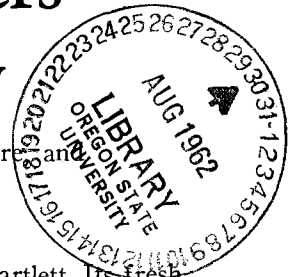


Pear Varieties and Pollinizers for the Willamette Valley

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For the main pear crop in the Willamette Valley choice is limited solely to the Bartlett variety for canning purposes. Although many other varieties have been processed experimentally, none equals this pear in flavor, texture, and appearance when canned. The only other possibility at present is a new russeted type of Bartlett that has been reported to have superior flavor and better handling qualities. Four strains of russeted Bartletts are being evaluated at the OSU Lewis-Brown Experimental Farm near Corvallis.

BARTLETT is the most widely grown variety in the Pacific coast states. It is widely adapted to soil and climatic conditions. Its flavor and texture for canning has been well accepted for over half a century. The picking season is from mid-August to early September. This variety has a storage life of at least 12 weeks, thus enabling processors to handle the crop conveniently in their processing schedule. The Bartlett makes a strong well-branched tree which (under good management with irrigation) may produce 20 to 30 tons per acre.

ANJOU is second to Bartlett in total production and is the most important *winter-type* pear variety in Oregon. It is one of the four possible commercial pollinizer varieties for Bartlett. Although Anjou produces well in the Willamette Valley, it usually lacks the finish and the overall quality of the same variety as grown in the Hood River and Rogue River valleys—the major winter pear districts in Oregon. One russet sport of Anjou is known which could possibly develop into a commercial variety for the Willamette Valley. Anjou is for the fresh fruit trade and is not suited for canning. Since Anjou is a winter-type pear it is customarily harvested about one month after Bartlett.

COMICE is the major variety for the gift package trade in the Rogue River Valley. Although its flavor is outstanding, it bruises easily and must be given special handling. In the Willamette Valley it produces erratically and has a dull, rough finish. Nevertheless the flesh is juicy and of high quality. Comice can be used as a pollinizer for Bartlett. Though it is an early winter variety and generally produces lighter crops, it is also

a recommended pollinizer variety for Bartlett. Its fresh fruit market possibilities in the Willamette Valley are as yet undeveloped. It is not a satisfactory canning variety. Comice is harvested about three weeks after Bartlett.

BOSC is a winter variety, russeted and of excellent quality in the Willamette Valley. If a grower plans to grow fruit for the local winter pear market, Bosc would be the best of the established varieties. Bosc is an early winter variety that should be sold out of cold storage prior to February 1. It is an excellent baking variety. Unfortunately, Bosc blooms too late to be a dependable pollinizer for Bartlett. Bosc is harvested about three weeks after Bartlett. One weakness is Bosc's susceptibility to stony pit, a virus disease that causes deformed, worthless fruit. Careful budwood selection is necessary with this variety.

WINTER NELIS is mentioned primarily because it is one of the French varieties being used as a rootstock for the Bartlett and other pear varieties. Winter Nelis blooms too late to be a consistent pollinizer for Bartlett. It is not suited for canning and is only moderately good as a fresh fruit.

GOLDEN DOYENNE is one of the promising new pear varieties recommended as a pollinizer on a commercial trial basis. It is a russeted selection of Fall Butter (White Doyenne) and should replace Fall Butter as a pollinizer for Bartlett. Golden Doyenne is a golden-colored smooth russet pear capable of withstanding rough handling. Its storage season is about the same as Bosc and it is harvested in the same season. It is suited for fresh fruit use only.

PACKHAM'S TRIUMPH and Golden Doyenne are the only varieties that peak bloom about the same day as Bartlett. Packham's Triumph is a promising new variety now being tested extensively in this area. The fruit is shaped and colored much like a Bartlett but keeps well into late winter. It is not suited for canning but may have value in a local fresh fruit trade. This variety is for winter season use, and it is harvested about four weeks after Bartlett.



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GRAND CHAMPION is a russeted sport of Gorham that is high in quality and attractive in appearance. It blooms too late to pollinize the Bartlett. However, this variety is nearly equal to Comice in dessert quality, stores until the Christmas season, and the skin withstands mechanical injury. It is considered one of the most promising early winter varieties for commercial trial in the Willamette Valley. It requires Bosc or other late-blooming varieties as a pollinizer. It is suited for fresh fruit use only and should be consumed before January 1. Grand Champion is harvested about two weeks after Bartlett.

HARDY is another variety used as an interstock between Quince and Bartlett.

OLD HOME is one of the major rootstocks for new pear plantings. No pear decline has ever been reported on Old Home growing on its own roots. In addition, it is resistant to fire blight, very winter hardy, and produces a tree with wide crotch angles. Old Home is used as a compatibility bridge between Quince rootstock and the Bartlett variety.

A Few Facts About Pollinizers For Pears

Most pear varieties have a blooming period of 5-6 days with a peak bloom of 1-2 days. April 12 is the average date of full bloom for the Bartlett variety at Corvallis. Pears are noted for their short bloom period, as compared with apples. Willamette Valley pear growers frequently encounter cool, rainy, or windy weather at the blooming period which prevents optimum bee activity in pear trees. Hence the right pollinizer varieties and the presence of a substantial number of bees become extremely important to secure a heavy commercial crop.

Climatic conditions which restrict bee activity, and hence pollination, affect the set and shape of Bartlett pears. Seedless fruits produced without pollination may be seriously deformed and often manifest a tendency toward premature dropping. To produce Bartlett shapes preferred for canning, two strong colonies or hives of bees (placed near pollinizer varieties) are recommended per acre and any two of the following pollinizer va-

rieties: Anjou, Golden Doyenne, Packham's Triumph, or Comice.

No Bartlett tree should be more than two trees away from a pollinizer variety. The minimum number of pollinizers would then be every fifth tree in every fifth row. In some years, this probably will not be enough and it is preferable to have at least one pollinizer to every eight or nine Bartlett trees. Every third tree in every third row will give this ratio. If two pollinizers are used, alternate them in the rows.

Bees prefer almost any flower to pear blossoms because the nectar and sugar content of pear blossoms is low. Be sure to knock down all competing flowering weed plants in the orchard, particularly chickweed and mustard, before pear trees bloom. In effect, you have to force bees to "work" pear blossoms by eliminating competing crops with a greater supply of nectar. In view of this situation, two hives of bees per acre should be the minimum in the Willamette Valley area.