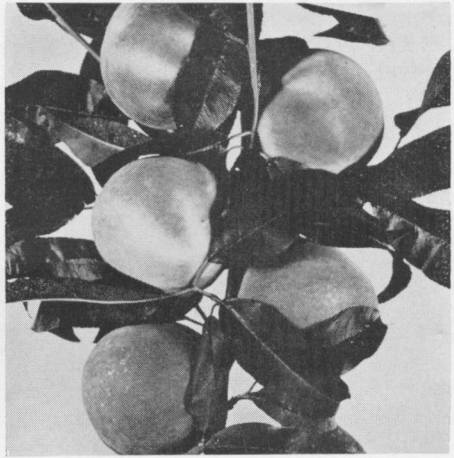


Performance of Peach Varieties in Alabama



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COMMERCIAL PEACH production in Alabama has reached an all-time high.

Although competition from the Fort Valley, Georgia, area has been keen for early market peaches, commercial peach tree population in Alabama has increased from a few hundred around the turn of the century to more than 900,000 at present.¹ The majority of this increase has been in early maturing varieties, such as Cardinal, Hiland, Dixired, and Redcap. Elberta is still the leading variety in Chilton County accounting for 15 per cent of the total tree population. However, early maturing varieties in the Dixired season comprise approximately 30 per cent of the total.

¹Smith, Melvin W., and Danner, M. J. Alabama's Changing Peach Industry. Ala. Agr. Expt. Sta. Cir. 124. 1957.

Although some early maturing varieties are grown in Blount County, there is no advantage for early maturing varieties in this area. Late maturing varieties such as Elberta, Shipper's Late Red, Rio-Oso-Gem, and J. H. Hale, grown primarily for the late season local market, account for 27 per cent of the total plantings.

Concerted peach variety testing was begun at the Auburn University Agricultural Experiment Station in 1939 when 72 varieties and chance seedling selections were planted. With this beginning new and improved varieties have been sought and tested for adaptability and usefulness in Alabama. New varieties were added in 1940, 1942, and 1943 for observation trials. Sixteen varieties added in 1948 included such well known varieties as Redhaven and Newday. In

1952, 12 USDA releases were planted for evaluation, 10 from Fort Valley, and 2 from Beltsville, Maryland. A new variety block was set the winter of 1961 at Auburn with new varieties that have been introduced by state experiment stations, private breeders, and the USDA. Several of these new varieties have indicated a low-chilling requirement for breaking dormancy.

Peach variety testing was begun at the Wiregrass Substation, Headland, in 1954 to evaluate adaptability of low-chilling varieties, including Hiland, Southland, Newday, Maygold, Redskin, and Redcap. Additional low-chilling selections were added in 1957 and 1961.

Testing low-chilling varieties was begun at the Gulf Coast Substation, Fairhope, in 1961. This area is on the East shore of Mobile Bay.

VARIETY RECOMMENDATION

Many varieties adapted for commercial plantings are satisfactory for local or home use. Since many have been

named and tested, only those that have exhibited good commercial qualities are discussed.

Varieties recommended for commercial plantings are listed in Table 1. These varieties have performed well in trial plantings and many are widely planted for commercial production in the Chilton County and Blount County peach areas.

VARIETY DESCRIPTION

Springtime, (Unnamed Seedling of Luken's Honey × July Elberta) × Robin, is an early maturing, low-chilling white fleshed peach; this peach has performed well in the Chilton area, ripening 8½ weeks before Elberta and is desirable for limited plantings as an early local or roadside market peach. Springtime is small, round, juicy, deep red skin, and ripens May 14 to 20. Its quality is somewhat better than Mayflower. Springtime is highly susceptible to brown rot and has a chilling requirement of about 650 hours.

TABLE 1. VARIETIES RECOMMENDED FOR COMMERCIAL PLANTING IN CENTRAL AND NORTHERN ALABAMA

Variety	Flesh color ¹	Stone freeness ²	Quality	Chilling requirement ³	Average calendar ripening dates ⁴	Weeks before Elberta
Hiland	Y	C	good	750	June 4	6½
Cardinal	Y	C	good	900	June 4	6½
Redcap	Y	C	good	750	June 5	6
Dixired	Y	C	good	900	June 7	6
Coronet	Y	SF	excellent	800	June 14	5
Redhaven	Y	F	excellent	950	June 21	4
Ranger	Y	F	excellent	950	June 24	3½
Keystone	Y	F	good	750	June 28	3
Southland	Y	F	good	750	July 5	2
Redglobe	Y	F	good	900	July 5	2
Loring	Y	F	good	750	July 9	1½
Blake	Y	F	excellent	750	July 15	½
Redskin	Y	F	excellent	750	July 19	0
Elberta	Y	F	excellent	900	July 19	0
Rio-Oso-Gem	Y	F	good	850	July 26	-1

¹ Y = yellow flesh.

² C = clingstone SF = semi-freestone F = freestone.

³ Number shown is the approximate number of hours below 45°F that is required to break the rest period.

⁴ Approximate calendar date of ripening, based on July 19 as the average maturity date for Elberta in Chilton County.

Hiland, Southland × (Hiley × Halehaven), was developed by the USDA Field Station at Fort Valley and introduced commercially in 1952. Fruit ripens 6½ weeks earlier than Elberta and 4 to 5 days earlier than Dixired. It is medium in size, yellow flesh, clingstone, fairly well colored and juicy, and is fairly firm at shipping ripe maturity, but tends toward excessive split pits. Trees are very productive, vigorous, with large blossoms. Chilling requirement for Hiland is about 750 hours.

Cardinal, Halehaven × selfed, was introduced by the USDA Field Station, Fort Valley in 1951. Cardinal ripens 6½ weeks before Elberta and about 4 days before Dixired. Fruit is yellow fleshed, small, clingstone, well colored, and is fairly firm at shipping maturity. Trees are productive and moderately vigorous. Chilling requirement is about 900 hours. Cardinal is recommended for planting with Hiland. In mild winters Cardinal may exhibit prolonged dormancy since it has a higher chilling requirement than Hiland.

Redcap, Southland × Dixired, was developed by the USDA Field Station, Fort Valley and introduced commercially in 1952. Redcap ripens approximately 6 weeks before Elberta and normally 1 or 2 days before Dixired. Fruit is very similar to Dixired, yellow flesh, round, clingstone, medium size, well colored, and firm at shipping maturity. Redcap has good quality and requires approximately 750 hours chilling.

Dixired, Halehaven × selfed, was named and introduced in 1945 by the USDA Field Station, Fort Valley. Dixired is the most widely planted early maturing peach. Shipping maturity is 6 weeks before Elberta. Trees are vigorous, productive, and fruits tend to be small in some years unless thinned heavily. Very often this variety will not average 2 inches in diameter. Fruit is well colored, firm, yellow fleshed, clingstone, and good quality. Chilling re-

quirement is about 900 hours. Dixired is recommended for planting with Redcap to offset any prolonged dormancy that Dixired might exhibit in mild winters.

Coronet, (Halehaven × selfed) × Dixigem, was introduced commercially in 1953 from Fort Valley by the USDA Field Station. Fruit ripens 5 weeks before Elberta, is well colored, ovate, medium size, mild flavored, yellow fleshed, smooth textured, and firm at shipping maturity. Flesh tends to cling to pit when not fully ripe but is semi-freestone when soft ripe. Trees are productive, vigorous, but susceptible to bacterial leaf spot. Blossoms are small and tend to open early. Chilling requirement is about 800 hours. Coronet is recommended as an early-midseason peach to replace Dixigem.

Redhaven, Halehaven × Kalhaven, was introduced by Michigan State University at South Haven, Michigan. Fruit ripens 4 weeks before Elberta and 1 week later than Coronet, yellow flesh, semi-cling at shipping maturity, skin color not as good as Dixired, firm flesh, and good quality. In some years fruit will develop a rough suture under Alabama conditions. Trees are productive, vigorous, and need considerable thinning to size properly. Chilling requirement is about 950 hours. Redhaven is recommended for the 4 weeks before Elberta season.

Ranger, Raritan Rose × selfed, was introduced in 1952 by the USDA Field Station, Beltsville. Fruit ripens 3 to 3½ weeks before Elberta, yellow flesh, large, good color, firm, ovate, nearly a freestone at shipping maturity, and has good quality. The fruit ripens uniformly and can be harvested in three pickings. Trees are productive and vigorous. This variety has exhibited high resistance to bacterial leaf spot in Chilton County. Poorly pruned trees tend to develop weak crotches. Ranger is recommended for the same season as Keystone, and it

has a chilling requirement of about 950 hours.

Keystone, Newday × Southland, was introduced by the USDA Field Station, Fort Valley, in 1954. Fruit is large, round, light colored, juicy, with good quality, ripening 3 weeks before Elberta. Flesh is yellow, smooth textured, and nearly freestone at shipping maturity. Trees are productive and vigorous, but do not produce heavy crops until the 4th or 5th year. Blossoms are small and tend not to set heavy crops under high nitrogen conditions. Keystone is recommended for a midseason peach. It has a chilling requirement of about 750 hours.

Southland, Halehaven × selfed, was introduced in 1946 by the USDA Field Station, Fort Valley. Fruit is large, well colored, ripens 2 weeks before Elberta, freestone, yellow flesh, and has good quality at shipping maturity. Objections to Southland are its susceptibility to bacterial leaf spot and unproductiveness as young trees. Older trees are vigorous, productive, and have large showy petals. Southland has a chilling requirement of about 750 hours.

Redglobe, (Admiral Dewey × St. John) × Fireglow, was introduced by the USDA Field Station, Beltsville, in 1954. Fruit ripens 2 weeks before Elberta in Chilton County, is yellow fleshed, well colored, round, firm, good quality, and remains on the tree at shipping maturity. Redglobe is a freestone and ships well. Trees are moderately resistant to bacterial leaf spot. To size properly Redglobe must be thinned. Trial plantings are recommended for partial replacement of Halehaven and Southland. Chilling requirement is about 900 hours.

Loring, Frank × Halehaven, was introduced by the Missouri Agricultural Experiment Station in 1946. Fruit ripens 1 to 1½ weeks before Elberta, is yellow fleshed, freestone, firm, good quality and color, medium size, and handles well for commercial packing. Trees are vigorous

and productive. Loring has a chilling requirement of about 750 hours and is recommended for the season between Southland and Elberta.

Blake, J. H. Hale × Primrose, was introduced in 1953 by the New Jersey Agricultural Experiment Station. Fruit ripens one-half week before Elberta, is freestone, yellow fleshed, has good color, quality, and firm flesh at shipping maturity. Trees are moderately vigorous and tend to set light crops in most years. Chilling requirement is about 750 hours. Blake is recommended for commercial planting to precede Elberta by 3 to 4 days.

Redskin, J. H. Hale × Elberta, was released by the Maryland Agricultural Experiment Station in 1944. Fruit ripens at the same time as Elberta, has yellow flesh, good color, and quality, is freestone, firm, and large when properly thinned. In some years a rough suture will develop. Trees are moderately vigorous and productive. Blossoms tend to set fruit every year. Redskin is moderately resistant to bacterial leaf spot. Chilling is about 750 hours.

Elberta, unknown, was discovered and introduced by Samuel H. Rumph, Marshallville, Georgia, in 1870. Fruit ripens normally about July 19 in Chilton County, is freestone, yellow fleshed, has excellent quality, and ships very well. Elberta has rather poor skin color and is susceptible to bacterial leaf spot. Trees are vigorous and productive. Regular Elberta is recommended for its popularity and good quality.

Rio-Oso-Gem, unknown, was introduced in 1933 by W. F. Yerkers, Rio-Oso, California. Fruit ripens 1 week after Elberta, is yellow fleshed, has excellent quality, round, firm, well colored, and good size when thinned properly. Chilling requirement is about 850 hours. Trees are vigorous, and productive. Rio-Oso-Gem is recommended for late market.

VARIETIES FOR SOUTHERN ALABAMA

Varieties Springtime, Hiland, Redcap, Southland, Loring, and Redskin have low chilling requirements and commercial qualities. These varieties are also recommended for the southern half of Alabama or that portion of the State that lies south of Montgomery. Ripening dates should be a few days earlier in the extreme south portion. This early ripening provides an early peach for market. In some years, particularly those that are mild, it can be expected that these varieties may not perform as described. Therefore, they are recommended as trial plantings rather than for extensive commercial operation.

TABLE 2. VARIETIES FOR TRIAL PLANTING IN SOUTHERN ALABAMA

Variety	Chilling requirement	Earlier than Elberta ¹
	Hours	Weeks
Springtime	650	8½
Hiland	750	6½
Redcap	750	6
Southland	750	2
Loring	750	1½
Redskin	750	0

¹In southern Alabama ripening dates should be 5 to 10 days earlier than in Chilton County.

TESTED VARIETIES NOT RECOMMENDED

The following varieties have been tested but are not recommended for commercial planting in Alabama:

After Glow	Maybell
Alabama	Mayflower
Ambergem*	Missouri
Augbert	Merrill Beauty
Arp	Merrill Brilliant
Bell of Georgia	Merrill Dandy
Best May	Merrill Fiesta
Brackett	Merrill 49er
Burbank Elberta	Merrill Gem
Cannon	Merrill Goldrush
Champion	Merrill Hale
Cherry Red	Merrill June
Cumberland	Merrill Pageant
Dixigem	Polly

Dixigold	Prairie Clipper
Early East	Prairie Dawn
Early Elberta	Prairie Daybreak
Early Gold	Prairie Rambler
Early Hiley	Prairie Rose
Early-Red-Fre*	Prairie Sunrise
Early Rose	Radiance
Early Triogem	Raritan Rose*
Fairhaven	Red Bird
Fay Elberta	Red Crest
Fireglow	Red Elberta
Fisher	Red Rose
Gay Elberta	Richaven
Gemmer's Late Elberta	Rodeo
Giant Jubilee	Slappay
Goodcheer	Southern Glow
Golden East	Southaven
Golden Jubilee	Stark's Delicious
Goldenrod	Stoner
Halberta	Story Early Elberta
Halegold	Sullivan Elberta
Hale Harrison Brilliant	Summer Crest
Halehaven*	Summer Rose
Heath Cling	Sunbeam
Indian Cling*	Sunglow
Jerseyland	Sunhaven
Jewel	Sunhigh
J. H. Hale	Sure Crop
July Elberta	Triogem
July Heath	Tulip
June Elberta	Vanguard
June Gold	White Hale
Late Rio	White Haven
Late Rose	White Rose
Liberty	World's Earliest
Lizzie	Yates Late Elberta
	Yellow Hiley

* Varieties recommended for home use.

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