



1988 - 1995 Apricot Variety Evaluations in Virginia

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Introduction

Many apricot varieties are available to tree fruit producers. Therefore, growers should become acquainted with characteristics of various varieties grown under Virginia climatic conditions. Currently, apricots are not produced commercially in the mid-Atlantic area because trees bloom early and are susceptible to spring frost. Flower buds are quite resistant to low winter temperatures and there are active apricot breeding programs in Ontario, New York, West Virginia, New Jersey, and Arkansas, as well as in California. If late-blooming productive varieties are planted on the most frost-free sites, and bloom delaying techniques are employed, Virginia fruit growers may be able to profitably produce limited acreages of high-quality apricots.

In 1988, 14 apricot varieties were planted at Virginia Tech's College of Agriculture, Kentland-Whitethorn Farm near Blacksburg. This site is adequate for apples, but peaches were frozen out in 1990 and 1994. The crop for some peach varieties was also reduced by about half by spring frost in 1995. Two to four trees of each variety were planted and were given minimum care. Annually, a weed-free strip was maintained under the trees with herbicides, fertilizer was applied at the rate of 70 pounds of nitrogen per acre, and trees were sprayed with pesticides at approximately 14-day intervals from petal fall until harvest. Sprays were actually timed for peaches rather than apricots. Trees were not pruned except to remove low or broken branches. Fruit thinning was not performed. Most varieties produced full crops in 1993 and 1995 and partial crops in 1992 and 1994.

Apricots bloom on spurs on 2-yr-old or older branch sections and laterally on 1-yr-old wood. Spurs seem to produce the largest fruits. Spurs bloom 4 to 7 days earlier than lateral buds and, therefore, are most susceptible to spring frost.

Data Collection

Each spring the date of full bloom was estimated for each variety. The quantity of bloom was rated as none, light, moderate, heavy, or very heavy. In 1993 and 1995, fruits were spot picked when ground color was yellowish orange. This usually required two pickings per tree. Fruits were counted and weighed, and average fruit weight was calculated. Fruits were evaluated for attractiveness, flavor, and flesh characteristics. A sample of 10 fruit per tree was used to measure fruit length and diameter perpendicular and parallel to the suture. The suture ratio was calculated by dividing the diameter parallel to the suture by the diameter perpendicular to the suture. Varieties with suture ratios near 1.0 were symmetrical around the suture, whereas varieties with suture ratios greater than 1.13 appeared somewhat flat. The length and average diameter were used to calculate the length:diameter ratio: values near 1.0 indicate a spherical shaped fruit and values greater than 1.0 indicate long or oval shaped fruit. Average yields per tree for 1993 and 1995 are also reported.

Variety Description

Blenheim

(also called Royal Blenheim). This is an old variety, dating back more than 160 years in England. It comprises nearly 30% of the apricots grown in California and is used for canning and drying. Blenheim bloom is relatively late and heavy. In 1993, harvest date was early, but in 1995, harvest was mid-season. Yield for the two cropping years averaged 45 pounds per tree and average fruit weight was 1.1 to 1.4 ounce. The fruits are poor to fair in attractiveness and 10 to 50% of the fruit surface was covered with a dull reddish-orange blush with some small red spots. The suture was smooth and the stem end sometimes showed splitting along the suture.

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The suture ratio was 1.11 and the length:diameter ratio was 1.0. The flesh was light orange, firm, juicy, and aromatic with a nice balance of sugar and acid. Flavor was very good to excellent. Preharvest drop may be severe some years.

Chinese

A variety from the South Haven Experiment Station in Michigan. Flower buds are reported above average in cold hardiness. Trees bloom in mid-season and produce only light to moderate amounts of flowers. Harvest season is early and yield averaged 41 pounds per tree for the two cropping years. Average fruit weight was 1.0 to 2.5 ounces. Ten to 50% of the fruit surface was covered with a red-orange blush with red spots over an orange background. The suture was fairly pronounced, the suture ratio was 1.07, and the length:diameter ratio was 1.04. Attractiveness was rated fair. The flesh was light orange, soft, and fairly dry. Flavor was similar to a plum and was rated good.

Hungarian Rose

Trees bloom late and produce moderately heavy amounts of bloom. Trees were harvested in early-mid-season and yield averaged 25 pounds per tree and average fruit weight was 1.6 to 2.1 ounces. The fruit surface was 20 to 50% covered with red blotches over an orange-yellow background. The suture was very smooth and some of the sutures may split at the stem end. The fairly unattractive fruit had a suture ratio of 1.07 and a length:diameter ratio of 0.97. The flesh was soft and mealy and the mild flavor was rated fair.

Perfection

This early-blooming variety blooms heavily. Harvest season is early and average yield was 28 pounds per tree. Average fruit weight was 2.5 to 2.7 ounces. The oval shaped fruit had 5 to 30% of the surface covered with small red spots over an orange-yellow background. The suture was fairly pronounced, the suture ratio was 1.15, and the length:diameter ratio was 1.04. Fruits were rated as fairly attractive. The flesh was soft and juicy and the mild flavor was rated fair.

Rival

This variety is from Washington State University. Bloom time is mid-season and trees produce a heavy bloom.

Harvest season is early and average yield was 70 pounds per tree. Average fruit weight was 1.7 to 1.9 ounces. The fruits have a solid glossy red blush over 30 to 70% of the surface with some small red speckles. The suture was smooth, the suture ratio was 1.05, and the length:diameter ratio was 1.07. Some years up to 5% of the fruits were split along the suture. Fruits were rated as very attractive. The firm flesh was fairly dry, fruits are aromatic, and the slightly tart flavor was rated good to very good.

Veecot

This variety was introduced in 1954 from Vineland, Ontario. Bloom tends to be heavy and bloom date varies from early to mid-season depending on the year. The harvest season is early. Average yield was 28 pounds per tree and average fruit weight was 1.8 to 1.9 ounce. The suture ratio was 1.15, and the length:diameter ratio was 0.99. This oval fruit has 10 to 50% red blotchy blush over an orange background. The suture is smooth and fruits are attractive. The orange flesh was firm, juicy, and sweet. Flavor was rated good to very good.

Wilson Delicious

Trees have moderately heavy bloom during the mid-season. This mid-season variety has yielded 10 pounds per tree and average fruit weight was 2.0 to 2.7 ounces. This oval shaped fruit has 40 to 70% of its surface covered with red blotches; there was little red blush. The suture ratio was 1.1 and the length:diameter ratio was 1.02. The suture was smooth and fruits were unattractive. The orange flesh was soft, dry, aromatic, and sweet with some acid. Flavor was rated good.

Goldrich

This variety, which was introduced by Washington State University, blooms moderately heavy in mid-season and ripens early. Yield was 40 pounds per tree and average fruit weight was 2.3 to 2.5 ounces. The flattened fruits had a smooth suture and a suture ratio of 1.15 and a length:diameter ratio of 1.11. This attractive fruit had 10 to 50% of the surface covered with an orange-red blush with some red spots over an orange-yellow background. The flesh was orange, moderately firm, juicy, aromatic, and mildly subacid. Flavor was rated fair to good.

Harogem

A variety from the Agriculture Canada Research Station at Harrow, Ontario. Trees bloomed heavily in the mid-season and ripened late in 1993 and early in 1995. Yield has averaged 90 pounds per tree and fruit weight was 1.8 ounce. This oval shaped fruit has a suture diameter of 1.16 and a length:diameter ratio of 1.05. This very attractive fruit has 5 to 50% of the surface covered with a glossy orange-red blush. The suture is fairly prominent at the stem end. The flesh was firm and fairly dry, and the mild flavor was rated fair to good.

Tilton

The second leading variety (28%) grown in California for canning, drying, and fresh market. Trees bloomed heavy and late. Yield averaged 90 pounds per tree and fruit weight was 1.2 to 2.8 ounces. The heart-shaped fruit had 30 to 60% of the surface covered with orange-red blush with many red spots. The suture was moderately smooth and some had cracks along the suture. The suture diameter was 1.15 and length:diameter ratio was 1.07. Fruits were moderately attractive. The flesh was fairly dry, mealy, and aromatic, and the flavor was sweet and rated good.

Harlayne

A 1980 introduction from Harrow, Ontario. Trees bloom late and very heavy and fruit ripens late. Yield averaged 75 pounds per tree and fruit weight was 1.1 to 1.2 ounce. The glossy fruits had 5 to 50% of the surface covered with small red spots and orange-red blush. The suture was prominent at the stem end and some were cracked along the suture. The somewhat flattened fruits were attractive with a suture ratio of 1.13 and a length:diameter ratio of 0.94. The flesh was firm and fairly dry, and the mild flavor was fair to good.

Hargrand

This variety from Harrow, Ontario, was introduced in 1980. Trees bloom relatively early and heavy, but fruit ripens late. Yield averaged 87 pounds per tree and fruit weight was 1.7 to 2.1 ounces. The fruits had 10 to 40% of the surface covered with orange-red blush and small red spots. The suture was prominent at the stem end and some were cracked at the stem end. Fruits were fairly attractive and aromatic. The suture ratio was 1.0 and the length:diameter ratio was 1.02. The firm flesh was light

orange, fairly dry, and sweet, and the flavor was good to excellent.

Goldcot

Trees bloom early and very heavy and fruit ripens in mid-season. Yield average was 52 pounds per tree and fruit weight was 1.01 ounce. The fruit surface was covered 10 to 40% with orange-red blush and small red spots. The moderately attractive fruit has a fairly pronounced suture, and the suture diameter was 1.1 and the length:diameter ratio was 1.04. The flesh was moderately soft and dry, with a mild, almost bland flavor that was rated fair.

Bloom and Harvest Dates, and Yields for 14 Apricot Varieties Planted in 1988 near Blacksburg, Virginia

Variety	Full bloom date			Harvest date		Yield (lbs/tree)	
	1991	1993	1995	1993	1995	1993	1995
Blenheim	3/30	4/15	3/22	7/7	7/15	58	25
Chinese	3/29	4/13	3/21	7/6	7/4	2	36
Goldrich	3/28	4/14	3/21	7/6	6/30	40	40
Perfection	3/26	4/13	3/19	7/7	7/4	30	28
Harogem	3/28	4/13	3/22	7/10	7/6	74	105
Veecot	3/29	4/13	3/19	7/7	7/4	41	10
Hungarian Rose	3/30	4/15	3/23	7/6	7/11	33	16
Wilson Delicious	3/28	4/14	3/22	7/9	7/6	20	5
Rival	3/28	4/14	3/21	7/8	7/6	40	50
Tilton	3/30	4/14	3/22	7/14	7/20	70	100
Harlayne	3/29	4/16	3/23	7/16	7/25	60	85
Hargrand	3/26	4/13	3/22	7/18	7/17	65	80
Goldcot	3/26	4/13	3/20	7/9	7/14	48	115
Harcot	3/30	4/12	3/22	7/6	6/29	13	88

Fruit Characteristics for Apricot Varieties Planted in 1988 Near Blacksburg, Virginia

Variety	Harvest Season	Fruit wt (oz.)	Shape	Comments	*Recommendations
Chinese	Very early	1.8	Round	Unattractive	None
Goldrich	Very early	2.4	Flat and oblong	Attractive	F
Perfection	Very early	2.6	Flat	Poor yields	None
Veecot	Very early	1.8	Flat	Poor yields	None
Rival	Very early	1.8	Round	Good flavor	F
Blenheim	Early	1.3	Somewhat flat	Excellent flavor	F, D
Hungarian Rose	Early	1.9	Round	Poor yields	None
Harogem	Mid	1.8	Flat	Very attractive	F
Wilson Delicious	Mid	2.3	Somewhat flat	Poor yields	None
Goldcot	Mid	1.0	Somewhat flat	Soft flesh	None
Tilton	Late	2.1	Flat & oblong	Good flavor	F, D
Harlayne	Late	1.2	Somewhat flat	Good flavor	F
Hargrand	Late	1.9	Round	Good flavor	F

*Recommendations: F = fresh, D = dried, none = not recommended.