

is bright yellow with bright red at the pit, so that the flesh is very pretty, too. It is fully freestone and of good quality, but slightly less acid than Sunhigh.

The flower buds are as hardy as those of Redqueen, and hardier than those of Sunhigh. On the basis of the freezing injury at New Brunswick in the early spring of 1967, the buds of Sunqueen seem to be in the range of hardiness of Collins, Jerseyland, and Redhaven. Trees of Sunqueen have been vigorous and productive. When the crop is well thinned, the fruit is large. The flowers are non-showy, with fertile pollen. The leaf glands are reniform. Sunqueen is not satisfactorily resistant to bacterial leaf

spot, but the leaves, and especially the fruit, are more resistant than Sunhigh to this disease.

Sunqueen has been very enthusiastically received by New Jersey peach growers. Trees were first available to New Jersey growers for limited commercial plantings in the fall of 1959. When it was named in 1966, only seven years later, it was the ninth most popular variety in the state on the basis of new plantings.

Trees of Sunqueen are available from the New Jersey Peach Council, Inc., R. D. 3, Princeton, New Jersey 08540, and some other nurseries. Fillette is not being propagated by the New Jersey Peach Council.

Processing Evaluation of Golden Delicious Seedling Selections

A. W. MOYLS AND K. O. LAPINS*

During the fall of 1967 the Fruit and Vegetable Processing Laboratory, Summerland Research Station, conducted processing trials on the Golden Delicious seedling selections 9E-13-47, 8C-29-24, 10C-6-25 and the variety Mutsu. A complete description of 9E-13-47 (= Kendall x Golden Delicious) and 10C-18-83 (= Golden Delicious open pollinated) was published in the January 1968 issue of this Journal. The third selection, 8C-29-24 (= Golden Delicious x Grimes Golden) is a large, yellow, oblong-conic shaped apple, relatively high in acid, and of very good flavor. The fruit ripens with Golden Delicious, but as it has been under observation for only a few years, bearing habits and storage life have not been established. It was included in this test because of its good fresh fruit qualities.

The processed products evaluated were canned applesauce, frozen slices, and canned sliced solid pack. Both sliced products were tested in pies,

and all three were compared with samples made from standard Golden Delicious. Quality judgements by a trained taste panel were based on appearance, color, flavor and texture.

Of the four selections, 9E-13-47 received the highest quality rating for all three processed products. It and Mutsu were the only two exhibiting the characteristic, attractive, bright yellow color associated with Golden Delicious. Pies made from frozen and canned slices of 9E-13-47 were superior to those made from standard Golden Delicious. In addition, sauce from this selection was equal to Golden Delicious sauce for color and preferable for flavor. It was the only applesauce of the four under test not significantly different from the control (1% level of probability—Table 1).

Of the other three "Golden types," Mutsu scored well as frozen slices, chiefly because of its attractive color. The canned solid pack slices, although acceptable, did not rate as high as

*Research Scientists, Research Station, Canada Department Agriculture, Summerland, B. C.

Table 1. Analysis of Applesauce Samples

	Golden Delicious	9E-13-47	8C-29-24	Mutsu	10C-6-25
Soluble Solids*	23.2%	22.4%	24.3%	20.7%	22.5%
pH	3.60	3.50	3.30	3.48	3.20
Total Acid (malic)	.38%	.37%	.59%	.33%	.53%
Mean Quality Score	11.95	11.86	10.34	9.93	9.48

*By refractometer.

those made from regular Golden Delicious. Its applesauce was only fair, being particularly coarse or grainy in texture. However, this variety was scored down chiefly on its peculiar aromatic or "pineapple" flavor. This flavor was most pronounced in the applesauce. Modification of processing techniques might overcome the unsatisfactory sauce texture; but the flavor, objectionable to many, could remain a problem.

The processed products made from 8C-29-24 and 10C-6-25 were pale yellow or white in color. This lack of color was most pronounced in canned solid pack slices and applesauce. For these two selections, being judged as "Golden Delicious," was perhaps un-

fortunate, because the absence of a deep yellow color downgraded their overall quality scores. They rated well for all other characteristics, and many taste panel members considered their flavor preferable to that of standard Golden Delicious. Judged on their own merits these selections could be considered highly acceptable.

Analysis of a limited number of canned applesauce samples together with their overall quality scores (maximum possible 15) are presented in Table 1. Both 8C-29-24 and 10C-6-25 were higher in total acid than standard Golden Delicious, Mutsu and 9E-13-47. This higher acidity is an asset and probably contributes to their good flavor rating.

The Recorded Origin of the Tolman Sweet Apple Questioned

By FRED L. ASHWORTH*

Tolman Sweet has been a standard apple here in St. Lawrence county for over a century, being a contemporary of the Fameuse, St. Lawrence, Stone and Golden Russet. It is not quite as hardy to cold as the Fameuse or Golden Russet, and not nearly as hardy as the St. Lawrence or Stone. Over half of the native pasture seedling apples, of better than average quality, are obviously Tolman Sweet seedlings; and it takes from 50 to 75 years for a pasture seedling to become a large enough bearing tree to attract attention. Between being browsed by cattle continually, and girdled by ro-

dents, its only recourse is to start anew from the roots, and come up through the dead brush of its earlier attempts. McIntosh is still too new a variety to exhibit many pasture seedlings.

If it had been a Dorchester, Mass. seedling, as Manning supposed in 1891, it should have become just as common in northern New England as it is here; but, until the early 1900's, it was practically unknown in Vermont. This section was largely settled by Vermonters, who brought in the Stone apple and other Blue Pearmain seedlings.

Henderson Lewelling was an inde-

*Member of APS Fruit Gardens Committee, of Hauvelton, N.Y.