# AGRICULTURAL EXPERIMENT STATION AGRICULTURAL COLLEGE OREGON STATE AGRICULTURAL COLLEGE W. A. Schoenfeld, Director

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VARIETIES OF FRUITS FOR PLANTING

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The choice of varieties is one of the most important considerations in setting out an orchard or small fruit plantation. With orchard trees, especially, one must assume, whether he wishes to or not, something of the role of a prophet and look into the needs of the future as far as possible. The important varieties of today may be superseded by better ones in the course of twenty or twenty-five years, and sometimes sooner. On the other hand, we have many fine varieties that have been favorites for a much longer period than that. It is not best to "take a flyer" as the expression goes, in any new variety until it has been thoroughly proved, but one should foresee as much as possible what the trends of popularity are and govern himself accordingly. In recent years, there has been a tendency to develop high colored fruit in place of some of the less gaudy and possibly better quality favorites of the past. The choice of different varieties will depend upon several factors, such as climate and soil, hardiness of the variety considered, pollination needed, whether the fruit is to be grown for home use or for commercial purposes, and so on.

Climatic conditions are undoubtedly the most important of these several factors. This is naturally coupled with hardiness of the particular varieties to be considered. Oregon may be divided roughly into nine different climatic sections, each one varying somewhat from the others in its requirements and in the varieties that will succeed best. West of the Cascade Mountains the question of hardiness is not of supreme importance, but east of that mountain range this question should be carefully considered. Within a few miles of the Columbia and Snake rivers and in the extremely northern part of Umatilla County, many varieties can be grown to advantage which are too tender for planting on the higher plateau region of eastern Oregon. On this plateau, there is only here and there along protected water courses or sheltered spots that even the hardier types of fruits will succeed. When they do succeed, however, they usually give excellent quality and fine finish. When I speak, in this article, of hardy varieties, I refer to those which succeed in most districts outside of the extremely high, frosty ones of the plateau region. There are a number of apples, pears and sour cherries, also prunes and plums which do well where the winter temperatures get quite cold, provided of course, the approach to winter is gradual enough so that the wood becomes well matured before extreme cold weather comes on. Of the small fruits, there are a few varieties of red raspberries which have been developed for cold climates. A number of black raspberries, also, are fairly hardy and the eastern blackberries of the upright growing types, are hardy in most sections of Oregon.

Currants and gooseberries are fairly hardy and many varieties of the American grape, will stand considerable cold during the winter. Strawberries, where they can be mulched with either straw or snow or both, will come through cold winter temperatures without any difficulty. Late spring frosts are more apt to be the limiting factor in growing this fruit.

Soils and exposures should be chosen with care. North and eastern exposures warm up slowest in the spring and are least apt to suffer damage from late spring frosts, while south and west exposures give somewhat better color. There should be enough slope to the land to allow cold air to drain off readily during the winter and spring. This does not mean steep slopes, but it does mean that low spots where cold air may settle should be avoided. Generally speaking, stone fruits do better upon rather sandy to silty soils that are not too heavy, and which are easily worked, while the fruits such as apples and pears make their best growth and production upon soils containing considerable clay, but still are well drained and with subscils not too heavy. If the orchard is to be grown for home use, greater attention may be given to soil drainage and general care which will overcome somewhat a faulty natural soil, but for commercial purposes, it will not pay to give too much attention to each tree and soils must be chosen which are naturally adapted to the crop.

The question of pollination is an important one. Most of our common tree fruits need cross pollination to do their best. Generally speaking, most apples and pears are successfully pollenized by varieties which bloom at the same period. Most of the European plums and prunes, including the French and Italian are fairly well self-pollenized, but a number of varieties such as the Japanese group and the American plums need cross pollination. The Franquette walnut pollenizes itself successfully when it gets into good bearing and most of the other varieties which are grown at all in Oregon are successful with cross-pollination among themselves. Filberts have to be planted carefully to provide cross-pollination at the right seasons of the year. The Barcelona sheds its pollen too early to make it a pollenizer for other common varieties. The DuChilly has been one of the outstanding pollenizers for the Barcelona as is Daviana, also. The DuChilly, in turn, needs cross pollenizing by a variety which has its pollen borne later than the Barcelona, so a third variety must be brought into the picture. The Daviana, Alpha, Gassoway and several others have been tried out for this purpose. The Brixnut filbert is successfully pollenized by the Halle's Giant. Our most common sweet cherries, the Royal Ann, Bing, and Lambert will not pollenize each other, and another variety usually the Black Republican, is set in for that purpose. The Black Tartarian, Governor Wood and a few others have been fairly successful as pollenizers. It is necessary to get a true Black Republican for this purpose. This can be done by choosing buds or scion wood from Black Republican trees which have caused trees around them to set good crops.

Quinces are, for the most part, self fertile. Most sour cherries do very well set in solid blocks without cross-fertilization, but now and then a strain appears which seems to be self-sterile. It is a good precaution, therefore, to provide cross pollination for sour cherries.

Peaches are self-fertile with the exception of the J. H. Hale and one or two other minor varieties.

Most of the strawberries now being produced in the Pacific North-west are the perfect flowered sorts. Before planting it is necessary to know, however, whether the variety you have in mind is perfect flowered or imperfect. In the latter case, it is necessary to set a perfect flowered sort near the imperfect one in order to provide for good yields.

Practically all the small fruits are self-fertile and grapes, both the American and European sorts, yield well without pollenizing though a few of them have some imperfect flowers and will be benefited by cross-pollination.

### Apples

Summer varieties: \*\*Yellow Transparent, Early Harvest, Sweet Bough, Red June, \*Red Astrachan, \*Duchess.

Fall: \*\*Gravenstein, \*\*Red Gravenstein, \*\*King, Fall Pippin, \*\*King David, \*Tetofsky. The last is especially hardy.

Winter: \*\*Yellow Newtown, \*\*Esopus, Spitzenburg, \*\*Ortley, \*\*Jonathan, \*\*Rome Beauty, \*\*Arkansas Black, \*\*Delicious, \*\*Starking, \*\*Richared, \*\*Stayman Winesap, \*\*Winesap, Tolman Sweet, \*Lady, \*Blue Pearmain and \*Northern Spy.

Crab apples: \*Hyslop, \*Martha, \*Whitney, \*Large Red Siberian,

\*Transcendent and \*Excelsior. All of these are good, and all are hardy.

#### Pears

Summer: Clapp's Favorite and \*\*Bartlett.

Fall: Flemish Beauty, Clairgeau, \*\*Seckel, Fall Butter, Hardy, and Idaho.

Winter: \*\*Bosc, \*\*Anjou, \*\*Howell, \*\*Comice, \*\*Easter, \*\*Winter Nelis and Vermont Beauty.

### Quince:

Champion Orange or Apple.

#### Sweet Cherry

Elton, Wood, \*\*Black Republican, Black Tartarian, \*\*Royal Ann, \*\*Bing, \*\*Lambert and Schmidt.

Sour cherry: \* \*\*Early Richmond, \* \*\*Montmorency, \*English Marello.

Duke cherry: May Duke, Late Duke, Olivet.

#### Peaches

\*\*Arp, an early peach, \*\*Elberta, \*\*Late Elberta, \*\*J. H. Hale,

\*\*Rochester, \*\*Salwey, Champion, \*\*Lovell, \*\*Muir, \*\*Early and Late Crawfords,

Tuskena (commonly called Tuscan Cling), Phillips Cling, Paloro Cling, and

Peaks Cling. The cling peaches are not grown commercially in Oregon.

### Plums and Prunes

\*\*French, \* \*\* Italian, Shropshire Damson, Peach, \*Washington,

\*Jefferson, Shiro, Burbank, \*Bradshaw, Climax, Tragedy, Standard, and Pond
(wrongly named Hungarian prune.)

### Nuts

Walnuts: \*\*Franquette, the only outstanding commercial walnut, Mayette, and Meylan.

Filberts: \*\*Barcelona, \*\*Du Chilly, \*\*Daviana, Clackamas, Alpha,

\*\*Brixnut, \*\*Halle's Giant, Gassoway.

#### Strawberries

\*\*Gold Dollar, \*\*Marshall, \*\*Corvallis, Narcissa, Redheart. The best everbearing variety we believe, for Oregon conditions is the Rockhill, though Mastodon and Progressive are good.

### Brambles

Red Raspberries: \*\*Cuthbert, \*Chief, \*Latham, Lloyd George, Newburgh, Red Antwerp, and \*Viking.

Black Raspberries: \*\*Plum Farmer, Munger, \* \*\*Cumberland, Gregg, Black Pearl.

Purple Canes: Columbian, Schaffer and Potomac.

Blackberries: \*\*Evergreen, Himalaya, \*Snyder, \*Kittatinny, \*Stewart or El Dorado, and \*Erie.

Dewberries: \*\*Lucretia and \*\*Youngberry. Only in milder portions of the state.

\*\*Loganberries strictly for western Oregon.

# Currants and Gooseberries

Among the currants White Imperial, Fay, Cherry, Viking, and Perfection are all good.

The gooseberries have a much narrower choice, the \*\*Oregon Champion and Poorman being outstanding.

## Grapes

American: \*\*Concord, \*\*Worden, \*\*Campbell's Early, Delaware, \*\*Niagara and Agawam.

European: Sweetwater, Flame Tokay, Muscat Hamburg, Rose of Peru. Advised for planting only in parts of the state where they are known to succeed.

Further information will gladly be given by correspondence.

<sup>\*</sup> Varieties especially hardy to cold.

<sup>\*\*</sup> Commercial varieties.