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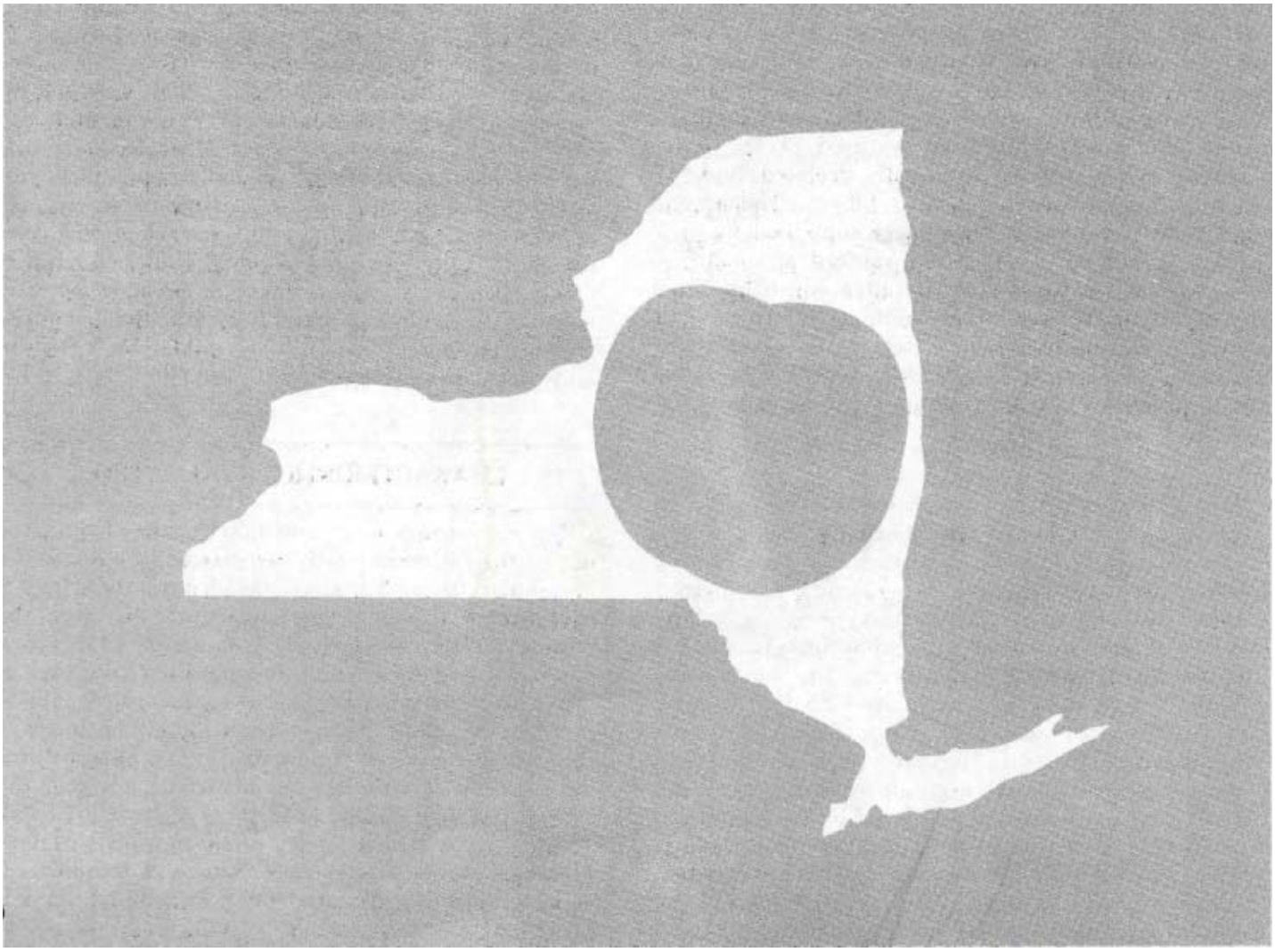
Peach and nectarine varieties for New York State

Robert C. Lamb and David E. Terry



INTRODUCTION

Judicial selection of peach and nectarine varieties is the key to a successful planting. Time devoted to studying the available varieties before planting is likely to be well spent. Variety characteristics, such as yield, quality, hardiness, disease resistance, and market adaptation, should be evaluated in view of your particular site and situation. Cultural practices, weather, and soil requirements involved in peach growing are covered in Cornell Information Bulletin 44, *Peach Growing.* This bulletin should be consulted before starting a new-peach planting.

THE INDUSTRY

The peach industry has been steadily declining for the past 20 years or more. There were 939,757 trees in commercial orchards in the State in 1954 and only 217,367 in 1970. There are several reasons for this: (1) Competition from southern grown peaches has increased because of improved methods of handling and transportation, (2) the problems of perennial canker and winter injury have increased, (3) the home canning of peaches has drastically declined, and (4) melting-fleshed varieties such as Elberta, Halehaven, and Golden Jubilee are no longer commercially processed in this state. Newly introduced non-melting-fleshed varieties processed as puree for baby food have partially replaced these varieties, however. The most important outlets for New York peaches are local markets for fresh use. Well-grown New York State peaches still command good prices on roadside stands.

CLASSES OF PEACHES

The principal types of peaches will be covered separately. The most important type is the yellow melting-fleshed peach represented by such varieties as Redhaven, Halehaven, and Elberta. The white melting-fleshed varieties have a limited market in some areas but are not commonly grown. Yellow non-melting-fleshed varieties or canner clings, as they are commonly known, have been grown primarily on the West Coast but are being promoted by the baby food manufacturers in the East for use in their product. They are not suitable for the fresh fruit market. Nectarines, or fuzzless peaches, have a limited demand for fresh fruit use but are more difficult to grow well than are peaches.

VARIETY TEST PROGRAM

There are many new peach varieties introduced each year. Not all of these are suitable for growing under New York conditions. It would be impossible for each grower to test all of these under his own conditions. For this reason, the New York State Agricultural Experiment Station at Geneva maintains a program of testing new varieties. We do not try to make a final evaluation of a variety on the basis of a few years experience in one location. It is, however, possible to eliminate the completely unsuitable varieties and describe the more promising ones so that the grower need only try a few varieties that have promise for his location.

RECOMMENDED VARIETIES

A sequence of yellow-fleshed varieties ripening over a 6-week period that are recommended for commercial planting is: Collins, Brighton, Jerseyland, Redhaven, Triogem, Canadian Harmony, Glohaven, Madison, Cresthaven, and Redskin. These varieties, by virtue of their performance in experimental and commercial orchards over a period of several years, have demonstrated their general adaptability andi merit. A trial planting of some of the other varieties' described in the following tables may show that they are more suited to an individual grower's requirements than are those on the recommended list. The weather, the soils, and markets of an individual peach growing enterprise may have a considerable influence on which variety is best.

CHARACTERISTICS EVALUATED

For easy comparison and brevity, the characteristics of the different peach varieties will be presented in tabular form. Varieties included in these tables have fruited at least 3 years at Geneva; therefore, the ratings are the averages of a minimum of 3 years. Since many of these characteristics vary from year to year under the influence of varying conditions, this is a relatively short time to adequately evaluate a variety. However, in the interest of keeping growers informed, these varieties are included even though the evaluations may change as more experience is gained.

Several characteristics are rated on a scale of 1 to 5; in each case, 5 is the best rating, 4 represents a good level of the characteristic, 3 a medium level, 2 is poor, and 1 is very poor. A "+" indicates a somewhat better level than most varieties in the class and a "-"

somewhat inferior level than most varieties in the class. The following is an explanation of the information given in the various columns of the tables:

Column 1 lists the varieties in order of ripening.

Column 2 indicates the average date of ripening at Geneva, N. Y. These dates will probably hold true within 2 or 3 days in western New York but would be a week later than the ripening dates for the Hudson Valley and perhaps 10 days or more later than the ripening dates for Long Island. These dates may vary widely from year to year depending on temperatures, but the relative positions of the varieties will remain fairly constant.

Column 3 is the average of an estimate of the crop for each year that records were taken. Trees were rated from 5 for a very full crop to 0 for no crop. These estimates were taken varying numbers of years, depending on how long the variety was under test. In some cases, these years included those when there was extensive blossom bud killing as well as those years when there was very little blossom bud killing.

Column 4 gives the average diameter in inches.

Column 5 shows the average percentage of the fruit that is covered with red. Although there are other factors, such as brightness of the ground color and the amount of fuzz which influence the attractiveness of a variety, the amount of red coloration is the most important. If there are other outstanding characteristics of appearance, they are listed under "Remarks."

Column 6 gives an estimate of firmness on a 1 to 5 scale, with 1 being very soft and 5 very firm, such as a tanner cling.

Column 6A gives the flesh color of nectarines. Y = yellow flesh and W = white flesh.

Column 7 gives a rating (on the 1 to 5 scale) for quality which includes flavor, texture, and juiciness. Personal preference is very important here, and not everyone would agree with our ratings.

Column 8 describes the oxidation of the flesh where N stands for "non-browning," a variety which turns brown or oxidizes very slowly on exposure to air, and O stands for "oxidizes," a variety which turns brown quickly. Non-oxidizing varieties are especially good for freezing and canning because they do not turn brown readily during processing.

Column 9 describes the freeness of the pit, where 1 is a canner cling, 2 is a clingstone, 3 a semi-clingstone, 4 a freestone, and 5 is air-free; i.e., the pit cavity is larger than the pit.

Column 10 compares the blossom bud hardiness on a 1 to 5 scale. No. 1 is very tender and is characterized by Redglobe, 2 is tender and is characterized by Merrill 49'er, 3 is medium like Elberta, 4 is hardy like Redhaven and Triogem, and 5 is very hardy like Reliance and Veteran.

Column 11 is an evaluation of the usefulness of the variety. C = recommended for commercial planting; L = local markets and home use; T = a new variety, recommended on a trial basis; S = a variety with some special characteristic, such as hardiness which would recommend it for a special purpose; and N = for a variety with no value for New York State conditions.

Column 12 Remarks = miscellaneous notes on characteristics, such as disease resistance, tendency to split pit, etc., which might influence the selection of a variety.

Four tables are presented. Table 1 lists the yellow melting-fleshed varieties. Table 2 lists the white melting-fleshed varieties, Table 3 lists the nectarine varieties, and Table 4 lists the yellow non-melting fleshed varieties or canner clings.

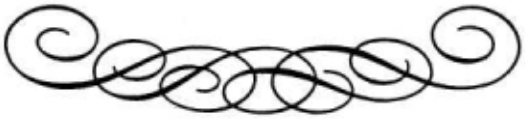


Table 1.—Yellow melting-fleshed varieties.

1	2	3	4	5	6	7	8	9	10	11	12
Variety	Date Ripe	Productivity	Diam. (in.)	Red Color (%)	Flesh firmness	Quality	Oxidation of flesh	Pit freeness	Hardiness	Usefulness	Remarks
Collins	8/1	4	2 1/2	90	3	4	N	3	4	C	No split pits, ripens unevenly, pointed apex.
Brighton	8/7	3.1	2 1/2	95	4	4+	N	3	3	C	Sweetens up while still firm, pointed apex in some years.
Garnet Beauty	8/8	4	2 1/2	95	3	4	N	3	4	T-C	An early sport of Redhaven, Early Redhaven, Earliglo very similar, blooms early.
Royalvee	8/8	3.5	2 5/8	70	3-	3	N	2	2	N	Split pits.
Sunhaven	8/10	3	2 3/4	90	3-	3+	N	3	3	C	Some split pits.
Starking Delicious	8/13	3.8	2 1/2	70	3-	3	0	3	4	N	Ripens unevenly, some green in flesh.
Jerseyland	8/13	3.4	2 3/4	90	3-	3+	—	3+	4	C	Some split pits, pointed apex some years.
Reliance	8/14	4	2 1/8	60	2+	3	0	3+	5	S	Some split pits, very hardy.
Prairie Dawn	8/14	3.3	2 1/2	50	2	3	N	3	4	N	Greenish ground color, uneven ripening.
Sentinel	8/15	4.0	2 1/2	80	2	4	—	3+	3	T	Fairly promising newer variety, may be too soft.
LaGem	8/18	4.0	2 5/8	90	2	3	N	3	3	N	Dull color.
Redhaven	8/19	4.2	2 5/8	90	4	4	N	3+	4	C	A standard variety.
Golden Jubilee	8/20	4	2 5/8	40	2	4	0	4	4	L	Formerly a standard variety, but it does not have enough color and is too soft.
Late Sunhaven	8/21	3.5	3	90	3	4-	—	4	2	T	Not as good as Redhaven.
Regina	8/22	2	2 3/4	90	3+	4	N	4	3	N	Not hardy enough for NYS.
Goldgem	8/22	3.4	2 5/8	75	3-	4	0	4	3	N	Blooms early.
Velvet	8/23	3.3	2 5/8	90	3-	4	N	4	—	T	Small pit, thick flesh.
Envoy	8/24	3.7	2 1/2	70	3-	4	0	4	4	N	Not enough color, too soft.
Triogem	8/24	3.8	2 5/8	75	4	4	N	4	4	C	A standard variety.
Redtop	8/24	2	2 3/8	90	4	4+	N	4	2	N	Not hardy or productive enough.
Golden Red	8/25	3.2	2 3/4	50	2	4	0	4	2	N	Not hardy and too soft.
Washington	8/26	2.6	2 7/8	70	3	4	0	4	2	N	Particularly susceptible to perennial canker.
Halehaven	8/29	3.8	2 1/2	85	3	4+	0	4	3	C	Old standard variety, but too dull in color.
La Premiere	8/29	3.2	2 5/8	60	3	4	0	4	3	T	
Richhaven	8/30	3	2 7/8	80	3	4+	0	4	2	N	Corky suture and pollination problems.
Redglobe	8/31	2	3	85	3+	4+	0	4	1	N	Canker susceptible.
Canadian Harmony	8/31	3.4	2 5/8	85	3+	4	N	4	3	C	Reported to be somewhat resistant to canker.
Veteran	9/4	3.7	2 5/8	40	2	3+	0	3	5	S	A very hardy variety.
Glohaven	9/5	3.7	2 5/8	90	3	4	N	4	3	C	
Loring	9/6	2.9	2 3/4	60	3	4	0	4	1	N	Very early blooming and not hardy enough.
Vanity	9/7	3.3	2 5/8	80	3	4+	N	4	3	C	Thick flesh, small pit.
Redqueen	9/8	3.0	2 1/2	90	3	3+	0	4	3	T	

Table 1.—Yellow melting-fleshed varieties. (Concluded).

1	2	3	4	5	6	7	8	9	10	11	12
Variety	Date Ripe	Productivity	Diam. (in.)	Red Color (%)	Flesh firmness	Quality	Oxidation of flesh	Pit freeness	Hardiness	Usefulness	Remarks
Madison	9/10	4.5	2 1/2	50	3+	4+	0	4	3	C	Blossoms resistant to frost.
Dixiland	9/11	2.6	2 3/4	50	3	4-	0	4	3	N	Skin tears at the cavity on picking.
Merrill 49'er	9/12	3.2	2 5/8	50	3	4+	0	4	2	N	Not hardy enough.
Cresthaven	9/13	3.7	2 7/8	70	4	4+	N	4	3	C	Very good quality.
Redskin	9/15	3.3	2 5/8	40	3	4	—	4	3	C	Needs careful thinning for good size.
Jersey-queen	9/16	2.5	2 3/4	35	3	4	N	5	2	N	Lacks hardiness.
Elberta	9/19	2.8	2 3/4	30	3+	3	0	4	3	N	The former standard variety for this season.
Jefferson	9/19	2.8	2 1/2	40	3	3+	0	4	1	N	Too late maturing for NYS

Table 2.—White melting-fleshed varieties.

1	2	3	4	5	6	7	8	9	10	11	12
Variety	Date Ripe	Productivity	Diam. (in.)	Red Color (%)	Flesh firmness	Quality	Oxidation of flesh	Pit freeness	Hardiness	Usefulness	Remarks
Early White Giant	8/3	3.3	2 5/8	65	2	2	—	2	4	L	Some split pits.
Erly-Red-Fre	8/8	2.8	2 3/4	70	3-	3	0	3	4	L	Some split pits.
Raritan Rose	8/20	3.3	2 1/2	80	3	4	0	4	3	L	
Eden	8/27	3.9	2 1/2	60	3	4	0	4	4	L	Small pit, thick flesh.
Red Rose	8/30	3.6	2 3/4	80	3	4	0	4	3	L	Some split pits.
Champion	9/7	3.2	2 3/4	20	2	4	0	4	4	L	

Table 3.—Nectarine varieties.

1	2	3	4	5	6	6A	7	8	9	10	11	12
Variety	Date Ripe	Productivity	Diam. (in.)	Red Color (%)	Flesh firmness	Flesh color	Quality	Oxidation of flesh	Pit freeness	Hardiness	Usefulness	Remarks
Nectared 1	8/9	2.7	2 1/4	90	2	Y	3	N	2	3	N	Considerable russetting and cracking.
Pocohontas	8/10	3.0	2	80	2	Y	3+	0	3	3	T	Best early yellow.
Morton	8/12	3.2	2 3/8	90	2	W	3+	0	2	4	L	Brown rot susceptible.
Cherokee	8/15	3.3	2 1/8	70	3	Y	4	N	2	3	T	Tends to crack.
New Yorker	8/22	3.3	2 1/8	80	2	W	4	—	4	3	N	Brown rot susceptible, narrow crotch angles.
Redbud	8/26	3.5	2	80	2	W	3-	0	4	4	L	Reported to have some brown rot resistance.
Nectared 4	8/26	3.3	2 3/8	90	2	Y	4	N	4	3	L	
Lexington	8/28	2.9	2	80	2	Y	3	0	4	5	L	A very hardy nectarine.
Redchief	9/4	2.8	2 1/8	90	2	W	3	0	5	4	L	Reported to have some brown rot resistance.
Cavalier	9/5	3.2	2 1/8	80	3	Y	3-	0	4	3	L	
Garden State	9/6	2.5	2 1/8	80	3	Y	3	N	4	2	L	
Nectacrest	9/7	2.0	2 1/4	70	2	W	4	0	4	3	L	

Table 4.—Yellow non-melting-fleshed clingstones.

1	2	3	4	8	10	12
Variety	Date ripe	Productivity	Diam. (in.)	Oxidation of flesh	Hardiness	Remarks
Coronado	8/23	3.1	2 5/8	0	3	
Vivian	8/26	3.8	2 1/4	0	3	Productive, but small.
Lodell	8/28	4.0	2 1/2	N	3	
Fortuna	8/31	4.0	2 5/8	0	3	Good quality.
Babygold 5	9/3	3.1	2 3/4	0	3	Some brown rot.
Babygold 6	9/4	3.0	2 3/4	0	2	Some brown rot.
Ambergem	9/4	3.2	2 1/2	N	4	Red at pit.
Babygold 7	9/10	2.8	2 7/8	N	3	
Suncling	9/11	3.2	2 1/2	0	4	Some brown rot.
Babygold 8	9/21	3.1	2 1/2	0	4	

About the Authors....

Dr. Robert C. Lamb and David E. Terry are Associate Professor and Experimentalist, respectively, Department of Pomology and Viticulture, New York State Agricultural Experiment Station, Geneva.