sidewalks, driveways, and patios.



- Pakistan (*M. alba*) black fruit
- Illinois Everbearing (*M. alba x M. rubra*) black fruit
- Sweet Lavender (M. alba) white fruit
- Beautiful Day (M. alba) white fruit
- Persian White (*M. nigra*) pinkish white fruit
- Oscar (M. alba) black fruit
- **♦ Wellington (***M. alba x M. rubra***) black** fruit

Currant *Ribes* species

- Deciduous shrub native to temperate regions of Northern Hemisphere.
- Long familiar in N. Europe for culinary uses, also used by American tribes for medicine.
- Currant species include black, red, pink, and white currants.
- Strongly flavored, tart berries can be eaten fresh; more often used for juice, jelly, jam, and baking.
- Shade tolerant but shallow rooted; must have sufficient water in dry spells and when first planted.



Cultivars

- Ben Connan* black
- Ben Lomond* black
- Ben Nevis* black
- Ben Sarek* black
- Titania* black
- Minn 69* red
- Cascade red
- Jonkheer van Tets red
- Rovada* red
- Blanca* white
- Primus* white

Blue Elderberry Sambucus nigra

- Deciduous shrub or small tree with subspecies native to Europe and N. America.
- All green plant parts are poisonous; the blue/purple berries are mildly poisonous when unripe.
- Ornamental cream-white flower clusters can also be used for wine or fritters.
- Berries are edible after cooking, used for jelly, jam, and chutney.
- High nutritional and medicinal value.
- Red elderberry, most common in Puget Sound, is ornamental but not edible.



Cultivars

- Adams (American)
- Johns (American)
- Nova (American)
- Variegated* (European)
- Haschberg (European)
- 💙 Alesso (European)
- Korsor (European)
- Black Beauty (European purple foliage, pink flowers)

Mountain Ash, Rowan Sorbus aucuparia

- Deciduous tree native to Europe and southwest Asia, widely naturalized in N. America.
- Unrelated to true Ash trees (Fraxinus spp.)
- Ornamental green pinnate leaves, white flower clusters, bright red or orange fruit.
- Fresh fruit is mealy, astringent.
- Raw fruit contains parasorbic acid, a known carcinogen safe after berries are cooked, frozen, or dried.
- Trees grow well, 15-20 feet high, suited for ornamental use or as forage.





Cultivars

- Rosina*
- Rabina*
- Konzentra
- Nevezhinskaya*
- 🔖 Ivan's Beauty* (S. aucuparia x Aronia)
- Ivan's Belle (S. aucuparia x Crataegus)

Shipova X Sorbopyrus auricularis

- Intergeneric hybrid rare in nature, known for over 400 years ("Bollwiller Pear").
- Small tree 15-20 feet high similar to pear, white flowers, self fertile.
- Fruit is of truly excellent quality, yellow skin and fragrant sweet flesh, shaped like a small pear.
- Problem: trees may take 10-15 years to begin fruiting (!!?!).
- Trials of different rootstocks to promote earlier production inconclusive so far.



Medlar Mespilus germanica

- Deciduous tree native to southeastern Europe and southwest Asia, cultivated since pre-Roman times.
- Very popular in Victorian era but not well suited to commercial markets because fruit must be "bletted" before it is edible.
- White five-petaled flowers are self-fertile and late opening.
- Fruit looks like a large brown fuzzy rose hip; after bletting it is soft and sweet.
- Fruit can be eaten fresh or used in jam and jelly.



Jostaberry Ribes x nidigrolaria

- Complex cross of black currant and two gooseberry species, a deciduous bush similar to currant.
- First introduced in 1977, with more cultivars developed by breeding programs.
- Resistant to many of the common *Ribes* diseases: powdery mildew, white pine blister rust.
- Fruit is edible both fresh and cooked.
- Easy to grow and productive.
- Bird protection is needed.



Summary:

- Species and cultivars are available grower-friendly and well suited to our area.
- Evaluated during 12 years of fruit trials at Mount Vernon.
- Selected for high quality, productivity, and disease resistance.
- Many cultivars NOT listed may grow well in specific climate conditions.
- Individual tastes can vary.
- Since 2009 several new introductions are available (check local nurseries).

More information:

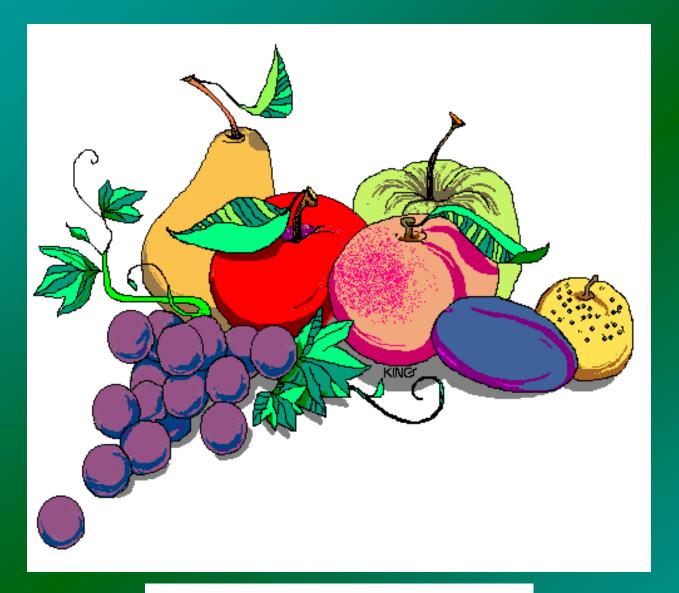
- Bob Bors, U. of Saskatchewan Haskap
- California Rare Fruit Growers, Inc. https://crfg.org/
- Michael Dolan, Burnt Ridge Nursery, Onalaska, WA http://www.burntridgenursery.com/
- Bob Glanzman ("Kiwi Bob")
 https://kiwifruitsalsa.wordpress.com/
- NewCROPTM Purdue University Center for New Crops & Plant Products

https://www.hort.purdue.edu/newcrop/

- Raintree Nursery https://raintreenursery.com/
- Lee Reich, Uncommon Fruits for Every Garden, Timber Press, Portland, OR (2008)
- Bernadine Strik, PNW 507 Growing Kiwifruit (2005)

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