Performance of New Apple Varieties in Vermont

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Our location is in Southeastern Vermont—about 20 miles from the Massachusetts border and two miles from the Connecticut River and New Hampshire. Our orchards are located on several farms in the foothills above the Connecticut River Valley, at elevations varying from 700 to 1200 feet above sea level.

We have about 170 acres planted to apples, 3½ acres in cultivated highbush blueberries, 2 acres in peaches and smaller amounts of raspberries and blackberries. While we are primarily McIntosh apple growers we are looking for high quality dessert apples to extend both the picking and the marketing season.

Those ripening before McIntosh are used locally to supply roadside stands and stores within a radius of 75 miles. For this purpose we use Lodi, Red Astrachan, Early McIntosh and Milton. We would like better red varieties to precede Early McIntosh. We have found Melba too soft for this purpose. We fruited the Puritan last year but its season seemed to overlap that of Early McIntosh—and the latter is the better variety.

To follow McIntosh we have Cortland, Macoun, Davey, Spartan, Red and Golden Delicious, Monroe, Idared, Melrose and Ruby.

Davey has been a very good winter apple in 10 years out of the past twelve. One year it cracked about the calyx end (the same year the Stayman badly cracked in the Virginia area). In 1957 the Davey russeted from early frost and the apples did not keep well in storage. In 1958 they developed very well again—the color and size being all that we hoped for.

Spartan looks excellent in every way when grown on young trees. However we have several older grafts which produce mostly 2¼" and 2½" apples. It makes us wonder if our 3" apples on these young trees will gradually decrease in size as the trees get older. The color and quality are excellent. Perhaps we can improve size by special care in the way of mulch, fertilization and special pruning. It may be several years before we will know.

Monroe has done well with us. Our oldest trees were planted in 1950 and have produced annually for several years. Several of the trees planted in 1954 produced a bushel of fruit last year indicating that the trees will also begin to bear at an early age. The apples are of good size, a deep Jonathan-type red and except for one year have kept well in cold storage. Once they showed some deep scald in storage. Monroe is still on trial with us.

Melrose is very promising as a late winter apple. Last April they came out of storage in excellent condition. So far our trees and grafts have borne annually. The season may be a little late for the more northern fruit areas. It has been our last apple to pick following Golden Delicious. The size, color and quality of Melrose have been satisfactory.

Ruby has now fruited with us on grafted trees for three years. It is a highly colored productive, large, late keeping apple. We are favorably impressed with its appearance. Being a cross of Gallia Beauty and Starking it gets color from both parents but we hope the quality of the Starking will be more evident.

Idared has fruited for several years on a grafted tree and in 1958 the trees planted in 1954 began to bear. I believe the Idared will need good pruning and thinning on older trees to get good size and color. Some fruits on the inside of the grafted tree have failed to mature and color well. Needless to say all the apples on the young trees have been large and well-colored. Idared is still on trial with us.

We have fruited the Victory, Crandall, Hume and several of the N. Y. State numbered selections but so far have found them either inferior to other varieties of their season or our experience with them has been too limited to form any judgment of their value.

In closing, I would like to say that we have found the Blueray and Bluecrop blueberries to be the hardiest of the more recent introductions. They have shown the least winter injury in this area. We like the Berkeley for its large sweet berry and so far the winter injury has not been severe. Ivanhoe we discarded because of winter injury and its tart fruit. Pemberton and Jersey are still our favorites among the older varieties.

Winter Injury to Sweet Cherry Blossoms

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The low temperatures recorded at the Peninsula Branch Experiment Station, Door County, Wisconsin during December, January, and February have given us an opportunity to make a comparative study of the blossom bud hardiness of ten Sweet Cherry varieties. The trees have completed six years of growth in the orchard and are growing under a clean cultivation-cover crop system of culture.

Minimum temperatures for the three month period included 34 days below zero with the lowest reading of −17° F recorded on January 23.

Examinations of blossom buds were made during the week of March 1. Each bud was carefully sectioned and individual blossoms were examined with a binocular microscope. A total of 500 lateral blossoms (lateral buds on 1958 growth) and 1000 spur blossoms (spur buds on 1957 growth) were examined for each variety except Hedelfingen.

The percentage of blossoms alive for the varieties are given in Table I.

TABLE I. Sweet Cherry Blossom injury at Peninsula Branch Experiment Station Sturgeon Bay, Wisconsin

Variety	*Percent of blossoms alive*	
	Laterals	*Spurs*
Schmidt	2.3	1.9
Yellow Glass	0.8	6.4
Hedelfingen	—	13.0
Gold	0.0	13.2
Hardy Giant	1.6	12.0
Lambert	6.0	18.8
Senaca	4.1	27.0
Napoleon	4.8	29.8
Bing	11.0	36.0
Windsor	8.0	51.4

If you have any sharp, black-and-white photos of fruit varieties that you could send to the editor, they would be welcomed for possible publication.

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