

## Fruit Species and Varieties for Home Orchards

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Many fruit species are not adapted to New Mexico's climate and soil conditions. Late spring frosts occur frequently in all areas of the state, injuring flowers and young fruits of early flowering species. In the north and at high altitudes, minimum winter temperatures limit the species that can be successfully planted. Low relative humidity and drying winds may desiccate plants. The life expectancy of many trees is limited by exposure to high light intensity. Soils, in general, are alkaline, resulting in mineral element deficiencies. Both soil and irrigation water may be high in soluble salts.

The following discussion covers some problems likely to be encountered with various species, areas of adaptation, and a number of recommended varieties. Others may perform equally as well, and the performance of a given variety may be better in protected areas around homes than in commercial plantings.

### Almonds

Almonds are the first fruit species to flower in the spring and consequently produce crops infrequently. They should be planted only in the south. Recommended varieties are 'Mission' (Texas), 'Titan', and 'All-in-One', a semidwarf variety. In the southern areas, these trees are usually long-lived and are attractive small shade trees.

### Apricots

These trees are adapted to alkaline soils, and usually mineral element deficiencies are not a problem. Trees are relatively long-lived. They have attractive leaves and are useful as small shade trees. Apricots flower after almonds but early enough to be injured frequently by late spring frosts. Young fruits seem to be more susceptible to frost injury than almonds, plums or peaches. Full crops occur in southern areas about one in five years and less frequently in colder areas. 'Tilton' and 'Sun Glo' flower slightly later than many other varieties.

### Plums

Japanese plums flower about the same time as apricots, but young fruits are a little more cold tolerant, and production is more reliable in all areas of the state. Most varieties need cross-pollination (two different varieties need to be planted). 'Methley' is self-fruitful and more frost tolerant than most varieties. Other tolerant varieties are 'Santa Rosa' and 'Satsuma'. Two hybrids that are reliable are 'Gold' and 'Sepa'. Japanese plums are short-lived and frequently chlorotic (iron deficient) in New Mexico.

European plums flower later than Japanese type and frequently escape frost injury. They are recommended for northern and high altitudes. In general, performance has been poor in the south. Recommended varieties are 'Italian' and 'Stanley' (prune plums), 'Damson' and 'Edwards'.

### Peaches

Peach trees are short-lived in all areas of New Mexico with an average life of 10 years. Painting the trunks with exterior white latex paint to reflect the winter sun reduces sunscald and prolongs life. Annual pruning, to promote compact trees, protects the main branches from burning. Zinc deficiency may be a problem, especially on sandy soils. Peaches flower about two weeks before apples. Full crops should be expected one year in four or five. Three late blooming varieties are: 'Redhaven', 'Dixie Red' and 'Raritan Rose' (white fleshed). 'Rio-Oso-Gem', 'Glohaven', and 'Sullivans Elberta' are recommended. 'Regular Elberta' is very susceptible to frost injury.

### Cherries

Both sweet and sour cherry trees are short-lived and perform poorly in hot southern areas. They are recommended only for cooler areas. Sweet cherries flower early and may be injured by frosts. 'Bing', 'Black Tartarian', and 'Lambert' are suggested for trial. 'Bing' and 'Lambert' require cross-pollination.

Sour cherries flower late and frequently escape spring frosts. 'Montmorency' is the main variety. In southern areas, try 'Meteor' (semidwarf) and 'North Star' (dwarf). Most varieties need no pollinators.

### Apples and Pears

Both species require numerous scheduled sprayings to control worms and other pests. Pears flower after peaches and before apples. Pears are adapted to all areas, but production is better in the south. 'Bartlett' is the leading variety. 'Duchess' and 'Eldorado' are also good. 'Kieffer Starking Delicious' and 'Moonglow' are fire blight resistant. Pear varieties on dwarfing rootstocks are recommended over standard trees.

Although apple trees flower later than most fruit species, late spring frost injury occurs frequently in all areas except in the south. 'Rome' is late-flowering. 'Golden Delicious' flowers and fruits are slightly more frost tolerant than other varieties. 'Rome' is not recommended for warmer areas of the state. 'Arkansas Black' (a late-maturing variety), 'Jonathan' and 'Winesap' develop good red color in the southern area. Most commercial varieties are adapted to higher altitudes. Semidwarf and dwarf trees bear sooner and are easier to manage than standard trees. Plant only improved earlier-coloring strains of these varieties.

### Grapes

There are three main species or types of grapes that will grow in New Mexico. European (California) varieties are not entirely winter-hardy in New Mexico and should be planted only in southern areas, unless winter protection is given. American varieties are cold tolerant, but some, such as 'Concord,' are chlorotic in alkaline soil. French hybrids, in general, are intermediate in winter hardiness. Varieties suggested are:

#### European Table Varieties –

'Thompson Seedless' and 'Black Monukka' (seedless). Others that may produce well are 'White Malaga,' 'Red Malaga,' 'Cardinal,' 'Gold,' 'Thomascot' (seedless), and 'Queen'.

#### Wine Varieties –

'Zinfandel,' 'Grenache,' 'Emerald Riesling,' 'French Colombard,' and 'Palomino'.

#### American Varieties –

'Golden Muscat,' 'Niagara,' 'Fredonia,' and 'Westfield'.

#### French Hybrids –

'Vidal Blanc,' 'Rougeon,' 'Chancellor,' 'Cascade,' and 'Baco Noir'.

### Berries

Bramble fruits (blackberries and raspberries) and strawberries are difficult to grow in the warmer areas of New Mexico. Production is poor, and it is difficult to maintain fruiting wood on brambles. Everbearing strawberries may be grown on raised beds in partial shade with mulch and with frequent irrigation. The 'Boysenberry' is the best of the brambles. Black currants, grown with protection from afternoon sun, are sometimes profitable. Growing berries is usually more successful at higher altitudes.

### Figs

The fig continues growth late in the fall and frequently all of the aboveground parts winter-kill. It is recommended only for the southern areas. Irrigate less frequently in late summer so the plants will attain hardiness before cold weather. Varieties include 'Celeste,' 'Mission,' and 'Brown Turkey'.

### Pecans and Walnuts

For the southern area of the state, western pecan varieties such as 'Western Schley,' 'Wichita,' and 'Burkett' are recommended. In other areas, early-maturing varieties should be planted. In the middle Rio Grande Valley and from Roswell north to Tucumcari, 'Stuart' and 'San Saba' may succeed. For areas with shorter seasons, only northern varieties such as 'Peruque,' 'Major,' and 'Posey' should be planted.

English walnut trees are less winter hardy than pecans. Trees of hardier strains, called Carpathian walnuts, may survive temperatures as low as -40°F. However, they flower earlier than pecans and may be damaged by spring frosts. Walnut leaves are more susceptible to salt injury. 'Mesa' variety has produced consistently, and the tree has survived -20°F in the Mesilla Valley. Named varieties, such as 'Colby' and 'Lake,' rather than seedling trees, should be planted.



