

## Apple Color Sports, A Milestone on the Industry's Progress

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The color sport varieties are doing much to help the growers of the east and of the middle-west, because they entice the housewife to buy more apples. The climatic conditions of these regions are not as ideal from the standpoint of growing good colored apples as the far west; but these new sports have helped the growers to overcome these climatic disadvantages. The color sport varieties will attain higher color with less sunshine and less cool nights than the older varieties, hence they are a great advantage to our eastern and mid-western growers.

The emphasis today—if we are going to get Mrs. Housewife to buy more fresh apples—is to make available to her high quality apples with bright, high color, and these color sports will furnish this color necessity much more readily than the older varieties. Mrs. Housewife frequently buys by eye, and the apple in the bin with the least blemishes and highest color is the one which will attract her pocketbook. The apple industry must recognize and provide for Mrs. Housewife's desires if it is going to expand and to increase the consumption of fresh apples.

We have found in our Berryville,

Virginia, and Charles Town, West Virginia, orchards that the color sport varieties will obtain the highest uniform color if they are spot picked, taking the best colored apples off first, leaving the remaining apples—generally about one-half—for a period of around two weeks, in which time they will mature their proper color. I consider it a great mistake to pick a color sport tree in full because we will sacrifice one-half of that tree to inferior color. Also, when a tree is spot picked, the remaining apples will gain frequently as much as one-quarter inch in size and on today's fresh apple trade we have found that large apples sell much better than small apples. The reverse of this was true during the early years of the depression—in the thirties and before the apple industry lost its foreign market.

I have a suspicion that the sports in our orchards are more susceptible to both frost and spray russet than the old varieties. This may, however, be due to their youthfulness. None of them are over 20 years in age, and most of them are 12 years of age. This russet factor can be mitigated by selecting good drainage sites when planting an orchard and by keeping away as much as feas-

ible from all caustic sprays. If the scab fungus can be brought under reasonable control in the early sprays I do not believe any sulphur should be used after the first cover spray. Commencing with the second cover spray we should employ ferbam as a fungicide. From my observations today ferbam does a creditable job in keeping scab off the fruit and does not impair foliage functions as extensively as sulphur. Nothing can be more detrimental to the proper maturity and color of the sports than the attenuation of photosynthesis by caustic fungicides. I believe the day will come when mercury will deliver telling blows against scab while leaving the foliage in proper functioning condition.

We have found in our operations that early thinning of sports is essential to color and to size. We endeavor to give them all a going over between June 1 and July 20. Those thinned in June, the earlier the better, generally give a better account of themselves than those thinned in July. What you lose in tonnage—it is always questionable whether you do lose tonnage with proper thinning—you gain in increased size and color and these two attributes command higher prices from the trade. The larger sizes have brought us as much as 50c per box more than the smaller sizes; and the trade is pleased and will come back for more.

I have found that the pruning of sport trees is the most important factor in annual bearing, size of fruit, color, and spray economy. I

feel it is a great error to leave these too thick, thinking they need little pruning because they are sport trees. They need uniform pruning every winter, judicially removing wood from the outer branches as well as the inside; and always avoiding the bane of an appleman's existence—"muletailing" (on the ends of the limbs). I believe proper pruning is the most important factor governing the ultimate reception of these sports within the trade. And in times of labor shortages it is the hardest job to get done yearly.

Since 1930 all of our replanting has been with color sports, excepting the Golden Delicious and the Lowry varieties. We have planted roughly 140,000 sport trees since 1930 and I feel they have given a good account of themselves where the above mentioned cultural and production practices were adhered to. To my knowledge none of these sports has proven untrue, i.e. reverted to the color of its parent. Our largest plantings are in the Shotwell, Starkling, Vance and Richared sports of Delicious. Delicious apples in our country are difficult to raise—they freeze easily, set poorly unless excellent pollinating weather prevails, and they are most susceptible to the scab fungus. However, when you get a crop of them they bring a good price.

Our next largest planting consists of the Stayman—201 and Staymared. This apple attains a high color and has sold profitably during the winter months. Its great drawback is its

tendency to crack. But we believe we have found the solution to this lamentable occurrence. The old Staymans during the past three years have cracked also, so this depressing tendency is not peculiar to the sport Stayman. There have been many weather and spray conditions peculiar to the past three years which I believe have caused this cracking.

Third in numerical order are our 262 and Seeando Rome Beauty. I cannot speak too highly of these two sports. They are self-fertile, more frost resisting than other varieties, heavy annual bearers, and their foliage and apples strongly resist spray russetting. Also they are grand baking apples and find a ready reception on any market into which they are shipped. I do not know of any great defect they are subject to while growing in our section.

Our fourth heaviest planting is the Red Yorking and Colora York. Both are sports, but we have found the Colora York does not attain the high color found in our Yorking. Of course, this makes the Colora deficient in its main necessity. Yorking and Colora Yorks have only a fair reception upon the fresh trade market, but they are much sought after by the canning factories, and with the recent tremendous expansion by apple canneries these Yorks will always find a home.

Last but not least we have large numbers of Seeando Winesap. These are long keepers and command a good price in winter and early spring. Their chief defects are their susceptibility to russet and their inability in obtaining large size. Much money must be spent in pruning and thinning these trees if their apples are to attain favorable market size. This color sport of Winesap within our orchards does russet more frequently under identical climatic and spraying conditions than the old Winesap.

Today in America Mrs. Housewife is more particular than her mother or grandmother. She will look over the apples in the grocery store and if they do not appeal to her eyes she will buy some other product. She wants her eyes to be pleased and they in their pleasure will entice her appetite. She does not stop to reflect that a green apple may have better flavor than a red one. But she likes to see the pretty color. And so with all their drawbacks, the color sports are our best means of enticing Mrs. Housewife to buy more apples for her family, and if she can become progressively more enamoured of big red apples put up in attractive packages with a minimum of bruising, then the apple industry can look forward to a boost in sales and increased dividends on its investments.

