

Fruit & Nut Recommendations for Mississippi



APPLES

Apples traditionally are a northern crop best suited for the northern third of Mississippi. Elsewhere in the state, apple trees can be planted in home orchards. Spur-type apple trees produce fruit more quickly than regular types and are usually preferred. Apples can be grown in most soils, but a well-drained silt loam is best.

Most apple varieties set a better fruit load and produce higher quality fruit when cross-pollination is ensured by planting two or more varieties. Choose varieties based on bloom periods (early, middle, or late).

Some apple characteristics are transferred from the rootstock to the top. The most widely used rootstocks are the clonally propagated East Malling (EM) and the Malling-Merton (MM). Each rootstock has advantages and disadvantages, and it is important for each grower to select accordingly.

The preferred rootstock for most Mississippi growers is M 7A or MM 106.

1. **Smoothie**—Possibly the best Golden Delicious type available. The tree is vigorous, productive, and easy to manage. The fruit excels in flavor, aroma, and long-term storability. Its russet-resistant skin is glossy and noticeably smooth to the touch. Ripens in early September. The bloom period is mid- to late season (nonspur type). Good pollinator for most other varieties.
2. **Gala**—A medium-sized apple, oval to round in shape, and reddish orange in color. Recommended for fresh eating and cooking. Strong trees are compact growers and productive bearers. Newer red sports (Royal or Imperial) are recommended.



Ripens in late August. The bloom period is mid-season (nonspur).

3. **Ozark Gold**—Outstanding yellow apple if allowed to ripen properly on the tree. An early Golden Delicious type that ripens in mid-August. Bloom period is midseason (nonspur).
4. **Red Chief, Mercier Variety**—The tree is a heavy producer and has shown all the spur-type advantages plus additional vigor, making it easy to establish and manage in the orchard. The fruit is high quality. Ripens in late August to early September. Midseason bloom (spur type).
5. **Mollie's Delicious**—An attractive, unique, slightly cone-shaped, large fruit with a white base color and bright-red blush. The tree is vigorous and productive. Fruit tends to set in clusters and requires two to three pickings. Ripens in mid-August and can be used as a pollinator but is sensitive to fire blight. Bloom period is early (nonspur).
6. **Paulared**—An early red apple of good quality but susceptible to blight. It has tart flavor, light to creamy flesh, and is equally good for eating, sauces, or pies. Paulared requires thinning. Only pick near maturity for best quality and flavor. Ripens in early August. Bloom period is early (nonspur).
7. **Granny Smith**—A very late-maturing, late-keeping, dual-purpose apple. Flesh is hard, crisp, and juicy with excellent tart flavor. Fruit is grass-green and shiny. Ripens in early October. Susceptible to fire blight. Bloom period is midseason (nonspur).
8. **Arkansas Black**—A compact spur mutation of an old variety. Popular as a fresh-market variety. An excellent pollinating variety for Red Delicious and other mid- and later-bloom-season varieties. Great companion variety for Granny Smith. Ripens in mid-September to early October (spur type).

9. **Braeburn**—Originated as a chance seedling in New Zealand; its high quality and excellent flavor make this apple exciting. Skin color is green, shaded with dark red. Smooth texture and sweet flavor.
10. **Empire**—Its flesh is juicy, cream colored; moderately acid, high-quality dessert type. Tree is upright spreading, bears early, and produces annually; needs pollinizer.
11. **Blushing Golden**—Has a smooth golden delicious flavor but a bit tangy; keeps well in cold storage. Hardy and strong tree. Ripens in mid-October; needs a pollinizer.

Recommended for Trial

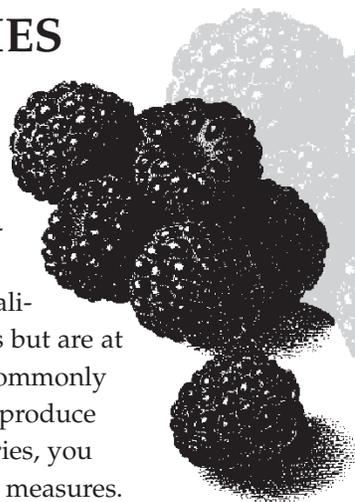
1. **Fuji**—Highly recommended; has good promise.
2. **Mutsu**—Fruit is light green to yellow and very large. Flesh is firm, very dense, and juicy. Excellent dessert and processing apple. The tree is vigorous but pollen is sterile and requires a pollinator. Susceptible to a bacterial disorder commonly called blister spot. Ripens in late September. Bloom period is middle to late (nonspur).
3. **Earligold**—Early golden delicious apple that ripens in late September. Good quality, firm.
4. **Jonafree**—The fruit is shaped like and ripens with Jonared but with a higher percentage of red surface. Flavor is like Jonathan but a little less acid. Fruits are 2 ½ inches, 75 percent medium firm, crisp, and juicy with good dessert quality. Tree is field-immune to scab and is resistant to fire blight and cedar apple rust. Somewhat susceptible to mildew. Fruit hangs well to maturity.
5. **Redfree**—An outstanding summer apple that can be stored up to 2 months. Attractive glossy red fruit hangs well and retains quality and firmness to maturity. Fruit is medium size with 90 percent bright-red color and smooth, waxy russet-free skin. Flesh is light colored, crisp, and juicy with excellent flavor. Fruit ripens 5 days before Paulared and 6 weeks before Delicious. Tree is immune to scab and cedar rust, has moderate resistance to fire blight and mildew, and is annual bearing. Uneven ripening may require two pickings.
6. **Ultra Mac**—An improved McIntosh with extra spurs, firm, tart, super-crisp fruit. Ripens in early September; needs a pollinizer.

Coastal Region

1. **Golden Dorsett**—This apple is a Yellow Delicious type. Golden Dorsett is needed to pollinate Anna. Best southern variety. Nonspur, low-chilling variety, and early bloom period.
2. **Anna**—This red apple is recommended specifically for areas within 50 miles of the Mississippi Gulf Coast. Anna needs Golden Dorsett as a pollinator. Nonspur, low chilling, and early bloomer.
3. **Ein Shiemer**—Old standby; this golden apple self-pollinates. Nonspur and low chilling requirement.

BLACKBERRIES

Cultivated blackberries do well in all areas of Mississippi. Several varieties are available to homeowners and commercial growers. The varieties listed possess excellent quality and good bearing habits but are at risk for a fungus disease commonly called double blossom. To produce consistent and quality berries, you need routine spray control measures. The red raspberry Dormanred also is listed.



Thorny

1. **Brazos**—An excellent variety for South Mississippi; vigorous, erect, thorny canes, high yield, large fruit, insect and disease resistance, and drought tolerance; somewhat cold-sensitive and not suited for North Mississippi.
2. **Cheyenne**—Vigorous, erect, thorny canes, ripens midseason, very productive, fruit very large; excellent for fresh consumption or processing; excellent flavor.
3. **Chickasaw**—Released in 1999. Vigorous, erect, thorny canes. Fruit size and yield are larger than Shawnee. Fruit are long, cylindrical, slightly flattened, and very attractive with a glossy black finish. Postharvest evaluations indicated superior shelf life.

4. **Kiowa**—Canes are thornless, erect, and self-supporting. Fruit is black, glossy, firm, very large with a high sugar content, and excellent flavor. Ripens about the same time as Chickasaw. Harvest season extends about 45 days. Good results in postharvest evaluations.
5. **Shawnee**—Vigorous, erect, thorny canes; berry larger than Cheyenne; very productive; ripens about one week later than Cheyenne. Excellent flavor. Excellent for fresh use or processing.

Thornless

1. **Apache**—Released in 1999; plant has erect-growing, thornless canes. Fruit is blocky, conic, and very attractive with a glossy black finish. Sugar content is comparable to other varieties, and flavor is rated very good. Seeds are larger than Arapaho and Navaho. Fruit are twice as large as Navaho, and yields are high. Bloom date is between Navaho and Arapaho, and ripening date is later than both varieties but more concentrated. Vigor, health, erectness of cane, and cold-hardiness are better than Arapaho and Navaho.
2. **Arapaho**—Canes are thornless, erect, and self-supporting. Fruit is medium-sized, short, conic, and

bright glossy black with small seeds and medium yields. Sugar content and shelf life are less than Navaho but greater than Shawnee. Ripens about 11 days before Navaho. Harvest period is 4 weeks. Hardy in all areas of Mississippi. Plants easily reproduce from roots.

3. **Navaho**—Canes are thornless, erect, and self-supporting. Fruit is black and glossy, firm, sweet, and medium in size. Ripens about 7 days after Shawnee, produces for about one month, and has shown good shelf life. Plants have good hardiness to low temperatures in Mississippi. Navaho plants do not reproduce freely from roots, so a closer spacing is best.
4. **Ouachita**—Released in 2003; plant has very erect, thornless canes. Fruit is large with very good flavor and high sugar content. Yields are consistently high, producing amounts the same or higher than the other thornless varieties. Ripening begins in early June and continues about 4 weeks. Plants and fruit are relatively disease-resistant.
5. **Dormanred Raspberry**—This raspberry was developed at Mississippi State University. Red, extra-large fruit. Requires training.



BLUEBERRIES

Rabbiteye blueberries grow successfully throughout Mississippi. They grow best on light-textured, well-drained, acid (pH 4.2 to 5.5) soils. For best results, add peat moss to the planting hole. Mulch and irrigate, but do not allow plants to become water-logged. Plant two

or more varieties to ensure cross-pollination. Recommended varieties (early to late ripening) include the following:

Early Season Varieties

1. **Austin**—Plants are moderately vigorous, productive, and upright. Berries are large, blue, firm, have dry scars, good flavor, and good shelf life. Ripens May to early June.
2. **Brightwell**—Berries are medium in size, blue, and have small dry scars and good flavor. Plant growth is vigorous, upright, and produces enough new canes to renew the plant.
3. **Climax**—Upright, open plants. Berries are large, medium-dark blue, and have a small scar and good flavor. Concentrated ripening period. Ripens May to early June.
4. **Premier**—Ripens 2 to 3 weeks before Tifblue. Large fruit with good flavor. Plants are vigorous, upright, disease-resistant, and productive.

Mid- to Late Season Varieties

1. **Tifblue**—Bush is vigorous and widely adapted. Fruit is large, round, light blue, sweet, and very firm with a small dry scar. Berries appear to be ripe several days before full flavor develops. Berries remain on the plant several days after fully ripe. This is the most productive of all rabbiteye varieties and is the standard to which rabbiteyes are compared. Ripens late June.
2. **Powderblue**—Plant is vigorous, disease-resistant, and productive. Ripens similar to Tifblue with better fruit color and more foliage. Resists cracking in periods of excess rain.
3. **Centurion**—Ripens later than Tifblue; adds 1 or more weeks to the rabbiteye ripening season. Plant is vigorous and upright. Fruit has good flavor; not as firm but darker than Tifblue.
4. **Baldwin**—A productive, late-ripening variety with good flavor and firm, dark blue fruit; has a lengthy ripening period; adapted to pick-your-own and backyard plantings.
5. **Misty**—Blossoms and ripens about the same time as Biloxi. Berries are light colored with a good scar and firmness. Plants are vigorous and upright. Ripens late April. Use Biloxi as pollinator.
6. **O'Neal**—Ripens early with large, high-quality fruit of medium blue color with good picking scar and flavor. Bloom often begins in the fall and continues during warm periods until normal bloom time. Ripens late April to early May.
7. **Ozarkblue**—Exceptional yields with good fruit size and quality. Recommended for planting in the upper South because it requires 800 to 1,000 chill hours. Ozarkblue has consistently fruited in variety trials when most other southern highbush and rabbiteye cultivars have had partial to total crop losses to spring freezes and frost. Pollinate with Summit.
8. **Pearl River**—Vigorous, productive, upright plants. Pearl River is a hybrid of highbush and rabbiteye blueberries. Fruit is firm, medium-sized, good flavor, small scar, and somewhat darker than other cultivars. Ripens early May.
9. **Star**—Fruit is large and easy to harvest because of a concentrated ripening period. Fruit has excellent scar, firmness, good color, and good flavor. The plant leafs strongly before the first flowers open. The recommended pollinator is Southmoon. Ripens late April to early May.
10. **Summit**—A mid- to late season southern high bush cultivar. Fruit is firm with large and excellent color, flavor, and picking scar. Resistant to cracking, tearing, and stemming. Excellent performance in postharvest studies. Plant is semi-upright with medium vigor. Ozarkblue is a good pollinator.

Southern Highbush Varieties

1. **Biloxi**—Relatively low chilling variety. Recommended for southern areas of Mississippi. Plants are upright, vigorous, and productive.
2. **Bluecrisp**—The flesh of the ripe fruit is so firm it has been described as crunchy. Plant is moderately vigorous, more spreading than upright. Fruit is light blue with deep dry scar, firm, and sweet with a good shelf life. Ripens early May.
3. **Jubilee**—Upright, vigorous, productive plants. Medium-sized fruit with good color, flavor, firmness, and small picking scar. Ripens early May.
4. **Magnolia**—Medium-sized, productive, vigorous plants with a spreading growth habit. Medium-

CHERRIES

Only the tart cherries are adapted to Mississippi and then only in the northern area. All tart cherries are self-fertile and can be planted alone or in solid blocks.

Montmorency—The best red tart cherry for home and commercial processing. Can be used for pies, preserves, and canning.

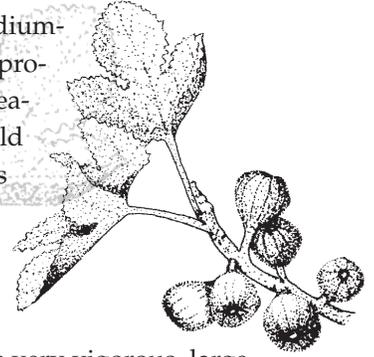


FIGS

Most Southern soils grow healthy fig bushes. The fig bush is frost-sensitive and can receive occasional injury. Plant bushes on the south side of buildings in the colder areas of Mississippi. Figs adapted to Mississippi are seedless and do not require pollination.

1. **Celeste**—A small brown-to-purple fig produced on 2-year-old wood having a tight-closed eye and a very sweet taste. The bush is vigorous, large, productive, and the most cold-hardy of the common fig varieties.

2. **Brown Turkey**—A medium-sized, light-brown fig, produced on the current season's growth; has a mild sweet flavor and ripens over a 60-day period. The eye is moderately closed, which helps reduce fruit spoilage on the tree. The bush is very vigorous, large, and productive.



GRAPES, BUNCH

With proper variety and site selection, bunch grapes grow best in north Mississippi but can be grown throughout the state. Grapes grow in many soils, but they grow best in well-drained, deep, sandy loam soil.

Shallow, heavy clay soils do not produce the vine vigor, yield, or quality of better-drained soils. The site selection needs good air drainage (not subject to late frost) and needs to be in full sun.

The choice of varieties is important and complicated. Most American bunch-grape varieties cannot be grown in Mississippi because of susceptibility to Pierce's disease and/or lack of environmental adaptation. Varieties listed are resistant to Pierce's disease and are self-fertile.

North Mississippi

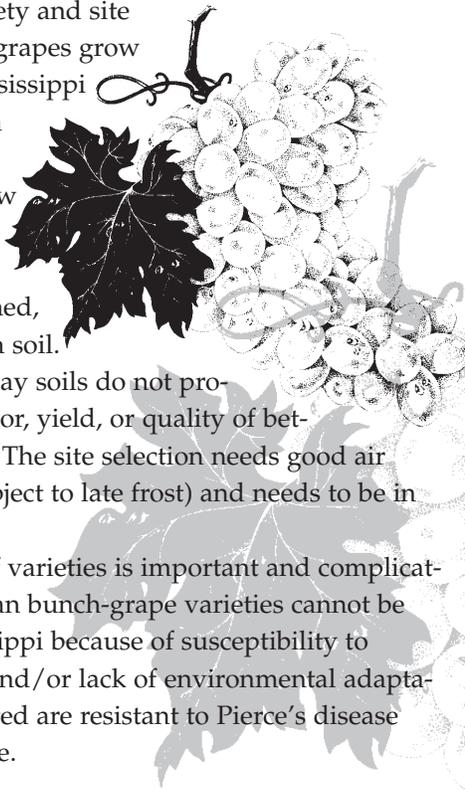
1. **Fredonia**—A deep-purple grape, early midseason, vigorous, productive, with medium to small clusters of large berries. Berries ripen uniformly.
2. **Niagara**—A white grape, midseason, vigorous, productive, medium size, with compact clusters of large berries.

South Mississippi

1. **MidSouth**—A vigorous vine resistant to Pierce's disease but highly susceptible to root-knot nema-

todes when grown in infected soil. Dark-blue grape good for eating fresh and making jellies. Harvest dates are from late July to mid-August.

2. **MissBlue**—A dark-blue grape with open clusters. Highly susceptible to anthracnose, requiring a persistent fungicide program to keep this disease under control. Harvest dates in Mississippi are from late July to mid-August. Recommended for juices and jellies.
3. **Miss Blanc**—Grapes of Miss Blanc are white to green in color, sweet, mild, and pleasantly flavored. Fruit ripens in late July to mid-August.
4. **Orlando Seedless**—A new seedless bunch grape released from Leesburg, Florida. The variety has good flavor, large attractive bunches, early ripening, and vigorous vines. Susceptible to anthracnose and root-knot nematodes.
5. **Daytona**—A pink bunch grape recommended for fresh fruit consumption, released by the University of Florida. The fruit has vinifera-like fresh fruit character, tenacious berries (permits handling without berries falling from the cluster), and superior bunch and berry size. Susceptible to anthracnose and root-knot nematodes.
6. **Conquistador**—A multipurpose bunch grape released by the University of Florida. It yields well and is recommended for wine, juice, and jelly as well as table use. Susceptible to anthracnose and root-knot nematodes.
7. **Suwannee**—An early ripening variety released by the University of Florida for wine and fresh fruit. The major advantages of Suwannee are its early ripening, improved berry size, later blooming, and vigorous growth. Susceptible to anthracnose and root-knot nematodes.



GRAPES, MUSCADINE

Muscadines are native to the Southeast and will thrive in most areas where winter temperatures do not go below 10 degrees Fahrenheit. The basic considerations are the same whether a few vines or several acres are planted. Three main factors—climate, site, and soil—determine where to locate a vineyard. Give special care in selecting a frost-free site that is above the surrounding terrain to provide air drainage through and away from the vineyard. Muscadines produce best in full sun on fertile, well-drained soil. A sandy loam is ideal, but the grapes grow on a variety of soils.

There are two types of muscadine varieties—those with imperfect flowers (only female flowers) and those with perfect flowers (male and female floral parts in the same flower).

A single vine of a perfect-flower variety can pollinate eight surrounding imperfect-flower vines. In a single-row planting of predominantly imperfect-flower varieties, make every third vine a pollinator.

The muscadine grape ripening season begins in late August and extends into October, depending on varieties.

1. **Black Beauty**—Purple, crunchy skin, large size, excellent flavor; female; good yields, extends harvest, excellent vigor; excellent for fresh fruit.
2. **Black Fry**—Purple, large, good vigor; medium-tough skin, excellent flavor, excellent for fresh fruit, female.
3. **Carlos**—Bronze, tough skin, medium size, good flavor; self-fertile; excellent for juice, jelly, and wine; high yields.
4. **Darlene**—Bronze, large fruit, medium-tough skin, good flavor, poor vigor; female; good for fresh fruit.
5. **Dixieland**—Bronze, medium-large; excellent flavor, medium-tough skin, self-fertile; unpredictable yields and size; good for fresh fruit.
6. **Doreen**—Bronze, tough skin, medium size, good flavor; self-fertile, high yields; excellent for juice, wine, and jelly.
7. **Fry**—Good flavor, medium-large size; bronze, crunchy skin; female; must spray for disease control; cold-sensitive, poor vigor; good for fresh fruit.
8. **Fry Seedless**—Must spray with gibberellic acid to reach desirable size; skin moderately tough; light purple; good flavor; small fruit. Makes excellent raisins.
9. **Granny Val**—Bronze, medium-tough skin, large size; late-maturing, good flavor; self-fertile, uniform ripening; sensitive to cold weather; good for fresh fruit.
10. **Hunt**—Purple; medium size, good flavor, medium-tough skin; female; good for juice, wine, and jelly.
11. **Ison**—Purple, medium-large size, strong muscadine flavor, medium-tough skin; self-fertile; uniform ripening, good pollinator, good yields; good for fresh fruit.
12. **Jane Bell**—Bronze; medium-large size; tough skin; good sweet flavor, uneven ripening; self-fertile; good for fresh fruit.
13. **Jumbo**—Purple, large size, good flavor, tough skins; female.
14. **Magnolia**—Bronze, tough skin, medium size, good flavor; self-fertile; excellent for juice, wine, and jelly.
15. **Noble**—Small, purple, good flavor, tough skin; self-fertile; excellent for juice, wine, and jelly.
16. **Scuppernong**—Bronze, tough skin, medium size, good flavor; female; good for juice, wine, and jelly.
17. **Sterling**—Bronze, tough skin, medium size; self-fertile; excellent for juice, wine, and jelly.
18. **Sugargate**—Medium-large size, purple, inconsistent yield; good flavor, medium-tough skin; female; good for fresh fruit.
19. **Summit**—Bronze, medium-large fruit, excellent flavor; high sugar content, medium-tough skin; female; susceptible to disease and insect problems; good for fresh fruit.
20. **Supreme**—Purple, large fruit, good flavor, medium-tough skin, heavy yield; female; good for fresh fruit.
21. **Sweet Jenny**—Bronze, large size, excellent flavor; crunchy skin; female; good for fresh fruit.
22. **Triumph**—Bronze, medium-tough skin, medium-large size; good muscadine flavor; self-fertile; non-slip skin, dry scar, good for fresh fruit.
23. **Watergate**—Bronze, large size, good flavor, medium-tough skin; uneven ripening; female; good for fresh fruit.

PEACHES

Peach varieties listed below are recommended for Mississippi areas **north** of Hattiesburg. Plant a commercial peach orchard with 15 percent of the first three varieties listed and 15 percent of the last three varieties, with the remaining 70 percent consisting of the middle 10 varieties.

Variety	Stone	Required chilling hours	Average maturity date
Springold	Cling	850	May 30
Bicentennial	Cling	700	June 4
Surecrop	Cling	950	June 10
Sentinel	Semifree	850	June 17
Harvester	Free	700	June 29
Redhaven	Free	950	June 27
Majestic	Free	800	July 9
Ruston Red	Free	850	July 20
Dixiland	Free	750	July 22
Redskin	Free	750	July 25
Quachita	Free	850	August 3
La Jewel	Free	850	August 8

(South Mississippi)

Peach varieties listed below are recommended for Mississippi areas **south** of Hattiesburg. Plant a commercial peach orchard with 15 percent of the first three varieties and 15 percent of the last three varieties, with the remaining 70 percent consisting of the middle nine varieties.

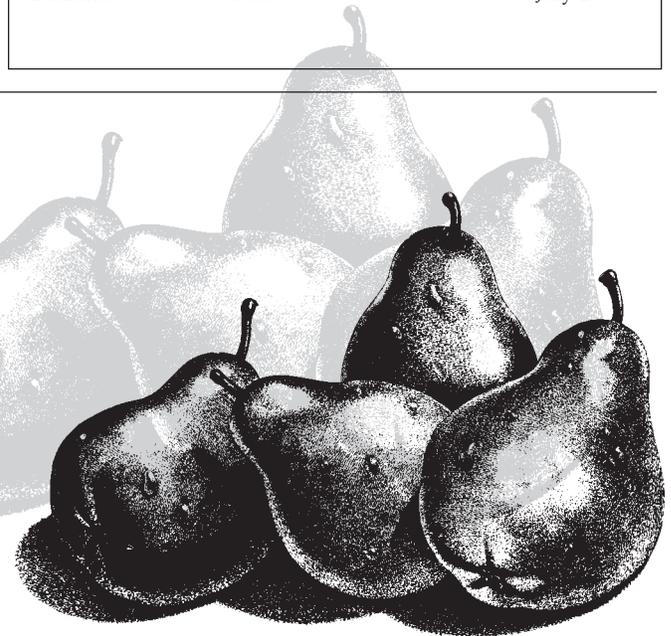
Variety	Stone	Required chilling hours	Average maturity date
Florida King	Cling	450	May 18
Bicentennial	Cling	750	May 26
June Gold	Semifree	600	May 30
La Pecher	Semifree	450	June 6
Idlewild	Semifree	550	June 9
Harvester	Free	750	June 15
La White	Semifree	650	June 18
La Gold	Free	700	June 19
La Festival	Free	450	June 25
La Feliciana	Free	550	July 5
Dixiland	Free	750	July 20

PEARS

Pears grow in most areas of Mississippi. In the Southeast, U.S. pears should have some resistance to diseases such as fire blight and leaf spot. Unfortunately, most varieties that exhibit some degree of disease resistance are of poor quality and/or are small in size. Most pear varieties are self-incompatible (self-sterile), so plant at least two different varieties with similar blooming periods (early, middle, or late). Because of possible frost damage, only plant early-blooming, low-chill pears in extreme south Mississippi.

Most pear fruit attain a higher quality if picked several days before maturity and allowed to ripen off the tree at 70 degrees Fahrenheit.

1. **Kieffer**—The most extensively grown pear in the South; this old variety has little resistance to fire blight and is poorly adapted. Considered an early to mid-bloomer, it may suffer late-frost damage. The Kieffer pear matures in late September or October. Rated good for preserves.
2. **Orient**—This large-fruited, roundish pear ripens in mid-August to early September. The tree is vigorous and spreading; shows some resistance to fire blight and is well-adapted throughout the state.



3. **Moonglow**—This spur-type tree is vigorous, blooms late, and has good fire blight resistance. Fruit quality is good with a mild flavor, few grit cells, and soft flesh; good for canning. Fruit ripens in mid-August.
4. **Magness**—This pear is rated high in quality but requires 5 to 6 years before fruit bearing begins.

High resistance to fire blight. Ripens in late August. Magness does not produce good pollen.

5. **Ayers**—Trees are vigorous, upright, and blight-resistant. The chilling requirement is high; recommended for north Mississippi only. Fruit is an attractive yellow with red blush and ripens in late July to early August. The blooming period is early.
6. **Le Conte**—Adapted for north and middle Mississippi; good resistance to fire blight. Fruit is yellow with red blush. Excellent eating pear. Bloom period is early.
7. **Baldwin**—An excellent variety for coastal areas because of its low cold requirement to break dormancy. The fruit is almost round and golden-yellow when ripe. Ripens in mid-October, and the blooming period is early.
8. **Maxine**—Less resistance to fire blight than Magness or Moonglow. Trees are vigorous and upright. Maxine can be planted with Moonglow or Magness for cross-pollination. It ripens in mid-September between Orient and Kieffer. Fruit quality is fair to good.

Local Selection Recommended for Trial Planting

1. **Cox**—Has been grown in Lumberton-Poplarville, MS, area for 40 years and has never been known to fire blight. Excellent eating pear that ripens in September and blooms in midseason.
2. **Diamond**—This vigorously growing tree has not shown evidence of fire blight. It produces extremely large, firm fruit, excellent for preserves, cooking, and canning. Ripens in late summer and blooms in midseason.
3. **Fan-Stil**—This bell-shaped pear is a creamy yellow color with a touch of pink or blush. Some say

it is an improved Le Conte. The tree is vigorous, disease-resistant, and consistently produces large quantities of fruit. It is good for eating fresh and for cooking. Bloom period is midseason.

4. **Southern Queen**—The true origin of this south Mississippi pear is unknown. Southern Queen produces fruit that is bell-shaped (true pear). One-pound fruit is not uncommon when fruit is thinned or in years of low fruit set. In most years fruit set is good, and the fruit is comparable in size to Bartlett or Kieffer. The fruit ripens in August and becomes very mellow at full maturity. The color of the fruit skin is a striking russet or bronzy brown. The flesh is creamy yellow with an excellent texture for eating. The Southern Queen has never been known to have fire blight and may be highly resistant as evidenced by the 60-year-old trees still in existence and bearing. Bloom period is early to midseason.
5. **Walt**—The parent tree appears to be small-growing. It produces small fruit that is edible while immature (green) with a decent flavor and sweetness. The fruit matures in late July and August, becoming mellow and soft-fleshed as it matures. When fully ripened, it is most suitable for eating fresh and for making jams and jellies, but it is not suitable for making preserves. During its 40-plus years, the tree has not shown evidence of fire blight or leaf spot diseases (Dr. Walter Davis). The bloom period is considered early.
6. **Warren**—Discovered in Hattiesburg by T. O. Warren, it is a pear with the quality of Magness, Comice, or Seckel. It appears to be very resistant to blight but also takes several years to come into bearing.

ASIAN PEAR VARIETIES

Sometimes called pear apples, Asian pears are round and as crisp as apples, but also juicy and flavorful. All Asian pears listed require pollinizers, and they pollinate each other. Most European pear varieties also pollinate Asian pears. They are not as winter-hardy as regular pear varieties.

1. **Hosui**—An attractive fruit with a golden russet skin. The flesh is firm, juicy, and mild, with good quality.
2. **Chojuro**—Large, round fruit; partially self-fruitful.

The skin color is russet to brown-orange. Fruit is sweet and spicy, and the tree is highly productive.

3. **Seuri**—Round-shaped Chinese pear. Skin is unusual—a yellow undercolor with a mottled partial russetting. Flesh is bright white, good crisp texture, aromatic with a floral, sweet flavor. Fruit quality is good, and size is large to very large.
4. **Twentieth Century (Nijiseiki)**—The medium-to-large fruit has very smooth greenish-yellow skin and creamy white flesh that is juicy and aromatic. The tree is upright and productive.



PECANS

The pecan varieties recommended for Mississippi are listed at right. Some are designated for north Mississippi, some for south Mississippi, and some are specifically for home plantings. Disease resistance is the primary trait for home plantings.

Variety	North	South	Home
Desirable	X	X	
Forkert	X	X	X
Owens	X	X	X
Sumner		X	X
Cape Fear		X	
Stuart	X	X	
Choctaw	X		
Elliott		X	X
Pawnee	X	X	X
Kiowa	X	X	
Candy			X
Melrose			X
Jackson			X

PERSIMMONS, ORIENTAL OR JAPANESE

Oriental persimmons produce flowers that are male, female, and/or perfect (male and female flower parts present in the same flower). Some cultivars produce fruit from flowers when pollination has not occurred. These fruit contain no seeds.

Some cultivars produce fruit that is astringent except when fully ripe. Others produce fruit that is not astringent, even when unripe or green.

Oriental persimmons often fail to produce full crops because of pollination problems or climactic stress. Most cultivars will set fruit without pollination and will mature the seedless fruit on the plant if environmental factors are favorable. However, this fruit set is fragile, and environmental stress, such as drought, can cause the plant to release its crop before it matures. Be careful to maintain favorable growing conditions. Some cultivars will have dark brown spots or streaking around the seeds if pollinated but will be clear orange when seedless. Other cultivars lack the dark streaking regardless of seed set.

Non-astringent Cultivars

Early Season Cultivar

Izu—The earliest ripening non-astringent cultivar. The tree regulates crop loads well, producing large fruit that is generally blemish-free. Sugar content is not as high as later maturing cultivars.

Midseason Cultivars

1. **Matsumoto Wase Fuyu**—An early ripening bud sport of Fuyu. The tree sets many flowers and pro-

duces heavy-clustered crops. Thin clusters to prevent bent limbs with excessive fruit loads. The tree is moderately vigorous and medium-sized.

2. **Gosho**—Unseeded fruit may have good size; seeded fruit has better flavor. Requires a pollinator for seeded fruit.
3. **Ichikikei Jiro**—A bud sport from Jiro. The tree is comparatively smaller than most and regulates its crop well. It will mature seedless crops and is a good homeowner cultivar. Apical end splitting occurs in a percentage of the fruit. The tree is around 7 days later than most cultivars to begin growing in the spring, which helps it escape late frost injury.
4. **Hana Fuyu**—Also known as Giant Fuyu, it regulates its crop load well and is of medium vigor. The fruit is slightly larger than most, generally free of imperfections and may be slow to lose astringency. The tree is a good homeowner cultivar.
5. **Hanagosho**—A large tree with vigorous upright growth and a strong scaffold system. The tree usually has a few male flowers every year, and crop regulation is good. The tree is a good homeowner cultivar.
6. **Jiro**—Can be erratic in cropping when the tree is young. Older trees have a good, well-spreading shape and produce quality crops. Some apical end fruit splitting will occur.
7. **Midia**—The largest of the non-astringent types, with fruit weighing three-fourths of a pound. An indented ring forms around the top half of the fruit. The tree is an inconsistent cropper and seems more vulnerable to tree decline than other cultivars.

Late Season Cultivars

1. **Fuyu**—Also known as Fuyugaki, is the most popular non-astringent cultivar and the most widely grown persimmon cultivar in the world. Fruit thinning is usually necessary to ensure large fruit, prevent clustering, and regulate crop loads. Fruit imperfections are few, yields are good, sugar content is high, and the tree is generally well adapted.
2. **Suruga**—The sweetest of the non-astringent types. Red coloration in mature fruit is strong, and fruit imperfections are infrequent. Thin crop loads to prevent overproduction.

Astringent Cultivars

Early Season Cultivars

1. **Siajo**—Considered one of the sweetest persimmons, although traces of astringency sometimes remain when the fruit is soft. Fruit are relatively small with a long conic shape and a translucent, jelly-type flesh. The tree is large, upright, and can produce heavy crops. It is a good homeowner cultivar.
2. **Giombo**—Similar to Siajo in fruit quality, although the fruit are much larger. The fruit are light translucent-orange and thin-peeled with a sweet, juicy, jelly-type flesh. Giombo fruit are a connoisseur's choice. The tree is early to start growing in the spring and is sometimes injured by freezing temperatures.

Midseason Cultivars

1. **Tanenashi**—The most popular astringent cultivar, it matures heavy crops without pollination, and will seldom set seed even if pollinated. It is usually

- best to thin the fruit to encourage vegetative growth. The fruit, often large, can weigh more than three-fourths of a pound. Skin is deep yellow to orange when mature. The flesh is orange, pasty, comparatively dry, and of acceptable quality. Harvest may extend from September through November. It is a good tree for homeowners.
2. **Hachiya**—A common commercial cultivar. Fruit is high quality and jelly is fleshed with an attractive red skin. Fruit often has concentric ring cracking at the apical end and will ripen unevenly, starting from these points.
3. **Sheng**—This tree spreads well and has large fruit with lobed sections looking somewhat like a 4- or 6-leaf clover from the top. Fruit has a high jelly content, is bright orange, and when pollinated will set many seeds.
4. **Great Wall**—A strong-growing, upright tree with small, four-sided fruit. The flesh is dry, similar to Tanenashi, but of excellent quality.
5. **Tamopan**—A cultivar with large fruit having a circular depression around the top third nearest the stem. The fruit is juicy, watery, and stringy with a thick peel.
6. **Gailey**—A standard pollinating cultivar with small- to medium-sized fruit. Concentric ring cracking is common. Its fruit are very dark-fleshed, even with small seed numbers. The primary purpose of this cultivar is pollination.
7. **Ormond**—Sometimes called the Christmas persimmon. Fruit are long, conic, and often harvested in January. The tree begins growing early in the spring, which increases chances for freeze injury.

PLUMS

Plum production in the Southeast is limited because older commercial varieties are susceptible to black knot, bacterial canker, bacterial fruit spot, and plum leaf scald. Breeding programs in Alabama and Georgia have developed varieties resistant to these diseases, so this should cause expanded production.

The new Japanese-type varieties developed resulted from crossing native plums with commercial vari-



eties. Resistance to bacterial, fungal, and viral diseases came from the native plums, while the commercial varieties in the crosses provided desirable fruit quality.

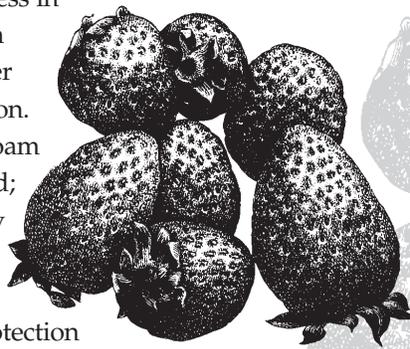
The chilling requirement for most varieties of Japanese-type plums varies from 550 to 800 hours. This means Japanese-type plums are early blooming in middle and north Mississippi and may be susceptible to late-frost damage.

The culture of plums is very much like peaches. A major difference is that most plum varieties are not self-fruitful (self-sterile) and require another variety for cross-pollination. Methley, Bruce, and Au-Amber are self-fertile and can be used to pollinate most other plums.

1. **Au-Amber**—A red-purple skin with yellow-amber flesh, small fruit with medium firmness. Recommended for roadside, local markets, and home use; self-fruitful.
2. **Au-Rubrum**—Maroon skin with red flesh. Large, firm fruit makes cultivar suited for commercial market.
3. **Au-Rosa**—Red skin and yellow-red flesh. Has large, firm fruit suitable for the commercial market.
4. **Au-Cherry**—Red skin and flesh. Small fruit of medium firmness recommended for home production.
5. **Bruce**—Usually marketed as a “green plum.” Reliable fruit production after late frost; self-fruitful.
6. **Crimson**—Red skin and flesh. Resistant to black knot and bacterial canker.
7. **Methley**—Red-purple skin color with good fruit quality. Used primarily to pollinate other varieties but is susceptible to black knot; self-fruitful.
8. **Morris**—Very attractive fruit; not self-fertile. Skin color is purple; flesh color is blood red. Fruit shape is round to oval with an average size of 1.8 inches. Ripens around June 16.
9. **Robusto**—Usually picked as a green plum; vigorous and productive. Not self-fertile; skin color is bright red and flesh color is red; average fruit is round and about 1.6 inches. Ripens around June 5.
10. **Segundo**—Can be picked as a green plum, like Robusto. Not self-fertile; skin color is yellow/red, flesh color is yellow/red; fruit shape is round with an average size of 1.9 inches. Ripens around June 11.

STRAWBERRIES

Factors critical to success in strawberry production include soil type, water availability, and location. Well-drained, sandy loam soils are recommended; avoid organic and clay soils. Sufficient water-pumping capacity is required for freeze protection with overhead irrigation to prevent flower, fruit, or plant damage. A location near potential customers is important for pick-your-own marketing.



Varieties recommended for north Mississippi, matted-row-production system, include the following:

1. **Cardinal**—An Arkansas release. Ripens in midseason (mid-May) over a long period, with large yields produced at each harvest. Reported to be vigorous and resistant to the leaf diseases, leaf spot, leaf scorch, and powdery mildew. Cardinal is probably the best overall recommended strawberry.
2. **Sunrise**—Glossy, bright-red berries that do not darken. Good dessert quality but poor freezer characteristics. Very vigorous plants; resistant to the soil-borne diseases red stele and verticillium wilt. Susceptible to leaf spots. Poor freezer characteristics.
3. **Dixieland**—Large, firm berries. Skin and flesh are bright red; acid; fair dessert quality. Good for freezing and preserving; early. Foliage is generally healthy; susceptible to virus diseases that may seriously reduce yields after the first year's harvest.

4. **Pocahontas**—Large, attractive berries, blunt and conic. Medium firm; skin is bright and medium red; flesh is red; subacid. Good dessert quality; good for freezing. Foliage resistant to leaf scorch and partially resistant to leaf spots. Plants are vigorous and make runners freely.
5. **Tennessee Beauty**—Berries are attractive, uniform, medium-size, and long conic. Color is a glossy medium to deep red. Good dessert quality; mildly subacid flavor. Good freezing quality; late season; large caps; runs freely. Plants are resistant to leaf spots and leaf scorch and tolerate virus diseases.
6. **Comet**—Arkansas release. Yields better than Sunrise but not as productive as Cardinal; early ripening. Plants are vigorous, prolific, and resist leaf spot, leaf scorch, and powdery mildew with tolerance to spider mite injury. Do not plant Comet in soils with a history of red stele disease.

South Mississippi, annual hill, black-plastic-mulch production system:

1. **Tangi**—Louisiana release. Excellent production and resistant to most foliage and fruit diseases; acid.
2. **Chandler**—California release. Large, somewhat soft fruit; good production.
3. **Douglas**—California release; large, soft fruit.
4. **Florida 90**—Productive, but may lose fruit to late-spring freezes.
5. **Cardinal**—Arkansas release; attractive sweet fruit. See earlier description.

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