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HOME FRUIT ORCHARDS IN THE WILLAMETTE VALLEY

A well-planned and cared for orchard can be a great source of satisfaction and food. Commit yourself to caring for them. A larger variety of fruit will increase the complexity of your management and care problems. Apricots, almonds and many nectarines, bloom too early for satisfactory fruiting and should not be planted in the Willamette Valley.

SOILS

Well-drained, sandy loam soils at least 14-30 inches deep are necessary for stone fruits and desirable for apples and pears. Ridges or mounds will improve surface drainage necessary for clay soils.

IRRIGATE

Five gallons per week are needed the first growing season (less if the weather is cool), increase to 8-10 gallons per week the second year and about 15 gallons the third year. Before irrigation, always sample the soil in the root zone to be sure more moisture is needed.

SPACING

Dwarf rootstocks, 6'x12'; 20'x20' for standard trees or more for walnuts. Plant the same depth as the nursery. Spread the roots, clip off broken roots, eliminate air pockets with water and slight packing.

FERTILIZER

Very little is needed the first year. Be careful not to burn the roots. Mix one cup of bone meal with the back-fill soil. This will aid nutrition in the root zone. Small amounts of nitrogen can be placed on the surface in subsequent years to be leached in by the rain.

APPLE VARIETIES

Apples have long been considered by many to be the top home orchard fruit due to reasonable success in fruit production, quality, versatility and popularity.

PESTS

Fruit damage from apple maggot may change this premier position. Satisfaction can still be achieved with codling moth control beginning about three weeks after petal fall. Continue the program to within two weeks of harvest to control apple maggot with Diazinon or Imidan. Check the home orchard spray schedule, "Controlling Diseases and Insects in Home Orchards" (EC 631, \$1.00) and follow label directions.

Scab and mildew can seriously damage fruit finish. Scab can be controlled with fungicides applied throughout the bloom and after summer rains. Use Immunox, Captan, summer lime sulfur or wettable sulfur.

Another disease control method is resistance (minimum scab) or immunity (no scab). An increasing number of these varieties have emerged from various breeding programs in the U.S. and Europe since the 1930's to the present time.

ROOTSTOCKS

Dwarfing rootstock such as MM9, MM26 or semi-dwarfing, such as MM106 or MM7, will allow more trees in a smaller area and produce fruit at an earlier age. Most can be spaced about 8'x15' feet with rows running north/south. MM9 should be supported with stakes or trellises.

With 2,500 apple varieties in the U.S. and 4,000 worldwide, where do we start and finish on a list of recommended varieties? Here are just a few, starting with disease resistant varieties.

SCAB RESISTANT VARIETIES

Prima

Early September Red, round, medium-sized, attractive fruit. Yellow, crisp flesh, mildly sub-acid, good flavor.

Chehalis

Early September Large, greenish-yellow fruit of Golden Delicious type. Crisp, white flesh, mildly sub-acid. Keeps well in cold storage.

McShay

September 5-16 Recent OSU release. Red over green. Medium-sized, round, conical shaped fruit. Excellent dessert quality, sweet-tart and juicy.

Priscilla

Mid-September Large, red over yellow fruit. Excellent dessert quality, white crisp flesh.

Liberty

October 1-10 Medium-sized, round, dark red fruit, superior dessert quality of scab-free varieties. Sweet-tart and keeps well.

Macoun Early October	Somewhat resistant. Solid, dark red, small to medium sized fruit, white aromatic flesh with high dessert quality.
Spartan Early October	Somewhat resistant. Solid dark red, small to medium sized fruit. Flesh is white, firm, crisp, juicy, shaped somewhat like Delicious, although is McIntosh/Newton cross. Keeps well in cold storage.
Sir Prize October 1-15	Yellow, long, medium to large fruit. Excellent dessert quality. Thin skin.

NOTABLE SUMMER VARIETIES

Tydemans Red September 15-25	Somewhat resistant to scab and mildew. Medium to large shaped like one of its parents, MacIntosh. Short storage life, fair quality, sub-acid flavor, good.
Red Melba August 10-20	Medium-sized, roundish, purple blush over greenish ground color. Abundant bloom. Good flavor. Crisp, juicy. Tends to preharvest drop. Little tendency to scab or mildew. Best early, Macintosh cross.
Summerred Late August	Beautiful, dark red, fine flavor, grows well here.
Prime Red (Akane) Aug. 25-Sept. 10	Resembles Jonathan but lighter red, uniform, medium-sized, attractive, good flavor.
Starks Summer Treat Aug.16-Sept. 10	Large attractive, Delicious type. Good flavor, sweet tart, crisp.
Paulared Aug. 15-Sept. 10	Solid red, good flavor, non-browning flesh.
Gravenstein Aug. 25-Sept. 25	Most widely known summer variety. Harvests over a long period. High quality for an early variety. Tart, good dessert, sauce, juice, and cooking. Red stripes over green or yellow. New red varieties have more color. Subject to bitter pit and mildew.

NOTABLE FALL VARIETIES

King Sept. 15-25	Very large, red stripes, flesh white. Firm, crisp, sweet, juicy. Excellent quality. Pies, sauce and fresh. Tree is weak, slow growing, semi-dwarf, annual bearer. An old, fairly well known variety.
Empire Sept. 25-Oct. 5	From McIntosh X Delicious. Solid red striped, round irregular shape medium-sized. Thick, tough skin. Heavy bloom. Flesh white or sometimes greenish. Firm, crisp, juicy, sub-acid, aromatic. Similar to McIntosh but with more color. Excellent flavor, stores well.

Golden Delicious October 1-15	Greenish-yellow to yellow. Outstanding dessert quality, excellent sauce, juice. Easily bruised, less scab susceptible than Delicious variety. Good pollinizer, very productive, tends to russet. Smoothie and other strains are less russeted, a common problem here.
Mutsu October 1-15	From Golden Delicious X Indo, introduced from Japan in 1948. Very large, regular fruit, ovoid to slightly truncate. Yellow to greenish-yellow. flesh yellow-white, crisp but rather coarse compared to Golden Delicious. Mildly sub-acid, juicy, moderately good quality, free from russeting, stores well, subject to bitter pit. Tree very vigorous, productive, but not a pollinizer.
Melrose October 5-15	From Jonathan X Delicious, introduced in Ohio in 1944. Red stripes, roundish, conic, large, excellent dessert quality, very good keeper. Juicy, sub-acid, withstands handling well. Tree medium to vigorous, somewhat slow to bear. Established local reputation.
Criterion October 20-30	Probably a seedling of Delicious. Has Delicious shape yellow with red blush, waxy skin, firm crisp, juicy, excellent sweet-tart flavor. Stores well. Tree vigorous, non-spur.
Cortland Late September	McIntosh cross. Large, red, round fruit. Good dessert quality. Flesh does not stain.
Gala Late September	Medium-size, striped red, excellent flavor. Popularity spreading quickly, from New Zealand.
Jonagold Late October	Good qualities of both parents, Jonathan X Golden Delicious. Large, round fruit. Excellent dessert quality as well as cooking.
Iared Late October	Handsome, solid red, high dessert and cooking quality. Tart flavor, one of the best long storage varieties.
Winter Banana Early November	Yellow with distinctive ridge on one side of fruit. Sweet, good dessert quality and storage.
Newton Early November	Green, crisp, tart, good dessert quality and storage.
Granny Smith Mid-November	Green, crisp, very tart but improves after one month of storage or will store late on tree until severe freeze. Popular introduction from Australia.

PEAR VARIETIES

CARE

Use the same materials and directions for codling moth worms and scab as with apples.

PEAR PSYLLA

Can be controlled with delayed dormant oil followed with Thiodan in summer.

VARIETIES

Plant two varieties for cross-pollination. Pears mature on the tree, but ripen in the kitchen for best fruit quality.

Bartlett August 15-30	Use old Home-Farmingdale or seedling rootstock. Most versatile pear for canning, drying or excellent fresh as a fall pear.
Asian September 1-30	20th Century, Tsu Li, Ya Li and many others. Harvested ripe and will crunch like an apple.
Comice September 10-20	On quince root. Large, juicy fresh fruit that stores until the holiday season.
Seckel September 10-30	Sweetest pear, fresh or sweet pickled.
Bosc September 15-30	Russeted winter pear used fresh or baked.,

PEACHES VARIETIES FOR THE WILLAMETTE VALLEY

Some peach varieties do well in the Willamette Valley climate despite the wet winter and cool spring if proper disease control measures are taken at the right time! These conditions increase coryneum twig blight, peach leaf curl, and brown rot in the bloom and fruit. Late and vigorous blooming varieties will more likely set fruit than early blooming varieties.

Minimum disease control sprays include 3 tablespoons fixed copper or lime sulfur per gallon of water in October for coryneum twig blight, same in mid-December, and repeat in mid-January for peach leaf curl and bacterial canker. Brown rot blossom blight (especially in wet bloom periods) can be controlled with Captan, Benlate or sulfur at the beginning of bloom and at petal fall.

Annual, heavy pruning is necessary for tree size and disease control, as well as for fruit wood renewal.

Primary pests include root borer (apply Thiodan in July and August, on base of trunks), twig borer (apply diazinon at prebloom or postbloom).

Careful attention must be paid to adapted varieties on culture for satisfactory results in the home orchard.

RECOMMENDED VARIETIES

Red Haven August 3

Was once the most extensively planted freestone-type peach in the world. Fruit size is medium if the tree is well-thinned. The fruit are round with prominent suture and apex. Skin color is yellow overlaid with red. The flesh is yellow with red around the pit. The fruit are firm, fine-textured, melting, and almost freestone when fully ripe, but the pits are difficult to remove and the skins tend to tear easily on picking. This variety has an outstandingly good flavor when fresh, frozen, or canned.

There may be different mutant strains of Red Haven in the nursery trade. Oregon growers recommend the Michigan stain.

The tree is vigorous and a consistently heavy bearer, except when there is spring frost. In favorable years, it sets very heavy crops that require extensive thinning. Red Haven trees also need heavy pruning to obtain the best development of fruit color.

A compact mutant of Red Haven was introduced in the 1970's, but it hasn't gained much favor with orchardists (probably because of the difficulty in handling its excessive branching and horizontal growth habit).

Harken August 4

The fruit are large and are yellow overlain with red blush skin color. The flesh is firm, juicy and almost smooth with a sweet rich flavor. It also is freestone and slow to brown. The tree is productive, moderately vigorous and cold hardy.

Suncrest
August 20

The fruit are large, round, firm, and attractively colored red on yellow.
The flesh is firm, melting, freestone with a good texture and flavor.

Veteran
August 28

Because of its reliable productivity, this variety has become the principal peach of western Oregon. The fruit are medium to large-sized and round-oblate in shape. The skin is yellow with very little red coloring. The flesh is yellow, soft, and semi-freestone to freestone. It peels easily without scalding and has a rich flavor when canned, but its fresh eating quality is only fair. These Elberta-type fruit tend to drop before ripening and must be moved quickly because they show bruises easily. The tree is vigorous and highly productive.

CHERRIES

POLLINIZERS

Sour cherries require no pollinizer. Sweet varieties require a pollinizer such as sour or Sam.

DISEASE

Control bacterial canker with 3-tablespoons per gallon of water and dead bud in January.

PESTS

Control cherry fruit fly in June.

VARIETIES

Recommended varieties are Sam, Stella, Royal Ann and Lambert.

PRUNES

Prunes are plums which dry and shrivel due to high sugar content rather than ferment.

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