

Raritan and Mollie's Delicious, Two More Red, Summer Dessert Apples from New Jersey*

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The new Raritan and Mollie's Delicious apple varieties, that follow Julyred (1), are the next step in the continuing program at Rutgers to develop a series of attractive summer apple varieties with good shelf life and superior dessert quality. They were named in the fall of 1966, the year of Rutgers' bicentennial.

Raritan

Raritan, tested as NJ25, is the first good quality summer apple that has shelf life approaching that of the standard fall and winter varieties. Raritan is a selection from the cross of (67634 = Melba \times Sonora) \times [110037 = Melba \times (Williams \times Starr)] made in 1949 by G. W. Schneider. It was selected in 1954. Raritan ripens with Puritan and Wellington, just after Julyred, and just before the first pickings of Williams Early Red. The fruit of Raritan is nearly round, and medium to large in size, 2½ to 3" in diameter. It is washed and splashed about one-half over with an attractive red on a light green that becomes light straw color when the fruit is fully ripe. The flesh is a very light straw color, fairly firm, crisp and juicy, and of good quality.

The tree of Raritan is vigorous and healthy, but it is a natural spur-type, and makes a sub-standard size tree. It was one of the first seedlings to come into bearing, and it comes into bearing early, either when topworked to mature trees or as budded trees. On the basis of the performance of the original tree, Raritan should be a

productive, annual bearer if the trees are not allowed to become overly vegetative. Trees that are not overly vegetative should produce above medium-sized fruits that are very attractive and that develop very good dessert quality. Like its high-quality grandparent, Melba, the peak of flavor and aroma of Raritan is short-lived; but Raritan will retain high quality and good condition much longer than many other summer varieties. It has been noted that, when Raritan has a light crop, the fruits are large, and some may develop water-core. Young trees or grafts of Raritan that are growing vigorously often rope up a heavy crop of good-sized fruits; this is similar to the cropping behavior of the new spur-type sports of Red Delicious. Such trees have often been observed to set only light crops for one or even two years afterwards, just like other spur-type trees.



Fig. 1. Mrs. Mollie Whatley samples her namesake, Mollie's Delicious, with Dr. L. F. Hough.

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Mollie's Delicious

Mollie's Delicious has been tested as NJ28. It is a large, Delicious-shaped apple that develops a beautiful red and white color at a time when the new, early-coloring, "triple-red" Delicious sports show some red color but are still green-fleshed and starchy. At this time, when the fruit of Mollie's Delicious is truly ripe, it is crisp breaking and juicy, with a flavor that recalls Golden Delicious at its best. Of course, this peak of quality lasts only for a short while at summer temperatures. But when the fruit is harvested just as the ground color is turning from light straw to white, the fruit will retain its high quality and good condition as well as any of the standard winter varieties. The fruits of Mollie's Delicious have kept in good condition in refrigerated storage from late August to April. But we don't expect that any fruit grower will ever find it profitable to keep such a beautiful, high quality, summer dessert apple in cold storage!

The skin of Mollie's Delicious develops from one-half to three-quarters red color (depending on the exposure) that is washed and mottled.

On the basis of the original tree and the young trees that have come into bearing to-date, Mollie's Delicious seems to grow vigorously enough, but it probably will not make a large tree. The first fruits on young trees are very large. Even when it crops heavily, the fruit is uniform and the size is large. It seems to be a regular bearer. Mollie's Delicious has developed good size, good color and quality in very limited tests in southeastern states. It may be a very profitable fresh market variety in the southeast states where it would ripen in midsummer.

Mollie's Delicious is from the cross (NJ14 = Golden Delicious \times Edgewood) \times (NJ4 = Red Gravenstein \times Close) made in 1948 by G. W. Schneider. NJ4, the male parent, is an aneuploid seedling from the triploid varieties, Red Gravenstein and Close (2). NJ4 was not dependably fruitful. Because of the unfruitfulness of NJ4, Mollie's Delicious (NJ28) was not distributed for grower tests for several years after it was selected in 1956. Both the pollen development and the seed development of Mollie's Delicious have been found to be normal. Mollie's Delicious has been used successfully both as a male and as a female parent in the breeding program. Incidentally, on the basis of a few progenies that have already fruited, Mollie's Delicious promises to be a very valuable parent for transmitting large size, good quality and good texture, but not much red color.

Mollie's Delicious was named for Mrs. Mollie Whatley (Fig. 1), the wife of Dr. Booker T. Whatley, who was a graduate student in the Department of Horticulture at Rutgers in 1956. Mrs. Whatley was the first homemaker to taste this selection. She spontaneously recognized and described the excellent dessert qualities and the appealing beauty of these first fruits.

Trees of Raritan and Mollie's Delicious are available from the New Jersey Apple Institute, R. D. 3, Princeton, New Jersey 08540.

Literature Cited

1. Hough, L. F. and Catherine H. Bailey. 1962. Julyred, a new, red summer dessert apple. *Fr. Var. Hort. Dig.* 16:53.
2. Schneider, G. W. 1953. Megagametogenesis and embryology in a diploid and an aneuploid apple. *Amer. J. Bot.* 40: 196-203.