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Peach and Nectarine Varieties for Virginia

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Introduction

Peach and nectarine are both members of the genus and species Prunus persica, and probably differ by only a single gene for skin pubescence (hairs on the fruit surface). One probably originated as a mutation of the other, but we do not know which came first. The species originated in China and was taken by traders from there into Persia, Greece, Italy, and other temperate areas of Europe. Peach and nectarine varieties may have yellow or white flesh. In Virginia different varieties ripen over a wide range of dates, from early June until mid-September. Varieties also differ in fruit size, susceptibility to some diseases and susceptibility to low winter temperatures, chilling requirements, and fruit disorders such as fruit cracking and split-pit. Descriptions of some of these characteristics are included in the next section of this publication.

Successful peach production requires growing varieties that are adapted to local growing conditions. Peaches have a short shelf-life, so a number of varieties ripening sequentially are needed to maintain a supply of fruit during the summer months. Most peach varieties look similar to the average consumer, so no single variety has dominated the market as 'Delicious' has for apple. The lack of variety recognition allows peach growers to plant new improved varieties without consumer resistance. However, evaluating new varieties can be expensive and frustrating to commercial fruit growers.

There are probably more than 4,000 peach and nectarine varieties, and new peach and nectarine varieties are constantly being introduced from publicly funded and private breeding programs. More than 100 peach and nectarine varieties are currently available from U.S. nurseries. Commercial producers who find seedlings or mutations with good fruit characteristics also may name and introduce these as new varieties. In an effort to identify varieties with commercial potential, variety evaluation trials were initiated in 1988 and 1990 at the

Virginia Tech College of Agriculture & Life Sciences Kentland Farm near Blacksburg. Characteristics of the varieties included in this study are described in this publication. New varieties have been planted for evaluation and will be described in future publications. Before a variety can be recommended it is important to evaluate fruit trees for at least three years because crop load, fruit size, appearance, disease symptoms, and flavor vary with weather conditions. All varieties described in this publication have been evaluated for at least five years. However, cold hardiness of these varieties has not been evaluated because there has not been a "test winter" with temperatures low enough to kill flower buds during the past 10 years.

Depending on the year, harvest dates of any given variety can vary. Very warm weather usually shortens the season and may cause varieties to ripen at the same time. Early bloom, combined with cool summer temperatures, may spread harvest dates over a longer period of time. Ripening dates are for Blacksburg, which is located at about 2,000 feet above sea level in the New River Valley of the Allegheny Mountains. Ripening dates would probably be similar for the northern end of the Shenandoah Valley, but harvest will usually be 7 to 10 days earlier in the Piedmont, and 10 to 14 days earlier in the southeastern part of the state.

Definition of terms

Mutation – Sometimes single limbs or whole trees may mutate and produce fruit that ripen earlier or later than the original variety. Sometimes mutations may also result in different flesh color or there may be a change from peach to nectarine. Trees propagated from limb mutations often do not produce fruit identical to that of the original mutation. Large plantings of these varieties resulting from limb mutations should not be planted until sufficient "second generation" trees have proven to produce fruit identical to that of the mutated limb.

Blossom types – Most commercial varieties have showy blossoms, which are flowers with large pink petals. *Non-showy* blossoms have smaller redder petals. Showy bloom is recessive to nonshowy.

Clingstone – For some varieties the flesh adheres to the pit when the fruit is cut in half. These varieties often have fibrous flesh. Most early-season peach and nectarine varieties are clingstones. Clingstone varieties tend to have firm flesh.

Freestone – Varieties with flesh that separates easily from the pit. Most varieties used for fresh consumption are freestone.

Semiclingstone or semifreestone - Refers to fruit that becomes mostly freestone by the time it is fully ripe.

Split pit —Sometimes the pit within a fruit may split in half before harvest. This is usually accompanied by the opening of the pit at the stem and splitting of fruit and may serve as an entry site for insects. The cause of the problem is not very well understood, but the disorder is most serious for early varieties ripening before Redhaven and for trees with light crops and very large fruit. The pit hardens about 50 or 60 days after bloom. Before the pit hardens, fibers from the flesh are attached to the pit. If the pit is not fully developed before the fruit swells rapidly, the force may pull the pit apart. Fruit with split pits are usually obvious before harvest because the diameter of the fruit across the suture is larger than normal.

Chilling requirement – Peach trees need cold weather during the winter in order for the buds to develop properly, so the trees will bloom and leaf out normally. Chilling requirement refers to the duration and degree of cold needed for a particular variety. There are several methods for estimating the chilling requirement, but for the purposes of this bulletin chilling requirement is the



Showy Blossoms



Nonshowy Blossoms



On the left is 'Lady Nancy', a white flesh peach with a yellow line following the suture; on the right is a yellow flesh peach.



On the left is a yellow peach with yellow ground color. On the right is a white peach with whitish green ground color.



Split pit: The pit broke in half when the fruit was pulled apart.

total number of hours below 45° F that a variety needs during winter for buds to develop normally and bloom. Once chilling occurs, the tree needs a certain amount of warm weather in order to bloom (about 2 weeks at room temperature). Varieties with low chilling requirement bloom early and flowers are usually killed by spring frost. Therefore, varieties with a chilling requirement of at least 700 hours are recommended.

Disease resistance – The two most common diseases infecting fruit of peach and nectarine are brown rot and bacterial spot. A fungus causes brown rot and is most severe in seasons with wet humid conditions; it is usually not a problem in dry seasons. Nectarines tend to be more susceptible than peaches. Bacterial spot is a bacterial disease that can cause spots on the leaves and premature defoliation and it can cause spots on the fruit that may crack and predispose the fruit to rot. The severity can vary from year to year depending on weather conditions. There are probably no varieties that are immune to either disease, but varieties do differ in their susceptibility. Both diseases are usually not severe at the Blacksburg test site, but they were noted when observed.

Pubescence – Hair covering the surface of a peach is referred to as pubescence. The only difference between peach and nectarine is that nectarines have smooth skin. Some peach varieties have more pubescence than others.

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Open pollinated – Peach breeders usually take pollen from flowers of one parent tree and place it on the flower of another parent tree. Sometimes breeders allow non-controlled pollination to occur and obtain seeds from a tree without knowing the identity of the pollen parent. Seedlings resulting from such seeds are referred to as open-pollinated seedlings.

Suture – A suture is a longitudinal line, usually apparent as a depression, connecting the stem end of the fruit with the fruit tip. Sometimes the suture is raised and one side appears larger than the other.

Variety Descriptions

Yellow-Fleshed Peaches

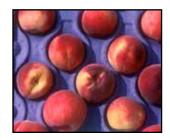
Rich May - A recent introduction from Zaiger Genetics, Modesto, CA. Trees often produce few blossoms and cold hardiness is questionable. Trees usually produce light crops that rarely need thinning. Harvest season begins from June 19 to June 28. Fruit are round and large (2.5 to 2.75 inches in diameter) for an early variety, and there is little pubescence. Seventy to 95% of the surface is colored



The variety is 'Rio-Oso-Gem'. The fruit on the right shows a lopsided suture.



The variety is 'Cresthaven'. This fruit has a fairly deep suture.



The variety is 'Cresthaven'. These fruits have smooth sutures.

with dark red stripes over an orange yellow background. The clingstone flesh is firm, somewhat fibrous, and has some red pigment. The fruit is aromatic and the flavor is a little tart but, considering the early season, the flavor is good. About 10% of the fruit have split pits. The trees bloom a few days earlier than most varieties, making them susceptible to spring frost and inconsistent cropping. This variety rarely has a full crop.

Candor – A hybrid of 'Redhaven' x 'Early-Red-Fre', released by the North Carolina Agricultural Experiment Station in 1965. This is a fairly attractive yellow clingstone peach. Harvest season begins from June 30 to July 5. Fruit are 2.25 to 2.5 inches in diameter and about 50% of the surface is covered with mottled orange/red blush over an orange/yellow background. The blossoms are non-showy and the fruit is quite pubescent and aromatic; some years there are numerous split pits. Trees require good thinning to obtain adequate fruit size.

Earliglo - A mutation of 'Redhaven', introduced in 1957 by J.M. Roxburgh, Simcoe, Ontario, Canada. Trees produce non-showy blossoms. The fruit is attractive with bright red mottled areas covering 70% of the fruit over orange yellow background. Harvest season begins July 10 to July 18. Average fruit diameter is about 2.5 inches. The flesh is clingstone, pale yellow, slightly mealy, and fairly firm. The fruit is aromatic, quite pubescent, and there are few split-pits. The flavor is fair.

Sentry – A hybrid of 'Loring' x 'Sentinel', released by USDA, Kerneysville, West Virginia, in 1980. This fairly attractive fruit has pale yellow flesh and 70 to 90% of the surface is covered with bright red mottle over orange yellow background. Harvest season usually begins July 10 to July 19. The surface is quite pubescent and average fruit diameter is 2.5 to 3.0 inches. The suture is very prominent and 10 to 25% of the fruit may have split pits. The nearly freestone flesh is fairly firm, slightly mealy and flavor is good.

Topaz – A hybrid of 'Loring' x 'Loring', released in 1976 from the State Fruit Experiment Station, Mountain Grove, Missouri. Trees bloom fairly early because it has a fairly low chilling requirement, and flower buds are susceptible to frost. Harvest season begins July 24 to Aug. 3. The flowers are showy and average fruit diameter is 2.5 to 3.0 inches. About 90% of the fruit surface is covered with a mottled red and it is attractive. This is a firm round yellow-fleshed peach with very good quality. Due to frost injury the cropping is inconsistent and when there is a light crop there may be split pits.

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Juneglo – A hybrid of 'Zee Gold' x 'Early Sun Grand', released in 1984 by Floyd Zaiger, Modesto, CA, and Stark Brothers' Nursery. This very attractive yellow-fleshed clingstone nectarine is medium size with an average diameter of 2.25 to 2.75 inches. Harvest season begins July 7 to July 24. Fifty to 90% of the fruit surface is covered with bright red blush over a yellowish orange background. The orange/yellow flesh is firm and the nice balance of sugar and acid gives it a very good flavor. There is some red pigment in the outer half of the flesh and fruit is fairly susceptible to brown rot.

FA11: Introduced by Fruit Acres in Michigan. The moderate size fruit (2.25 to 2.75 inches in diameter) is attractive. Harvest season is July 27 to Aug. 4. The surface is quite pubescent and the fruit are mostly freestone. Forty five to 80% of the fruit surface is covered with red mottling over orange/yellow background. The surface is quite pubescent. The orange flesh is freestone and moderately firm, with a little red pigment and is a little fibrous. The flavor is fair to good.

Redhaven – A hybrid of 'Halehaven' x 'Kalhaven', introduced in 1940 by the Michigan Agricultural Experiment Station. The tree has non-showy blossoms. This is a semi-freestone peach and about 70% of the fruit surface is red over a yellow background. Harvest begins July 25 to Aug. 3. The fruit is attractive and quite pubescent. Fruit size is moderate and average fruit diameter is about 2.5 to 2.7 inches. The flesh is yellow and moderately firm and flavor is good. The flower buds are very tolerant of low winter temperatures, so the trees are consistently productive. This is still the standard in its season. Fruit ripen non-uniformly and usually require four to five harvests.

Salem – A whole-tree mutation of 'Loring' from New Jersey. A very attractive, large (2.75 inch diameter) yellow fleshed freestone peach. Fifty to 95% of the surface is colored red. Harvest season is Aug. 1 to Aug. 8. The freestone flesh is firm, the suture is prominent, and the flavor is fair.

Beekman – An open-pollinated seedling of 'Sunhigh'. It is moderately attractive, large, firm, and freestone. Harvest begins July 28 to Aug. 3. The fruit is 50 to 80% dark red. Fruit are slightly russetted, oval shape, and the suture is uneven. Flavor is good, but there is sometimes some astringency. This variety is not as good as 'Redhaven'.

Norman – A hybrid of 'Sunhigh' x 'Redskin', released in 1969 from the North Carolina Agricultural Experiment

Station. The trees have showy blossoms. Harvest begins July 27 to Aug. 4. The fruit is moderate in size with an average diameter of about 2.6 inches. The attractive fruit is 50 to 80% dark red over a yellow ground color. The flesh is freestone and fairly firm, and the flavor is very good. The tree is moderately resistant to bacterial spot and the flower buds are very tolerant of low winter temperatures. Fruit ripen fairly uniformly and can be harvested in 2 or 3 harvests.

JimDandee – Pedigree is unknown, and James Friday, Coloma, MI, and Hilltop Nurseries, Hartford, MI, released it in 1980. This attractive peach has non-showy blossoms. Harvest begins July 25 to Aug. 7. About 40 to 90% of the surface is covered with red mottling over a yellowish orange background. Average fruit diameter is about 2.5 inches and 70 to 90% of the surface is colored red. The flesh is somewhat fibrous and there is some red pigment in the flesh. Flesh is dark yellow, freestone and fairly firm, and flavor is good. It is susceptible to bacterial spot. Sometimes there is cracking along the suture at the stem end.

Rich Lady – A peach released by Zaiger Genetics in California. This beautiful clingstone peach is round and about 90% of the surface is covered with dark red over light red background. Harvest begins July 24 to Aug. 3. Average fruit diameter is 2.5 to 3.25 inches. The fruit surface is moderately pubescent and the fruit is mildly aromatic. Fruit on the tree are uniform in size and shape. The flesh is dark yellow with some red pigment under the suture, and usually has less than 10% split pits. The suture is slightly raised and the side opposite the suture tends to soften before the side with the suture. Flavor is good to excellent. Fruit is susceptible to brown rot.

Cullinan – A hybrid of 'McNeely' x 'Goldenred', released in 1977 by the USDA, Beltsville, MD. The tree has non-showy flowers. Harvest begins Aug. 1 to Aug. 10. This is a moderately firm, large freestone peach with 25 to 50% mottled orange-dark red blush. The suture is somewhat raised and the top is somewhat depressed. Flavor is good, but the fruit is not as good as 'Redhaven'.

Jefferson – A hybrid of 'J.H. Hale' x 'Vibrant', released in 1960 by the Virginia Agricultural Experiment Station. The tree has showy blossoms. Harvest begins Aug. 3 to Aug. 14. The fruit is moderately attractive with red mottling over 70% of the surface. The flesh is orange with some red pigment. The flesh is fairly firm and the flavor is good. The flower buds are quite tolerant of low winter temperatures.

Slaybaugh – A beautiful yellow freestone peach. The surface is 60 to 85% bright burgundy red over a yellowish orange background. Harvest season begins July 31 to Aug. 8. The flesh is freestone and fairly firm. Average fruit diameter is about 2.75 inches and the flavor is good, but a little tart.

Hawthorne – Released in 1988 by the Louisiana Agricultural Experiment Station, Calhoun, LA. Trees bloom early most years because it has a fairly low chilling requirement. Harvest season begins Aug. 2 to Aug. 6. Frost injury usually results in light crops with large fruit (3.5 inches in diameter) and a high percentage of split pits. The trees have showy flowers and the round fruit are fairly attractive. Fifty to 90% of the surface is covered with red stripes. Flesh is free stone and fairly firm and dark yellow, and flavor is good to excellent. Trees are moderately resistant to bacterial spot.

NJ-278 – A numbered selection from the New Jersey Agricultural Experiment Station. Harvest season begins July 28 to Aug. 11. This very attractive yellow freestone peach has 70 to 90% dark red mottle over a yellowish orange background. The flesh is bright yellow and firm with some red pigment. The size is medium and average diameter is about 2.75 inches. The flavor is good to very good.

Bellaire – A mutation of 'Loring', introduced in 1984 by Freddie Blair, Martinsburg, WV, and Hilltop Nurseries. The tree produces showy flowers. Harvest begins Aug. 6 to Aug. 12. The fruit is moderately attractive. Fruits have red color over 30 to 80% of the surface. Fruits are fairly large and average diameter is about 2.5 to 2.75 inches. Fruit shape is slightly oval, the flesh is fairly firm and flavor is good. The fruit are not as large or as firm as 'Loring'.

Ernie's Choice – The pedigree is unknown. It was tested as NJ275 and introduced in 1991 by the New Jersey Agricultural Experiment Station. Harvest season begins Aug. 7 to Aug. 18. The tree has showy blossoms. This very attractive yellow peach is large, averaging about 2.75 inches in diameter. Seventy to 90% of the fruit surface is covered with red over a bright yellow background. The fruit has little pubescence and the flesh has a little red pigment. Flavor is very good and it is moderately resistant to bacterial spot.

Loring – A hybrid of 'Frank' x 'Halehaven', released in 1946 by the State Fruit Experiment Station, Mountain Grove, MO. The tree has showy blossoms. Harvest sea-

son begins Aug. 10 to Aug. 16. The fairly attractive fruit is about 10 to 40% red over yellow. The fruit is large and average diameter is 2.8 to 3.0 inches. The flesh is freestone and fairly firm, and the flavor is good. This fruit does not have adequate color for today's market. The flower buds are fairly susceptible to winter cold injury, so cropping is sometimes variable.

Contender – A hybrid of 'Summercrest' x 'Redhaven', released in 1987 by the North Carolina Agricultural Experiment Station. Trees produce non-showy blossoms. Harvest season begins Aug. 8 to Aug. 15. This is a very attractive yellow flesh variety with good size (2.5 to 3.0 inches in diameter). Seventy five to 90% of the surface is colored red. The flesh is light yellow and aromatic, and flavor is very good. The fruit is fairly round and the suture is slightly raised and soft. Fruit ripen uniformly. This variety produces many flower buds, crops well most years and is moderately resistant to bacterial spot.

Harcrest – A hybrid of ('J.H. Hale' x 'Massasoit') x 'Sunhigh', introduced in 1983 by Agriculture Canada, Ontario. Trees are winter hardy and produce showy blossoms. Harvest season begins Aug. 20 to Aug. 25. This is a very attractive, large (2.75 inches in diameter) peach. Fifty to 70% of the surface is covered with red over greenish yellow, and there is little pubescence. The flesh is freestone, fairly firm, and contains some red pigment. The fruit is aromatic and the flavor is good. There are some split pits some years. It is moderately resistant to bacterial spot.

Cresthaven – A hybrid of ('Kalhaven' x SH50) x 'Redhaven', introduced by the Michigan Agricultural Experiment Station in 1963. The flowers on this tree are non-showy and the flower buds are very cold hardy. Harvest season begins Aug. 20 to Aug. 25. This is an attractive yellow-fleshed, freestone peach. The average diameter is 2.6 to 2.8 inches. The flesh is firm and dark yellow and flavor is very good. Sometimes the flesh is a little soft at one end and some fruit will crack when there is a light crop. It is moderately resistant to bacterial spot and flower buds are very tolerant of low winter temperatures. This is the standard in its season.

Biscoe – A hybrid of 'Raritan Rose' x 'Redskin', released in 1969 by the North Carolina Agricultural Experiment Station. The tree has non-showy flowers. Harvest season begins Aug. 24 to Aug. 30. The attractive fruit is covered with about 60 to 80% dark red over yellow. The flesh is freestone and moderately firm, and the flavor is good. The trees are quite resistant to bacterial spot and the flower buds are tolerant of low winter temperatures.

La Jewel – A hybrid of 'Redglobe' x 'Prairie Rose', introduced in 1987 by the Louisiana Agricultural Experiment Station, Calhoun, LA. Harvest season begins Aug. 20 to Aug. 31. Trees produce showy blossoms.

This is a large (3.0 to 3.25 inches in diameter) attractive fruit. Forty to 70% of the surface is colored red and pubescence is short. The flesh is moderately firm and dark yellow. Flavor is very good.

Elberta – An open-pollinated seedling of 'Chinese Cling', introduced in 1889 by Samuel Rumph, Marshallville, GA. The tree has non-showy blossoms. Harvest season is Aug. 25 to Aug. 31. The fruit is oblong, very pubescent, and fairly attractive. Sixty to 80% of the surface is colored red. The flesh is dark yellow and firm, but the flavor is only fair with some astringency. The tree is moderately resistant to bacterial spot.

O'Henry – An open pollinated seedling of 'Merill Bonanza', introduced in 1970 by Grant Merrill, Red Bluff, CA. The tree has showy blossoms and the fruit has short pubescence. Harvest season begins Aug. 28 to Sept 4. This is a round, large (3.0 to 3.25 inches in diameter) attractive fruit and has 90 to 100% red color. The flesh is firm and flavor is excellent. The tree is very susceptible to bacterial spot. The blossoms have only moderate cold hardiness and are less cold tolerant than 'Loring'.

Sweet Sue – Probably a seedling of 'Rio-Oso-Gem' from New Jersey. Fruit is large, firm, oval shape, and has a raised suture. Harvest season begins Sept. 1 to Sept. 6. Fruit has 20 to 40% red color and is not very attractive. The flavor is good. There are many "double fruit" on trees following dry summers, and cropping is inconsistent.

Fayette – This variety resulted from a complex pedigree, including 'Fireglow' and 'Haley', and was introduced in 1966 by the USDA, Fresno, CA. Trees have showy blossoms. Harvest season begins Aug. 30 to Sept. 6. The fruit is large, very firm, very attractive, and the flavor is very good. The fruit has 90% dark red color over yellow and flesh is dark yellow. Although this variety is from California, it crops fairly consistently and is susceptible to bacterial spot.

Encore – This variety resulted from a complex pedigree containing 'Autumnglo', 'Krasvynos', and 'White Hale'. The New Jersey Agricultural Experiment Station, and Stark Brothers' Nurseries introduced it in 1980. The tree produces many flower buds, they are extremely cold

hardy, and the blossoms are non-showy. Harvest season begins Aug. 30 to Sept. 7. This attractive peach has only about 30 to 60% red color. Fruit size is fairly large (3.0 to 3.25 inches in diameter). The suture is slightly raised, the flesh is firm, and the flavor is excellent for its season. Trees are productive and are moderately resistant to bacterial spot.

Emery – A hybrid of 'Rochester' x 'Redskin', introduced in 1969 by the North Carolina Agricultural Experiment Station. Trees have showy blossoms. Harvest season begins Sept. 1 to Sept. 9. The fruit are not very attractive and have only about 20 to 40% red color. Fruit are large, flesh is firm but somewhat mealy, and flavor is fair to good. Trees are fairly resistant to bacterial spot.

Promising Varieties Evaluated in New Jersey

New Jersey has a very successful peach breeding program and the most extensive peach variety evaluation program in the mid-Atlantic region. Below are some varieties that have performed well in southern New Jersey. Jerome Frecon and Robert Belding summarized these descriptions in 2001 in two Fact Sheets from Rutgers Cooperative Extension: FS687 "Yellow-fleshed peach varieties for New Jersey" and FS686 "White-fleshed peach varieties for New Jersey." Based on favorable performance in New Jersey these varieties are suggested for trial in Virginia.

'Harrow Dawn' – Ripens about 14 days before 'Redhaven'. This is an attractive semi-clingstone yellow peach with medium to large size and excellent flavor. The tree is vigorous, very productive and has low susceptibility to bacterial spot.

'Glenglo' – Ripens about 8 days before 'Redhaven'. This yellow-fleshed peach is attractive, medium-large in size, moderately firm, and semi-freestone. Trees are vigorous, productive, and have low susceptibility to bacterial spot.

'Flamin Fury PF#14' – Ripens about 7 days after 'Redhaven'. This yellow peach is freestone, and is fairly large (90% of the fruit above 2.5 inches). The tree is vigorous, productive, and has low susceptibility to bacterial spot.

'Flamin Fury PF#15B' – Ripens in 'Loring' season and the fruit is medium-large, attractive, firm, and freestone. Trees are productive with low susceptibility to bacterial spot.

'Harrow Beauty' – A beautiful yellow-fleshed peach, with firm flesh and good flavor, ripening in 'Loring' season. To get large fruit the trees must be thinned hard and early. Trees are very productive with low susceptibility to bacterial spot.

'Coralstar' – A medium to large sized yellow peach, with firm flesh, ripening in 'Loring' season. Trees are very productive with low susceptibility to bacterial spot.

'Bounty' – A large to very large sized freestone yellow-fleshed peach ripening in the 'Loring' season. This variety has been planted heavily in some states as a replacement for 'Loring'.

'Flamin Fury PF#24-007' – A large to very large yellow-fleshed peach ripening about six days after 'Loring'. The fruit is 60 to 70% red and essentially all fruit are over 2.5 inches in diameter. Trees are moderately productive and moderately susceptible to bacterial spot.

'Flamin Fury PF#27A' – A large to very large yellow-flesh peach and ripens about three days after 'Cresthaven'. The fruit is 60 to 70% red, and trees are vigorous, productive and moderately susceptible to bacterial spot.

'Laurol' – A very large yellow-fleshed peach, and ripens about five days after 'Encore'. The fruit is 60 to 70% red, and trees are vigorous, productive and moderately susceptible to bacterial spot.

White-Fleshed Peaches

Sugar May – A very attractive white-fleshed peach from Zaiger Genetics in California. The surface of the fruit is completely covered with a dark purple-red color. Harvest season begins July 7 to July 19. Average fruit diameter is 2.25 to 2.7 inches and the skin has little pubescence. Trees must be thinned well to obtain good size fruit. Fruits are aromatic, and the semi-cling flesh is very firm and a little tart. Flavor was rated fair to good. Some years about 30% of the fruit have split pits. Reported to be moderately susceptible to bacterial spot.

Stark Early White Giant – Originated from an unknown pedigree in Arkadelphia, Arkansas, in 1949. This large freestone white-fleshed peach has fruit with an average diameter of 2.75 to 3.5 inches. Harvest season begins July 7 to July 15. The fairly attractive fruit has about 50 to 90% of the surface covered with dark red blush over a yellowish white background and it is

aromatic. There is some red pigment just under the skin and the flesh is firm and juicy, but the flavor is rated only fair because it is somewhat tart and astringent. Most years there are some split pits.

Rich Lady – A recent introduction from Zaiger Genetics in California. This is a beautiful white-fleshed clingstone peach. Harvest season begins July 16 to July 24. The fruit surface is moderately pubescent and 90 to 100% covered with dark red over light red background. The fruit is round and average fruit diameter is 2.5 to 2.8 inches. The flesh is very firm with some red pigment. The fruit is moderately aromatic and the sub-acid flavor is very good.

Carolina Bell – A hybrid of 'Biscoe' x 'Starlite', released by the North Carolina Agricultural Research Station in 1987. This is a fairly attractive freestone white-fleshed peach and the flowers are non-showy. Harvest season begins July 25 to Aug. 5. Fifty to 80% of the surface is covered with a red blush. The flesh is moderately firm with some red color. The flavor is very good. It is less firm, but tastes better than 'Early White Giant'. When trees have a light crop the fruit are large and may have a few split pits, and it is susceptible to bacterial spot.

White Lady – An extremely attractive white-fleshed peach from Zaiger Genetics. Average fruit diameter is 2.5 to 3.0 inches. The harvest season begins July 28 to Aug. 8. Eighty to 95% of the fruit surface is covered with a dark pinkish red over a cream background. The color is almost iridescent. If fruit hang on the tree too long, fruit may develop skin discoloration and ink spots. The non-aromatic fruit is somewhat triangular in shape typical of split pits, but they are not split pits. The flesh is fairly firm, semi-cling and sweet with low acid. The flavor is fair to good. It is moderately susceptible to bacterial spot disease.

Sugar Lady – A beautiful white-fleshed peach from Zaiger Genetics. Harvest begins July 31 to Aug. 8. About 85 to 95% of the surface is covered with dark pinkish iridescent red over a cream background. The flesh is freestone and moderately firm. The average diameter of the fruit is 2.25 to 2.6 inches. The fruit is very aromatic and sweet with little acid and the flavor is good to very good. It is a little more susceptible to bacterial spot than 'White Lady'.

Redrose – A hybrid of 'J.H. Hale' x 'Delicious', introduced in 1940 by the New Jersey Experiment Station. Trees have showy blossoms. Harvest begins July 31 to

Aug. 7. The attractive fruit has 50 to 80% dark pinkish red color over a pink background and it is slightly aromatic. Average fruit diameter is 2.4 to 2.6 inches and it is aromatic. The flesh is fairly soft, freestone and there is some red pigment in the flesh. The flesh is moderately soft and somewhat acid, and flavor is fair to good. The tree is fairly resistant to bacterial spot.

Summer Pearl – The pedigree is complex and contains 'White Hale', 'Flaming Gold', and 'Candoka'. Introduced in 1979 by the New Jersey Agricultural Experiment Station, and Stark Brothers' Nursery. The tree has non-showy blossoms. Harvest season begins Aug. 12 to Aug. 20. The attractive fruit has 40 to 70% of the surface colored red over a greenish/white background. Average fruit diameter is about 2.75 inches. The fairly firm white flesh contains some red pigment. Flavor is good to excellent.

Lady Nancy – A limb sport of 'Jersey Queen' selected by Medio DeMarco in Hammonton, NJ, and introduced in 1989. Harvest season begins Aug. 18 to Aug. 28. This is a very attractive peach with 30 to 80% of the surface colored pink red over a cream green background. The fruit is aromatic and larger than 2.75 inches in diameter. The flesh is freestone, fairly firm and white with a yellow stripe along the suture. This indicates that the mutation is not present at all cell layers and can make the flesh color of the variety somewhat less stable. The flavor is sweet and very good with a nice balance of sugar and acid. Sometimes there is a bitter aftertaste. It is susceptible to bacterial spot and low winter temperatures may injure flower buds.

Nectarines

Sunglo – An open pollinated seedling of 'Sun Grand', introduced in 1962 by Fred Anderson, Merce, CA, and Stark Brothers' Nurseries, Louisiana, MO. This is a very attractive freestone nectarine with non-showy flowers and good size (2.5 to 2.75 inches in diameter). Harvest season begins Aug. 3 to Aug. 8. Seventy five to 90% of the surface is colored bright red over yellow background. The flesh is fairly firm and somewhat dry and flavor is fairly good. It is susceptible to bacterial spot.

Redgold – A hybrid of 'Hal-Berta Giant' x 'Sunrise', introduced in 1956 by Charles Thomason, Bangor, AL, and Stark Brothers' Nurseries, Louisiana, MO. The trees are productive and have non-showy blossoms. Harvest season begins Aug. 9 to Aug. 20. Average diameter of

this nectarine is about 3.0 inches. The fairly attractive fruit has about 50 to 70% of the surface covered red over yellow background. The dark yellow flesh is fairly firm and the flavor is very good to excellent. This nectarine is the standard in its season.

Fantasia – A hybrid of 'Gold King' x an open-pollinated seedling of 'Red King'. The USDA, Fresno, CA, introduced it in 1969. The tree has showy blossoms. Harvest season begins Aug. 14 to Aug. 24. This fairly attractive nectarine is oblong and large (2.5 to 2.75 inches in diameter). Sixty to 80% of the surface is colored red over yellow background. The firm yellow flesh has good to excellent flavor. The tree is moderately susceptible to bacterial spot and the fruit usually has a poor finish with russetting.

Royal Giant – A hybrid of 'Red Grand' x a seedling of unknown parentage, released in 1977 by Floyd Zaiger and Stark Brothers' Nursery. A very attractive nectarine and the tree has showy blossoms. Harvest season begins Aug. 28 to Sept. 4. The fruit is 80 to 100% red over a yellow background. The flesh is clingstone and fibrous. Average fruit diameter is about 2.7 inches. The fruit is fairly acid but the flavor is fair to good. The fruit seems quite susceptible to brown rot.

Varieties Suggested for Commercial Planting (In order of ripening)

Yellow- flesh	White-flesh	Nectarines				
Risingstar	Rich Lady	Easternglo				
Sentry	Carolina Bell	Summer Beaut				
Salem	White Lady	Sunglo				
Redhaven	Sugar Lady	Flavortop				
JimDandee	Summer Pearl	Redgold				
Slaybaugh	Lady Nancy	Royal Giant				
Ernie's Choice						
Coralstar						
Contender						
Flamin Fury						
PF#24-007						
Cresthaven						
Fayette						
Flamin Fury PF#27A						
Encore						
Laurol						

Harvest dates for peach and nectarine varieties evaluated at Blacksburg, Virginia.

June				July						August						September			
15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	
Rich	May																		
		Car	dor																
			Early	White	Giant														
				Suga	r May														
				Ear	liglo														
				Sei	ntry														
				Junelgo															
					Rich	lady													
							To	paz											
								FA11											
							F	Redhave	n										
								Rich Lac											
							Ca	rolina E											
								White	Lady										
								Beel	kman										
								Nor	man										
									andee										
								Sur	nglo										
								I	Red Gol	d									
									Salem										
									NJ-278										
										augh									
										inan									
										horne									
										r Lady									
										rose									
										erson									
										laire									
										Choice									
										Fantasia									
										Lor									
										Conte	ender								
											Sur	nmer P							
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													Elb	erta		L			
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															Encroe				
															Emery				
						<u> </u>									Swee	t Sue			

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