New Apricot Varieties for Utah

R. A. NORTON*
Logan, Utah

At the present time only three states in the United States are important in the production of apricots—California, Washington and Utah. Susceptibility to frost and diseases are the main causes for its limited distribution. It is very unfortunate that this wholesome fruit is not grown more widely, for it ranks very high nutritionally among fruits. The apricot contains nine times as much vitamin A as the average of eighteen other common fruits and twice as much as its nearest competitor—the nectarine. It exceeds the average of these eighteen fruits in proteins, carbohydrate, phosphorus, and niacin. However, it is slightly lower in fats, calcium, ascorbic acid, and thiamin.**

It is possible that apricots could be profitably grown more widely with the development of new varieties less susceptible to spring frost and injury due to low winter temperatures. New fungicides are being developed which are rapidly overcoming the ravages of brown rot and other diseases which attack this fruit. As an indication of the interest in apricots in the eastern states, Michigan is already engaged in a breeding program to find varieties adapted to that area. Several of these selections are being considered for release in the near future.

Apricots have been under trial at the Utah Experiment Station since 1890. Utah horticultural leaders Richman, C. P. Close, U. P. Hedrick, J. R. Wright, R. S. Northrup, W. W. Knudson and A. B. Ballantyne gave early reports on apricot growth and fruiting. In 1934, F. M. Coe summarized six years of his own work and much of the work of his predecessors in Utah Bulletin 251, Apricot Varieties. Coe reported much confusion among the names of the varieties, many of which he judged to be synonymous. He regarded Chinese (Jones, Wilson, Large Early Montgamet, Colorado) and Moorpark (Routier Peach, Wenatchee Moorpark, Gates) as the leading apricots grown in Utah.

Today (25 years since Coe's bulletin), the Chinese and Moorpark are still the prominent varieties, although Moorpark is no longer being planted because it is not adaptable for commercial canning except as puree or juice. In spite of its continued popularity, the variety Chinese has several serious limitations among which are

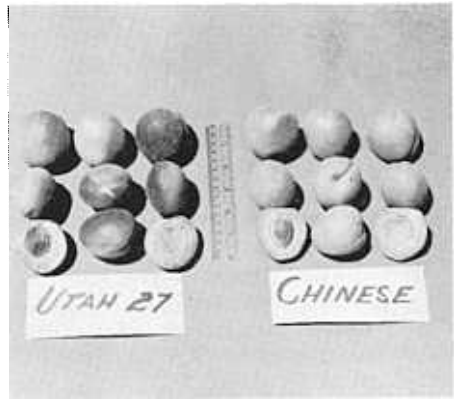

Fig. 1. **"Utah 27", a new, very promising apricot selection, and "Chinese", an old standard Utah variety badly needing replacement.**

*Associate Professor of Horticulture, Utah State University. Present address: University of California, Davis, Cal.

**Fruit and Vegetable Facts and Pointers. United Fresh Fruit and Vegetable Association, Washington, D. C.

the following: rather soft texture, high color and flavor (undesirable for baby food), susceptibility to frost, and a tendency towards small size in heavy cropping years. A recent comparison of commercially canned Utah apricots (Chinese) with those from California (principally Blenheim and Tilton) showed that while the flavor of the Utah product was somewhat comparable to California apricots, the texture (firmness and stringiness) was decidedly inferior.*

As a result of these tests and recent evaluation of newer varieties, we have decided that the variety situation in Utah is in need of urgent change. This revision is essential if we are going to compete at all with California and Washington which now produce over 90% of the apricots grown in the United States.

A few of the more promising varieties and selections worthy of trial in Utah, and perhaps other areas, are described below, in order of ripening. The evaluations were made at the Utah State University Howell Field Station, North Ogden, Utah. Results of fresh fruit and canning evaluation are given in Table 1.

Earli Orange. (Plant Patent No. 674) This variety originated in Grand View, Washington, and was introduced by Stark Brothers Nursery. It is the earliest high quality variety at the Station. It is attractive with a bright orange ground color overlaid with a bright red blush. Considering its earliness, it sizes well with fruits averaging 1¾ to 2⅛ inches in diameter. Its quality for fresh use and canning is fair to good. It is definitely a promising early variety for Utah.

Wilson Delicious. This apricot is one of Stark Brothers' introductions. The fruits are large and attractive when grown on well managed trees. They ripen slightly before Chinese. The flesh is a dark orange color, moderately firm when ripe and the flavor

Table 1. **Fresh and canning evaluation of promising apricot varieties grown at the USU Howell Field Station.**

Variety	[2]				Canning quality[1]			
					Color	Texture	Flavor	Quality rating[3]
Earli Orange	−9	Orange, red blush	Moderate	Fair — good	6.1			5.8
Wilson Delicious	−4	Orange, red blush	Moderate	Good				
Perfection	−2	Orange	Moderate	Good	6.1	6.4	5.8	6.1
Chinese	0	Orange	Moderate	Good—sprightly	7.4	6.9	7.1	7.1
Utah 27	0	Orange, red blush	Moderate	Good	6.2	6.0	5.9	6.0
Sun Glo	+5	Orange	Firm	Fair—good	7.4	6.9	7.7	7.3
Utah 18	+7	Orange	Moderate	Fair—good				
Utah 32	+8	Orange	Moderate	Good	8.2	7.7	8.2	8.0

[1]Color, texture, and flavor are rated 1 = poor, 10 = excellent.
[2]1952–59 average. Days before (−) or days after (+) Chinese.
[3]Quality rating obtained by averaging individual quality scores. Highest score indicates highest quality.

*Proceedings, Utah State Horticultural Society 1959 (in press).

is good. It is recommended for home and commercial planting.

Perfection. John and Bertha Goldbeck of Waterville, Washington, introduced this variety. In the Howell Station orchard, the fruits are medium to large, orange with a reddish blush, and almost round. The flesh is orange and has good texture, is fairly juicy, and is mild in flavor. The quality is rated as good.

Utah 27. This selection, like others from Utah described below, has resulted from the breeding program of Professor F. M. Coe, started more than twenty years ago. An unfortunate aspect of this breeding work is that the parentage of all of this material is unknown, the result of time and Professor Coe's leaving the University. Utah 27, the most attractive of the new selections, ripens with Chinese and is blushed with a bright red color over half of its surface. In shape, it is distinctly flattened, oval with little suture and is extremely uniform in size and shape throughout the tree. The flesh is bright orange, juicy, moderately firm, and of good quality. Canning tests on a limited sample have shown it to be somewhat more bland in flavor than Chinese, probably because the flesh is lower in acidity. When sun dried, it is comparable in flavor to Chinese but has a more attractive color. It is the only one of the selections that has a sweet kernel, like the Chinese. The tree is upright-spreading with large, dark green foliage. Utah 27 has been released to two Utah nurseries and will be available in the fall of 1960 or spring of 1961.

Sun Glo. (Plant Patent No. 751) This variety was introduced in Washington by the Columbia and Okanogan Nursery in 1946. It shows promise for extending the canning season of the Chinese. The deep orange color of the fruit makes it stand out in the orchard. The fruit should be thinned as they tend to overset. The firmness of the fruit, even when highly colored, makes it ideal for roadside market or shipping. The quality is good to excellent for canning, though very highly colored.

Utah 18. Large size, later maturity, and quality similar to Chinese, make this selection promising for extending the apricot canning season in Utah. This seedling ripens about a week after Chinese and has the largest fruit in the Station orchard. The fruits are similar to Chinese—round to slightly flattened, bright orange with little or no red blush. The flesh is mild in flavor and the quality fair to good. No canning tests were made during the 1959 season. This selection, like Utah 27, has been released to nurserymen for propagation and sale on a trial basis.

Utah 32. Maturing eight days or more after Chinese, makes this the latest of the promising new selections at the Utah Station. It has the highest quality of any variety in the canning tests and thus may become a valuable variety to extend to apricot processing season. The fruits are medium to large, round to somewhat flattened, moderately attractive with no blush. The flesh is bright orange, juicy, and of good quality.

L. G. Klein, new chairman of the Tree Fruit Exchange Committee of the American Pomological Society, calls our attention to two errors on page 57 of the March, 1960 issue of F. V. H. D. On lines 15 and 16 of the article entitled "Apple varieties for Quebec", Lobe should have read Lobo, and Bankroft should have been Bancroft. The editor greatly appreciates Dr. Klein's interest.