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## The Golden Delicious Story\*

PAUL STARK, JR.\*\*

It is quite fitting, in my opinion that, we delve into the history and development of the Golden Delicious apple, which, in the U.S.A. alone, yielded 21 million boxes of fruit in 1969. In the following paragraphs I shall refer to and quote from the sayings and writings of some of the people who have been involved with the discovery, development, evaluation, production and marketing of the variety.

First of all, there was Bewel W. Mullins and Anderson Mullins who found the precocious seedling on a West Virginia mountain side, who recognized its possible value, and sent samples to us for testing.

Then, there was my father, who recognized its quality, and made the famous trail of the "golden apple" an international legend. Joe Sicker helped put Golden Delicious on the map in the New York markets, as did Queen Marie of Roumania, who cooperated in the greatest publicity feat in horticultural history when she sampled one during her tour of the U.S.A. Bill Blizzard of the Charleston, West Virginia Gazette Mail, wrote a comprehensive documentation.

We look to the Cowins, Ryans, and Shells, American Fruit Growers, Inc., The Peters, Louis Mallin, Frank Hough, Roy Dougherty of Skookum Packers, Frank Cole and Tom Francomb of Tasmania, Gerald Wight of Capetown, South Africa, Charles Andre of France, and many others all over the world who recognized the potential of this fine fruit, and had

the intestinal fortitude to plant and market it in substantial volume. We owe a great deal to the professional pomologist, L. P. Batjer and his chemical thinning to eliminate bi-annual bearing; Edwin Gould, Marshall Ritter, Ronald Tukey for improving production methods; Norman Childers for his nutrition work, and Bob Smock for his contribution to controlled atmosphere storage, which literally makes the Golden Delicious a year-around apple.

We are indebted to the research workers of New Jersey Standard Oil, who gave us Captan; to Food Machinery Corporation, Wallace & Tiernan, and Decco, who gave us fruit waxes; and to Grady Auvil for improving training methods.

Last but not least, we owe much to Elton Gilbert, Phil Jenkins and Joe Steimbacher, who discovered and helped develop the first spur type Golden which has greatly enhanced the production and orchard efficiency of the parent variety.

Let's take a close look at this variety. The tree is strong, especially the spur type. Golden Delicious is a heavy, long season bloomer, self-fruitful, extremely frost resistant, and one of the earliest, heaviest of bearers. At three to five years of age it will pay its way. Properly thinned, it is probably the heaviest bearer of acceptable sized fruit of all the major varieties. It is the "sweetheart" of apple varieties among apple growers. The fruit is beautiful to behold, without a com-

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petitor in the Golden field. In spite of all the substitutes such as Prime Gold, Honeygold, Pacific Gold, Ozark Gold, Sungold, Blushing Golden, Golden Delicious it is still the unchallenged star. Its harvest season is longer than Red Delicious, and can be extended with alar; and its type can be improved with cytokinins. It does not deteriorate so quickly either. It is delightfully fresh, with snap and zing in its flavor. It may be of highest quality processed or home cooked, always beautiful and flavorful, suitable for any use. It is one of the few apples that folks with touchy stomachs can eat fresh.

In the hands of good orchard management, smooth Goldens can be grown in the East and Midwest as well as in the Northwest.

We now have the tools and the talent to grow, harvest, pack and store this royal queen of fruits. The organization, money and facilities are available for a great promotion in a national way.

The "gold" that first grew in Clay County, West Virginia, in 1912, not far from the hamlet of Odessa, now enriches much of the fruit world. But the original source of Golden Delicious, on an isolated West Virginia hillside, is dead and gone. No stone marks its grave.

Yes, it was "gold" that grew on a tree. The offspring of that tree dropped wealth all over the United States, and march in serried rows of green through Italy, Holland, France, Germany and other countries of Europe, as well as South Africa, The Isle of Tasmania, New Zealand, China and India; and the beginning of that wealth was a seed that swelled, burst, and forced life through Clay county soil into the West Virginia sunlight.

The Golden Delicious apple today is one of the most important apple varieties in all principal fruit growing areas of the world. But in 1912, the original tree, on the farm of the Mul-

lins family on Porters Creek, had only local fame as Mullins Yellow Seedling. It was a precocious sapling which bore big, yellow apples such as no one in the area had ever seen before. No one in the rest of the world had ever seen such apples, for they grew nowhere else. How the tree on Porters Creek came into existence is still something of a mystery, although pomologists reason that it was probably an offshoot of an old-time apple which in Virginia was called the Golden Reinette, and maybe Grimes Golden, which also had its origin in West Virginia.

The thirty-six acre farm on which the original Golden Delicious tree began to bear fruit at about the turn of the century, belonged to Bewell W. Mullins. But he did not own it, when Dad discovered the tree and named it Golden Delicious. The property, at that time, belonged to Anderson H. Mullins, Bewel's uncle. The late Mrs. Nancy Mullins, Bewel's widow, once explained this quirk of fate to Charleston Daily Mail writing Charles Connor as follows:

"Dad wanted a bigger farm, as we had three boys then, so he traded his 36 acres for his uncle's 105 acre farm up Falling Rock Creek. Anderson was interested in our fruit trees, and Dad had the hillsides full of them—pear, peach, apple and cherry—a regular orchard.

"Anderson had bought his fruit trees from the Stark Brothers for several years, and when he noticed the yellow apple tree on our farm, he knew it was something out of the ordinary; so he picked some of them and sent them to the 'Starks.'

According to Stark records, Anderson sent us three apples, and then a modest letter saying that the tree had been in bearing for nine years; that it had fruit when other trees did not; and that the yellow apples kept in good condition in his cellar until late spring. This was in April, 1912. With

his act, Anderson H. Mullins changed the course of apple-growing history. Dad and Uncle Lloyd (Stark) couldn't believe their eyes or their taste buds. They sent one apple to Col. G. B. Brackett, U.S. Pomologist at Washington, D.C., Brackett, who was also excited by it, and wrote glowing praise of the new discovery.

In the autumn of 1912, Paul Stark, a pomological Jason, set out in search of the "golden apple." He not only knew apples, he knew how to write about them in a way to excite interest and sales. He told of his voyage to West Virginia in a story often printed in our catalogs and Golden Delicious sales material. Journeying 1,000 miles on railroads, a body-bruising feat in those days, then horse and buggy, and finally 20 miles on mule back to a point on Porters Creek, he found what he was looking for—a genuine new apple that was to bring fortune to so many orchardists all over the globe.

With an Archimedean "Eureka!" he bit into the apple from Mullins' Yellow Seedling, then got down to business. The Company paid \$5,000 for the tree, a considerable amount of money in that time and place. While Bewell W. Mullins may have felt disappointment because of the chance which deprived him of a larger amount of money, his was not a total loss. For 30 years, at about \$100 a year, he was paid to maintain the original Golden Delicious tree for our company. This included fertilization, spraying three times a year, writing letters about the tree and taking photographs of it, and sending scions and buds to Louisiana, Missouri.

Bewell continued with these duties even after he moved to Charleston in the '20s to work in a glass plant. The Company took this remote-control supervision very seriously. A telegram from Paul Stark to Bewell, dated August, 1925, read as follows: "Please cut and mail all buds can procure without injury to Golden Delicious

tree. Wire approximate shipping date."

A letter of October 25, 1940, shows the care demanded by the company for the prize tree 28 years after we found and named it. It, too, is from Paul Stark to B. W. Mullins: "Judging from the pictures, it seems to have made good growth with good foliage, and a good crop. As I have written you before from time to time, I think a good application of manure is very essential and should be put on each year. We appreciate the personal attention you have been giving this tree and want you to keep us advised of anything that looks like it seriously affects the living of the tree. The next time you are up there, could you take some little snapshots with this same camera to show the trunk of the tree from all sides so we can see if there is any indication of any weakness? We want you to try to keep this tree in good healthy condition as long as possible. Did you put on any sulphate? If not, we could send you five or ten pounds and you can put it on early next spring. How many times was the tree sprayed this year? How many bushels of apples did it bear this year?"

Both the letter and telegram are in possession of Mrs. Thomas McQuain of Charleston, one of Bewell Mullins' daughters.

Shortly after the company bought the tree we built a cage around it, a sturdy woven-steel structure, enclosed even at the top. The cage was kept locked, and a lead-enclosed wire was strung from the hillside to the Mullins' farmhouse below. To the lower end of the wire was attached a burglar alarm powered by a battery. The alarm went off only once. The embattled Mullinses rushed up the hill into the darkness, prepared to fight a host of apple thieves. Their swinging lanterns, sure enough, revealed an intruder leaning against the wire enclosure. The intruder was female. She

was not chewing an apple. She was chewing her cud. She was the family cow.

When we bought the original Golden Delicious tree, we also acquired a piece of land, 30 feet to a side, which surrounded leafy, fruitful property. This 900 square foot bit of West Virginia hillside, covered when last seen by a mass of undergrowth, and occupied by a large blacksnake, turned out to be the most valuable and productive piece of real estate of its size in the mountain state. The deed is still on record in the Clay County Courthouse.

After Stark Bro's acquired the Golden Delicious tree, the firm propagated it by budding and grafting, and advertised heavily. They had help in selling their product from people whose praise could not be purchased.

The world's largest orchard company, The American Fruit Growers, Inc., of Pittsburgh and Wenatchee, invested in large scale plantings of the new apple. The Wilder silver medal, the nobel prize of the fruit world, was awarded to the Golden Delicious by the American Pomological Society.

Prof. H. L. Crane, Horticulturist, West Virginia Experiment Station, said: "It is likely that Stark's Golden Delicious will be the parent of a family of fruit trees that will revolutionize apple growing. I have never seen anything like it before. Here it is, showing fruit maturing on terminals, fruit spurs, and most important of all, on lateral buds. This is the only apple I have seen or heard of doing all this."

Golden Delicious has sired several promising varieties, including Splendor from New Zealand; Ozark Gold, from the Missouri State Experiment Station, Mountain Grove; SpiGold, from the New York Agricultural Experiment Station, Geneva; and the later ripening Blushing Golden, from Southern Illinois.

Professor Frederick Cranefield, of the Executive Committee of the American Pomological Society, asserted that "all the horticultural writers and pomologists will have to revise their books on apples, because the Stark's Golden Delicious bears regularly on new one-year wood."

Ohio State Horticulturists, Prof. Wendell Paddock, called the Golden Delicious "the most remarkable apple introduction that has been made in recent years." Prof. F. P. Cullinan, of Purdue University said: "I do not see how anyone could desire a higher quality apple than the Stark's Golden Delicious."

Dr. John Harvey, Kellogg, of Battle Creek Sanitarium and "breakfast food fame," wrote the Stark Nurseries that "I consider the Golden Delicious the finest apple I have ever tasted," and prepared to plant an orchard on his premises.

Even the great Luther Burbank, said: "After observing Golden Delicious in my experiment grounds and giving it careful tests, I have no hesitancy in stating that it is the greatest apple in all the world."

Former West Virginia Governor William A. MacCorkle invited Stark Bro's to come to West Virginia "with your wonderful staff of progressive people," but the Starks had been raising apples in Missouri since 1816, and had excellent reasons for continuing to do business at the same old fruit stand.

Many outstanding varieties will never have commercial acceptance. Those of us in the fruit business recognize that during recent years there has been a significant trend toward fewer and fewer varieties, until today we number only some four or five outstanding varieties in our commercial plantings. So, for a variety to be introduced and survive, it must be good; and that, of course, is the story of the Golden Delicious apple.