A SUMMARY OF APPLE AND PEACH VARIETY TRIALS IN OKLAHOMA

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A Summary of
Apple and Peach Variety Trials
In Oklahoma

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Interest in orchard work in Oklahoma has been turning in recent years from home orchards to commercial enterprises. This change is characterized by the selection of sites, soils, and fruit varieties that are better adapted to the requirements of the trees and more advantageously located to markets. High-quality varieties which bear regularly are being sought for planting.

The first problem in starting an orchard is deciding what varieties should be planted. Information on adaptation is essential to learn what varieties are the best and most profitable.

VARIETY TESTING

To aid both commercial and home orchardists in determining the better varieties for planting in Oklahoma, a variety testing program has been conducted at the Oklahoma Agricultural Experiment Station since it was established.

In 1930, an extensive variety test orchard was started at the Perkins farm nine miles south of Stillwater. The site has a southern exposure with good air drainage. The soil is a sandy loam underlaid with a compressed layer containing a considerable amount of clay. This layer varies in thickness from two to three feet. Beneath this is a very sandy layer.

The first varieties of apples were planted in the spring of 1930. The trees were spaced 40 by 40 feet. Three to eight trees of each variety were planted, except for the commercial block of fall apples which consisted of 28 trees of each variety. The commercial block contained only those apples considered good enough for marketing

Peach trees were planted in the spring of 1931. The trees were set 25 by 25 feet, with three to five trees planted of each variety.

New varieties of apples and peaches are added to the test orchard every year. Each tree is pruned and trained to the modified leader system. Blossom dates, harvest dates, and production records have been obtained on all the trees since they first began to bear.

This bulletin summarizes the performance of 71 apple varieties from 1939 through 1952, and 110 peach varieties from 1937 through 1952. A brief discussion is given on recommended and productive varieties of *summer* apples and on *early* and *late* peaches.

Information on minimizing frost damage is included.

VARIETAL PERFORMANCE

Apples

The performance of 71 apple varieties is reported in Table I on pages 13 and 14. Droughty conditions prevailed between 1933 and 1937. As a result, the trees did not come into bearing as early as might be expected, and several of them died.

The outstanding variety in yield was Turley. It averaged 362.3 pounds of fruit per tree. The next nine varieties were as follows: Fall Ambrosia, 321.6 pounds; King David, 290.8, Summer Champion, 280.5; Paragon, 271.0; Jonathan x Ben Davis 482, 249.1; Faurot, 226.7; Holland, 224.8; and Jonathan x Ben Davis 614, 215.1 pounds per tree.

Among summer apples, Summer Champion was the leading variety in yield. It began to bear at an early age and continued to set fruit regularly. The fruit is large and ripens during the first week in August. Development of red coloring is only slight in Oklahoma.

Other outstanding summer apples from the standpoint of yield were: Holland, Early McIntosh, Crimson Gravenstein, Colton, Ada Red, Wilson Red June, and Yellow Transparent. Lodi was not included in this early planting, but in later plantings, it appeared promising.

The outstanding fall apples in yield were Turley, King David, Paragon, Black Twig, Winesap, Jonathan, Starking, and Golden Delicious.

Blossom records show that Colton and Red Bird Early were the first to bloom in the season. Turley, York, Winesap, Paragon and Black Twig were among the last to bloom. On the average, the first varieties to blossom were in full bloom about eight days ahead of those which bloomed last.

Peaches

Yields

The performance of 110 varieties of peaches bearing between 1937 to 1952 is shown in Table II (pp. 15-19). The average yield is based on the number of possible years to bear. Since all the varieties were not planted during the same year, they vary in time and number of years bearing. This, of course, makes considerable difference in results between varieties.

The leading variety in production was Raritan Rose. It averaged 192.9 pounds of fruit per year (8-year average). The next nine leading varieties in order have been Ambrosia, 184.1 pounds per tree (15-year average); Oriole, 177.5 (16-year average); Culbertson Champion, 176.1 (15-year); Triogem, 171.1 (10-year); Delicious, 169.0 (15-year); Early Rose, 154.1 (15-year); Katie, 149.8 (12-year); Sunbeam, 149.2 (4-year); and Carman, 147.9 (16-year) pounds.

Many of the high producing varieties are not always suitable for planting because they have objectionable features.

Fifty-four varieties out-yielded Elberta, the leading commercial variety planted in Oklahoma. The time of harvest of each variety as compared with number of days before or after Elberta ranged from 66 days before to 72 days after.

The average blossom time varied as much as seven days from the earliest to the latest variety. Elberta was among the earliest, while Mayflower was among the last.

Relation of Yield to Frost and Freezing

Spring frosts and freezes during the blooming period have caused crop failures. Two to three days delay in blossoming of some varieties can make a difference between a crop or a failure.

More regular production was secured at Perkins by allowing the trees to produce a vigorous growth of shoots 12 to 18 inches long each year. Opening of buds progresses from the tip of the shoot toward the base; thus on 12 to 18 inch shoots, the period of blossoming is extended, and often the last buds escape frost. Abundant growth is accomplished by heavy pruning, good culture, and fertilizer applications. Elberta, which is one of the least resistant varieties, produced 12 crops in 16 years under this practice at Perkins.

Frost damage can further be minimized by the selection of an orchard site that has good air drainage. Cold air settles into the low

areas adjacent to high lands, thus causing frost pockets. Wooded areas located adjoining and between the orchard and low lands are frost collectors, too, as they prevent the outward flow of cold air.

Another hazard in the Perkins orchard is damage by low winter temperatures. Mild weather followed with sub-zero temperatures can cause complete crop loss, as was the case in 1947. Some of the least cold-resistant varieties failed to produce in 1942, 1943, 1944 and 1948 because of freezing temperatures. Only the most cold-resistant varieties were able to produce those years.

Early Rose, Rochester, Carman, Goodwin, Early Wheeler, Mayflower, and Briggs were the varieties that were cold- and frost-resistant enough to produce regularly. However, these varieties, except for Rochester and Carman, are of poor quality, and are not easily sold.

High-quality varieties having some cold resistance are Erly-Red-Fre, Goldeneast, Halehaven, Nectar, Oriole, Raritan Rose, Redhaven, Summercrest, and Triogem.

DISCUSSION OF RECOMMENDED AND PROMISING VARIETIES

The data obtained show several varieties of apples and peaches which are outstanding in production. Some of these varieties would be desirable for home and commercial planting in Oklahoma. Those recommended for planting in the State are:

PEACHES*

(Weeks Before Elberta; and Flesh Color)

6 Weeks Before	4½-5 Weeks Before		3½-4 Weeks Before
Erly-Red-Fre (white)	Raritan Rose	(white)	Goldeneast (yellow)
	Redhaven	(yellow)	Halehaven (yellow)
	Triogem	(yellow)	
	July Elberta	(yellow)	
	Nectar	(white)	

1 Week Before	Elberta Season		1½ Weeks After
Summercrest (yellow)	Gage	(yellow)	Afterglow (yellow)
Early Elberta (yellow)	Redskin	(yellow)	
Belle of Georgia (white)	Elberta	(yellow)	

* None of the clingstone varieties of peaches are recommended because they are not popular. The demand is for yellow-fleshed freestones.

APPLES

Summer	Fall	
Yellow Transparent (or Lodi)	Jonathan (Red Sports—Jonred, Black Jon, etc.)	Turley
Summer Champion (or Holland)	Starking	Paragon
Ada Red	Golden Delicious	Black Twig
		Winesap

Summer Apples

Varieties of summer apples are more profitable than fall ones because they mature just before dry weather prevails, require fewer spray applications to control insects, and usually bring as much or more on the market. All the apples listed below are summer varieties; those starred are recommended for growing in Oklahoma.

***Ada Red.**—A productive, medium-sized red apple ripening in August. It is a good commercial apple, but is often small due to heavy crops. It is of fair quality.

Colton.—One of the earliest varieties to ripen. It is a large greenish-yellow sauce apple. Production of this apple has been high, but it lacks the quality of Yellow Transparent or Lodi.

Crimson Gravenstein.—A crisp and tender, richly-flavored apple ripening in July just before Summer Champion. The color is red, lightly striped and underlaid with a greenish-yellow. Trees are vigorous and productive, but irregular in bearing.

Early McIntosh.—A high-quality, high-producing dessert apple. It has a tendency to over-bear, usually producing every other year. The fruit is small and ripens over a two to three week period. It is a red apple, but often the color is very poor in Oklahoma. It is too small for a commercial apple. Ripens in July.

***Holland.**—A huge, reddish apple similar to Summer Champion in tree habits and fruit characteristics. It originated in Texas in 1939.

***Lodi.**—An excellent, large yellow early-market apple for culinary and fresh use. The production has been poor at Perkins. It is susceptible to fire blight. It most nearly resembles Yellow Transparent, but does not grow mealy and soften readily at the center like the latter variety.

Ozark Ruby.—A new, highly-colored apple that ripens with Ada Red. It has not been in the planting long enough to determine its merits.

Starr.—A large, attractive, bright-yellowish apple that has been slow in coming into production. It is susceptible to fire blight.

***Summer Champion.**—An outstanding huge, smooth, firm, juicy red apple ripening in early August. Often the color is a light reddish blush. It stands handling and shipping. The trees are hardy and very productive. They begin bearing very young.

Summer Pearmain.—A large, high-quality, yellowish-green apple covered with a tinge of red. The trees were severely damaged by an early fall freeze in 1940.

Wilson Red June.—A large, attractive, smooth red apple marked with light colored dots. The quality is fair but tends to become mealy. It ripens in July and is inclined to be irregular in bearing.

***Yellow Transparent.**—The standard early yellow sauce apple. Trees are productive, the fruit being large on young trees, but becoming small and uneven in size and shape on older trees. Flesh is tender and readily shows bruises. It is susceptible to fire blight.

Peaches

The Elberta variety is gradually losing its national leadership in peaches. Today the trend is toward growing a greater number of varieties—varieties ripening from one to four weeks before Elberta, and to yellow freestones for canning and freezing. Several varieties in the test orchard excelled Elberta in yield. Some of these are described below. The starred varieties are those recommended for planting in Oklahoma.

***Afterglow.**—One of the more promising late varieties to extend the season. It ripens 1½ weeks after Elberta and is a productive yellow-fleshed freestone. It has more red color than the Elberta.

Alton.—A white-fleshed, semi-freestone similar to Mamie Ross and Carman. Productive, but the color and adhesion to seed will eliminate it for planting.

Ambrosia.—One of the highest producing varieties. It is a high-quality, white-fleshed freestone that is resistant to late spring frost. However, the fruit is small, softens readily upon harvest, and does not withstand shipping.

***Belle of Georgia.**—One of the best-eating, high-quality, white-fleshed freestones in season with Elberta. It generally grows to a good size and is more productive than Elberta. The disadvantages of this variety are its white flesh and its tendency to soften quite rapidly after picking.

Carman.—A medium to large white-fleshed semi-freestone. It is productive, usually bearing regularly. The buds are more resistant to low winter temperatures. It ripens with Triogem, July Elberta and some other better yellow-fleshed varieties. It should be limited to planting in home orchards in areas where low temperatures are a problem.

Culbertson Champion.—A white-fleshed semi-freestone that ripens five weeks before Elberta. The trees are productive and hardy. The disadvantages are the color and adhesion.

Cumberland.—A large, white-fleshed freestone that ripens with Golden Jubilee or four weeks before Elberta. The quality and production are good, but the fruit is too soft for commercial shipping. Flower buds are hardy to low winter and spring temperatures.

Delicious.—A white-fleshed, good-quality freestone. The fruit is of medium size, ripening four weeks before Elberta. This variety is very productive, but it will not gain much importance since it is in season with Raritan Rose.

***Early Elberta.**—One of the more popular varieties planted. It ripens one week before Elberta which is the chief difference between the two. It is a yellow-fleshed freestone. Normally the Early Elberta is not as large as the Elberta. There are several different varieties under this name, each being a bud sport from the Elberta. Starks Early Elberta and Sullivans Early Elberta are the most promising of these sports.

Early Rose.—A variety noted for its winter bud hardiness. It bears regularly and profusely. The fruit is medium sized, well colored, and ripens five weeks before Elberta. The flesh is white, clinging to the stone, and the quality is poor. This variety should be limited to home orchards.

***Elberta.**—The standard yellow-fleshed freestone. It ripens about mid-August at Perkins. Elberta is not a perfect peach, but it is large and an excellent shipper. The stone separates freely from the flesh even before fully ripe. The quality is fair. Elberta is subject to winter damage and is injured by spring frost at blossom time. It is also susceptible to bacterial spot.

***Erly-Red-Fre.**—One of the most promising early white-fleshed freestones. The fruit is large, attractive and well-colored. It ripens a few days after Early Wheeler. The peach sells well on the market and should make an excellent commercial variety. It is hardier than Elberta.

Frank.—An attractive yellow-fleshed clingstone ripening two weeks after Elberta. It is a good variety where a clingstone is in demand. It bears well and in some cases must be thinned to attain good size.

***Gage.**—An outstanding Elberta type ripening just after the Elberta. It is more productive and has greater resistance to bacterial spot than Elberta. A good variety to replace Elberta.

Goldfinch.—An attractive, yellow freestone ripening in season with Redhaven and Triogem. The flesh is somewhat fibrous, making it a good shipper.

***Goldeneast.**—A promising new variety developed by the New Jersey Experiment Station. It is a large, attractive, highly-colored, firm yellow-fleshed freestone. The production is good, ripening with July Elberta or 3½ weeks before Elberta.

Golden Jubilee.—One of the earliest ripening yellow freestones. The quality is excellent, the production is good, and it is a good canner. The disadvantage is that it softens quickly after harvest and is thus a poor shipper. The fruit has a tendency to be flat shaped.

Goodwin.—A variety found and propagated by Mr. Goodwin of Kingfisher, Oklahoma. It is an early ripening, white-fleshed semi-freestone. The fruit is very soft and will not withstand handling. The variety is noted for its resistance to low temperatures. The production is good, ripening seven weeks before Elberta.

***Halehaven.**—A yellow freestone ripening three weeks before Elberta. The flesh tends to adhere to the stone until fully ripe. It is outstanding for its production, color, and quality.

Illinois.—A productive, white-fleshed semi-freestone. It ripens a week before Elberta, but is in season with better white and yellow varieties.

***July Elberta.**—An outstanding yellow-fleshed freestone ripening 3½ to four weeks before Elberta. The quality is better than the Elberta. This variety is preferred over Halehaven in many localities because it has better shipping qualities and the stone separates more freely.

***Nectar.**—A promising large, round, white-fleshed freestone having bright red cheeks. The variety ripens with July Elberta or 3½ weeks before Elberta. It has a sweet flavor, and the production has been good. The seeds have a tendency to split when the fruit is halved.

Newday.—An attractive yellow freestone. The flesh tends to cling until fully ripe. It is in season with Triogem or four weeks before Elberta. The production is good.

Oriole.—A medium-sized, round, yellow freestone having excellent color. The fruit is small and should be thinned soon after blooming to improve size. The production is good, but since it is in season with better varieties such as Redhaven, it will never be important.

***Raritan Rose.**—A promising white-fleshed, high-quality freestone. It was the most productive variety in the test orchard. The fruit is medium sized, ripening with Golden Jubilee and just before Triogem. It is one of the better white varieties.

***Redhaven.**—A brilliant red-colored, yellow-fleshed freestone. The flesh is non-browning, which makes it an excellent variety for freezing. The fruit is also firm, allowing commercial handling and shipping. It ripens 4½ weeks before Elberta and with Golden Jubilee. The red color of the skin begins to develop early. The trees tend to overload, and if not thinned soon after blossoming, the fruit will be small. The trees are more productive and hardier than the Elberta.

***Redskin.**—A beautiful, red-colored, yellow-fleshed freestone introduced by the University of Maryland. The fruit is superior to Elberta, and ripens in season with Elberta. The production has been variable at the Perkins orchard although it has been about the same as Elberta. The yield has been 2 to 1 better at the Kiamichi Field Station.

***Summercrest.**—A promising large, yellow-fleshed freestone ripening 1½ weeks before Elberta. The skin is mottled and fleckled. The quality and production are good. The fruit tends to ripen rapidly upon maturity.

Sun Glo.—A large, yellow-fleshed freestone ripening three weeks before Elberta. The quality and production are good, but the fruit lacks shipping qualities. This variety is a selection of the South Haven.

***Triogem.**—Another highly-colored, attractive yellow-fleshed freestone. The quality is good. The fruit ripens soon after Redhaven

or four weeks before Elberta. It is one of the more promising yellow varieties.

Valiant.—A variety mentioned because its production and quality are better than Elberta. It is a yellow-fleshed freestone in season with better varieties such as July Elberta and Halehaven.

Vedette.—A productive, yellow-fleshed freestone. Often the flesh has a slight tendency to adhere to the stone. It ripens in season with July Elberta.

White Hale.—A high-quality, large, white-fleshed freestone. It ripens one week after Elberta.

APPLES

Table I.—Performance of 71 Apple Varieties at Perkins, Oklahoma; 1939 through 1952.

Variety	Average date of full bloom 1939-44	Crop years*	Average harvest date during crop years	Average annual yield per tree (pounds)
Ada Red	April 11	1941	Aug. 7	150.1
Ames	14	1941	Sept. 1	21.2
Anoka	--	1945	July 3	36.3
Berry Co. Seedling	--	1949	Aug. 15	37.5
Black Jon	14	1941	Aug. 30	145.9
Black Twig	16	1939	Oct. 9	204.4
C.P.C. 312	15	1939	July 5	10.1
Collins	16	1939	Sept. 18	85.0
Colton	9	1939	June 28	157.8
Cortland	15	1941	Aug. 22	81.5
Crimson Gravenstein	10	1939	July 21	169.7
Delicious	15	1939	Sept. 12	97.7
Delux	--	1950	July 9	8.4
Dixie	14	1941	Sept. 12	208.4
Double Red Duchess	10	1939	July 9	56.6
Early Harvest	15	1939	June 27	121.6
Early Joe	15	1939	July 20	68.6
Early McIntosh	14	1939	July 7	222.6
Fall Ambrosia	15	1940	Sept. 21	321.6
Fanny	14	1939	July 21	125.4
Faurot	13	1939	Sept. 16	226.7
Gano	15	1939	Oct. 3	94.0
Golden Delicious	15	1939	Sept. 13	159.5
Grimes	15	1939	Sept. 11	43.6
Holland	--	1944	Aug. 2	224.8
Hunts Everbearing	10	1939	July 15	115.7
Jonathan	14	1939	Sept. 1	165.1
Jonathan x Ben Davis 614	15	1939	Sept. 16	215.1
Jonathan x Ben Davis 713	15	1939	Sept. 18	160.4
Jonathan x Ben Davis 989	14	1939	Sept. 12	125.7
Jonathan x Ben Davis 842	12	1939	Sept. 14	249.1
King David	16	1939	Aug. 31	290.8
Kinnard	15	1939	Sept. 12	112.5
Lodi	14	1943	June 30	56.7
Macoun	16	1943	Sept. 2	65.6
Magnum Bonum	15	1939	Aug. 28	55.8
Medina	14	1941	Sept. 13	56.4
Milton	14	1942	July 27	85.2
Newfame	15	1941	Sept. 5	18.4
Orleans	16	1941	Sept. 7	106.9
Ortley	14	1939	Sept. 10	53.5
Ozark Ruby	--	1950	Aug. 12	13.3
Paducah	--	1947	Aug. 10	33.9
Paragon	16	1939	Oct. 9	271.0
Polly Eades	--	1947	July 30	11.9

Table continued on following page.

Table I.—Continued.

Variety	Average date of full bloom 1939-44	Crop years*	Average harvest date during crop years	Average annual yield per tree (pounds)
Red Bird Early	April 10	1939	June 27	111.3
Red Limber Twig	14	1939-1943	Oct. 15	74.4
Red Sauce	--	1947	July 17	6.9
Richared	15	1941	Sept. 12	48.1
San Jacinto	15	1939	Aug. 6	128.5
Secor	14	1941	Sept. 8	19.3
Starking	15	1939	Sept. 11	160.9
Starr	16	1942	July 15	50.4
Stayman	15	1939	Oct. 7	141.2
Staymared	15	1939	Oct. 8	150.7
Summer Champion	15	1939	Aug. 1	280.5
Summer Pearmain	15	1941-1946	July 22	73.7
Turley	17	1939	Sept. 18	362.3
U.S.D.A. No. 1	14	1939	July 1	13.8
U.S.D.A. No. 37	14	1939	June 28	5.7
U.S.D.A. No. 48	13	1939	June 29	1.7
U.S.D.A. No. 49	15	1939	June 30	43.7
Virginia Beauty	16	1941	Sept. 25	37.2
Virginia Strain Winesap	16	1941	Oct. 9	175.7
Wealthy	16	1939	July 30	51.8
Wilson Red June	14	1939	July 24	140.2
Winesap	16	1939	Oct. 9	172.0
Winter Banana	15	1939	Aug. 30	45.1
Wright	14	1939	Aug. 31	135.4
Yellow Transparent	15	1939	June 25	127.5
York	17	1937	Sept. 16	108.0

* The dates represent the first harvest year for each variety. All are continuous through 1952 except for Red Limber Twig and Summer Pearmain. Their complete harvest dates are listed in the table.

PEACHES

Table II.—Performance of 110 Peach Varieties at Perkins, Oklahoma; 1937 through 1952.

Variety	Color	Adhesion	Average Blossom Dates 1935 – 1942			Harvest Date		Crop years	Number of crops produced	Avg. yield per tree per crop years (pounds)
			First bloom	Full bloom	¾ petal fall	Average	Days before(—) and after(+) Elberta			
Admiral Dewey	Y*	Cl*	3/24	3/27	4/4	6/29	−47	1937-40	4	64.9
Afterglow	Y	F*	3/23	3/29	4/3	8/24	+ 9	1943-52	6	111.9
Albright October	Y	Cl	3/22	3/29	4/8	10/25	+71	1937-46	5	38.4
Alexander	W*	Cl	3/25	3/28	4/6	6/17	−59	1937-40	4	77.1
Alton	W	Semi*	----	----	---	7/19	−27	1946-52	5	123.8
Ambrosia	W	F	3/21	3/27	4/1	7/26	−20	1937-51	13	184.1
Babcock	W	F	----	----	---	7/23	−23	1945-52	4	77.3
Barbara	Y	F	3/23	3/29	4/4	9/5	+21	1941-49	3	104.8
Belle of Georgia	W	F	3/23	3/29	4/6	8/13	− 2	1937-50	11	140.8
Boyd	Y	F	----	----	---	8/13	− 2	1949-52	2	57.5
Brackett	Y	F	----	----	---	8/18	+ 3	1950-52	2	29.9
Briggs	W	Cl	3/24	3/29	4/7	6/23	−53	1937-48	11	84.4
Canadian King	Y	F	3/24	3/28	4/5	7/23	−23	1937-46	5	37.7
Canadian Queen	Y	F	3/25	3/30	4/7	8/6	− 9	1937-51	11	108.7
Carman	W	Semi	3/23	3/29	4/5	7/19	−27	1937-52	15	147.9
Champion	W	F	3/23	3/29	4/4	8/11	− 4	1937-52	15	83.9
Chinese Cling	W	Cl	3/23	3/28	4/5	8/11	− 4	1937-49	9	51.5
Culbertson Champion	W	Semi	3/24	3/29	4/5	7/9	−37	1937-51	13	176.1
Cumberland	W	F	3/22	3/29	4/5	7/11	−35	1937-51	13	123.6
Delicious	W	F	3/22	3/26	4/2	7/15	−31	1937-51	12	169.0
Dixigem	Y	Semi	----	----	---	7/8	−38	1950-52	2	50.5
Dixired	Y	Semi	----	----	---	6/26	−50	1950-52	3	43.1
Dr. Burton	W	Semi	3/26	3/31	4/7	7/18	−28	1940-41	2	12.2
Early Beauty	Y	F	3/24	3/29	4/4	6/22	−54	1937-42	4	43.1
Early Beauty—Sport of Fair Beauty	Y	Semi	----	----	---	7/3	−43	1946-52	5	45.0

* Y=Yellow flesh; W=white flesh; Cl=clingstone; F=freestone; Semi =semi-freestone.

Table II.—Continued.

Variety	Color	Adhesion	Average Blossom Dates 1935 – 1942			Harvest Date		Crop years	Number of crops produced	Avg. yield per tree per crop years (pounds)
			First bloom	Full bloom	¾ petal fall	Average	Days before(—) and after(+) Elberta			
Early Crawford	Y	F	3/26	3/29	4/5	7/29	−17	1937-51	11	42.0
Early East	Y	F	----	----	---	6/26	−50	1951-52	2	11.5
Early Elberta	Y	F	----	----	---	8/8	− 7	1946-52	5	87.2
Early Queen	Y	F	3/25	3/29	4/5	7/23	−23	1939-51	9	74.5
Early Rose	W	Cl	3/24	3/29	4/8	6/30	−46	1937-51	14	154.1
Early Wheeler (Red Bird Cling)	W	Cl	3/25	3/30	4/8	6/22	−54	1937-51	13	80.7
Eaton	Y	Cl	3/26	3/30	4/4	8/20	+ 5	1937-49	13	37.8
Elberta	Y	F	3/22	3/26	4/2	8/15	0	1937-52	12	76.2
El Reno Goodwin	Y	F	3/24	3/28	4/3	8/12	− 3	1941-52	8	76.1
Erly-Red-Fre (All-Red-Free)	W	F	3/23	3/29	4/3	7/1	−45	1945-52	7	120.1
Fair Beauty	Y	Semi	3/24	3/29	4/6	7/16	−30	1943-52	7	71.6
Fireglow	Y	F	----	----	---	7/21	−25	1950-52	2	14.8
Fisher	Y	F	3/23	3/26	4/1	7/8	−38	1945-52	6	113.7
Foster	Y	F	3/24	3/29	4/4	7/31	−15	1937-51	12	38.6
Frank	Y	Cl	3/21	3/28	4/4	8/31	+16	1941-52	7	110.7
Gage	Y	F	3/24	3/29	4/4	8/16	+ 1	1941-52	8	119.5
Goldeneast	Y	F	3/23	3/29	4/4	7/22	−24	1943-52	6	122.6
Golden Globe	Y	F	3/24	3/30	4/3	7/17	−29	1943-52	6	97.4
Golden Jubilee	Y	F	3/23	3/27	4/4	7/13	−33	1937-51	12	125.2
Goldfinch	Y	F	3/22	3/28	4/4	7/15	−31	1937-52	10	105.0
Goodwin	W	Semi	3/23	3/28	4/5	6/27	−49	1939-52	13	106.5
Gaume	Y	Cl	3/20	3/26	3/31	8/24	+ 9	1937-49	6	25.9
Halate	Y	F	----	----	---	8/29	+14	1946-52	3	25.7
Halberta	Y	F	----	----	---	8/14	− 1	1946-52	3	54.0
Hale Early	W	Cl	3/24	3/30	4/7	7/7	−39	1937-48	10	46.2

Table II.—Continued.

Variety	Color	Adhesion	Average Blossom Dates 1935 – 1942			Harvest Date		Crop years	Number of crops produced	Avg. yield per tree per crop years (pounds)
			First bloom	Full bloom	¾ petal fall	Average	Days before(—) and after(+) Elberta			
Halehaven	Y	F	3/23	3/28	4/4	7/23	−23	1941-52	9	143.9
Hardee	Y	F	3/23	3/28	4/5	8/14	− 1	1941-52	8	91.9
Heath Cling	W	Cl	3/24	3/29	4/5	9/13	+29	1937-49	10	65.4
Illinois	W	Semi	----	----	---	8/7	− 8	1946-52	5	145.1
Indian Free	Y	F	----	----	---	9/11	+27	1946-52	3	15.4
Iron Mountain	W	F	3/25	3/31	4/7	9/16	+32	1941-49	2	42.0
J. H. Hale	Y	F	3/22	3/27	4/2	8/14	− 1	1937-51	11	62.3
Jerseyland	Y	F	----	----	---	7/12	−34	1950-52	2	37.3
July Elberta	Y	F	3/23	3/28	4/5	7/20	−26	1946-52	5	99.1
Katie	Y	F	3/24	3/29	4/5	9/1	+17	1941-52	8	149.8
Krummel	Y	F	----	----	---	10/3	+49	1946-52	5	132.3
Late Crawford	Y	F	3/23	3/27	4/3	8/25	+10	1937-50	8	60.0
Late Elberta	Y	F	----	----	---	9/8	+24	1946-52	3	23.7
Liberty	Y	Cl	3/21	3/28	4/4	9/1	+17	1941-52	4	24.3
Lovell	Y	F	3/21	3/26	4/1	8/27	+12	1938-49	8	66.7
Mamie Ross	W	Semi	3/21	3/27	4/4	7/15	−31	1937-51	13	110.2
Markberta	Y	F	3/23	3/27	4/3	8/14	− 1	1939-50	5	64.3
Markgate	Y	F	3/24	3/28	4/5	8/12	− 3	1939-50	9	69.2
Markham Cling	Y	Cl	3/24	3/28	4/5	8/19	− 4	1939-50	5	2.9
Mathews Beauty	Y	F	3/23	3/29	4/4	8/12	− 3	1937-50	9	134.3
Mayflower	W	Cl	3/26	3/31	4/8	6/10	−66	1937-52	14	90.7
Mikado (June Elberta)	Y	Semi	3/24	3/30	4/6	6/29	−47	1945-52	4	81.7
Moser	W	F	3/23	3/28	4/3	8/4	−11	1937-50	12	101.2
Muir	Y	F	3/25	3/28	4/3	8/15	0	1937-42	3	39.2
Nectar	W	F	----	----	---	7/21	−25	1945-52	5	110.8
Newday	Y	F	3/21	3/27	4/2	7/17	−29	1943-52	6	132.8
New Prolific	Y	F	3/23	3/29	4/5	8/11	− 4	1937-50	12	118.0
O. K. Peach	Y	F	3/23	3/29	4/2	8/15	0	1939-52	10	86.8

Table II.—Continued.

Variety	Color	Adhesion	Average Blossom Dates 1935 – 1942			Harvest Date		Crop years	Number of crops produced	Avg. yield per tree per crop years (pounds)
			First bloom	Full bloom	¾ petal fall	Average	Days before (–) and after (+) Elberta			
Orange Cling	Y	Cl	3/25	3/29	4/5	8/12	– 3	1937-50	9	46.1
Oriole	Y	F	3/24	3/28	4/5	7/7	–39	1937-52	14	177.5
Pacemaker	Y	F	3/23	3/27	4/3	7/23	–23	1945-52	5	86.4
Palora Cling	Y	Cl	3/22	3/27	4/2	8/12	– 3	1937-49	8	34.4
Peak Cling	Y	Cl	3/22	3/27	4/3	8/28	+13	1937-49	5	43.9
Phillips Cling	Y	Cl	3/23	3/28	4/3	9/9	+25	1937-49	5	23.1
Raritan Rose	W	F	3/23	3/29	4/3	7/13	–33	1945-52	7	192.9
Redhaven	Y	F	----	----	---	7/14	–32	1945-52	5	133.2
Redskin	Y	F	----	----	---	8/15	0	1949-52	3	82.5
Rio Oso Gem	Y	F	----	----	---	8/27	+12	1950-52	1	3.7
Rochester	Y	F	3/23	3/29	4/5	7/21	–25	1937-51	14	108.9
Salway	Y	F	3/25	3/30	4/6	9/27	+43	1937-49	6	19.4
Sellers Orange Cling	Y	Cl	3/25	3/28	4/4	8/26	+11	1937-50	8	25.5
Shipper Late Red (Big Red)	Y	F	3/24	3/29	4/5	8/16	+ 1	1941-52	8	72.4
Sixty-six	W	F	3/22	3/27	4/3	7/16	–30	1937-51	12	100.6
South Haven	Y	F	3/23	3/30	4/7	7/20	–26	1939-40	1	5.4
Southland	Y	F	----	----	---	7/24	–22	1950-52	2	14.7
Stinson	W	Cl	3/26	3/31	4/6	10/26	+72	1937-46	5	22.2
Stonewall Jackson	Y	F	3/23	3/27	4/3	8/21	+ 6	1937-50	5	17.6
Strawberry	W	Cl	3/24	3/29	4/5	8/2	–13	1937-50	10	61.3
Summercrest	Y	F	3/23	3/29	4/4	8/6	– 9	1943-52	6	146.5
Sunbeam	Y	Semi	----	----	---	7/12	–34	1949-52	4	149.2
Sun Glo	Y	F	3/23	3/29	4/4	7/23	–23	1937-51	13	137.6
Sunhigh	Y	Semi	3/22	3/28	4/3	7/18	–28	1943-52	5	66.6
Tena	Y	F	3/23	3/29	4/5	9/1	+17	1941-52	6	90.2
Triogem	Y	F	3/23	3/29	4/3	7/17	–29	1943-52	7	171.1
Tuscon	Y	Cl	3/23	3/27	4/4	7/27	–19	1937-50	6	45.0

Table II.—Continued.

Variety	Color	Adhesion	Average Blossom Dates 1935 – 1942			Harvest Date		Crop years	Number of crops produced	Avg. yield per tree per crop years (pounds)
			First bloom	Full bloom	¾ petal fall	Average	Days before (—) and after (+) Elberta			
Valiant	Y	F	3/22	3/28	4/3	7/23	−23	1937-50	12	134.2
Vedette	Y	F	3/23	3/28	4/4	7/18	−28	1937-50	12	126.7
Veteran	Y	F	3/22	3/27	4/2	7/26	−20	1937-51	9	106.4
Vivid Globe	Y	F	3/25	3/29	4/6	8/4	−11	1937-50	10	42.4
White Hale	W	F	3/22	3/27	4/2	8/20	− 5	1945-52	4	103.3


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