

Apple Production and Variety Trends

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Back in 1894 Stark Bro's ran a national New Fruits Show encouraging fruit farmers and anyone else with a new apple variety to send them in for the contest. The most promising varieties were awarded prizes and the possibility of commercial propagation if they were better than already existing apples of their type and season. Propagation and sale to growers meant further rewards in the form of royalties for each tree sold.

One day, at the Show, my grandfather bit into a big red apple with five distinctive points forming a crown around the calyx end and exclaimed—"Delicious". The name stuck, and I often wonder if he had any idea of the impact this apple would have on the future of the fruit growing economy, not only nationally, but in all parts of the world where apples are grown.

The **Delicious**, its red sports and, more recently, the super fruit-spur red sports, with even better color and much earlier and higher yielding characteristics, promise production of three times that of the next three varieties—**McIntosh**, **Winesap** and **Rome**. These new super fruit-spur type **Delicious** will also greatly increase the per acre tonnage of **Delicious** apples in the areas east of the Rocky Mountains, since they are hardier in tree, in bloom, and not as touchy on pollination as the older strains. This has resulted in rather heavy plantings in the south-east and south-central states—North Carolina, South Carolina, Virginia, West Virginia and Alabama, in the mid-west, as well as on the West Coast.

Recent **McIntosh** plantings have not been heavy, but they are long-lived,

hardy trees, and production could increase as a result of the limited new plantings and better cultural methods.

Winesap planting was considerable for a year or two after the mid-fifties, but a Washington State survey showed very few **Winesaps** have been replanted since 1946. This variety will probably stabilize at near current production. Controlled atmosphere **McIntosh** and **Delicious** will disturb the future **Winesap** market.

The planting of **Rome Beauty** has slowed down, but the trees already in the ground assure a good increase in this variety.

Jonathan and its red sports will hold their own in fifth place, and the trees being planted in Michigan and the rest of the Mid-West will more than offset removals in the Far West. Blight has been rough on some young trees in the Mid-West, but repairs, antibiotics and replanting are overcoming this.

Although some **Yorks** are being pulled out, and plantings light, young trees set a few years ago promise to keep this variety producing at better than current levels, if processors' prices remain reasonable.

Heavy plantings of **Golden Delicious** and the early bearing characteristics of this fine apple promise a sensational increase over current crops of this variety. **Goldens** will surpass **York**, **Jonathan** and possibly **Winesap** and **McIntosh** very shortly. Fortunately, the market acceptance and popularity continue to grow with this increased production of **Golden Delicious**, which is a dual purpose variety, excellent for both fresh and processing markets. Chemical thinning will help

stabilize the annual production of Golden Delicious. The use of milder, organic, pest-control chemicals, along with maintenance of healthier, well-foliated trees, tend to reduce or eliminate russet and give better fruit.

Our sales of **Staymans** and red sport trees have substantially declined in recent years as a result of marketing problems with this apple, which is still a real good "eater" in my book.

Baldwins continue to decline in the East, and **Newtowns** are holding their own in the west, with some young plantings coming along in Oregon and California.

There is some planting of summer apples, including enough **Gravensteins** to maintain production of this variety, a big increase in **Beacon**, sometimes grown as Miller Red and Fenton, and a few **Lodi**, some of which will be top-worked and used for their hardy framework. There are quite a few young **Starrs** in New Jersey and **Early Macks** in New York, and **Tydemans Early Worcester** and **Early Mac** in Washington State. **Haralson** is the leading variety in young plantings in Iowa and Minnesota.

The great increase in the planting of dwarf trees in all areas is significant. Most of these are not the true dwarf, bush-type tree of France and other continental European countries, but are semi-dwarf, intermediate between the bush and our present standard-sized trees. The fruit-spur type **Delicious**, and, the more recently discovered spur-type **Winesap**, **Golden Delicious**, and **Lodi**, also fall into this size range. These semi-dwarf trees are young bearers, highly efficient and productive for the space they occupy, and will have a terrific impact on the future of apple production here and abroad. I think they are the answer to increased production of higher quality fruit at greatly reduced cost.

We used to figure it took 20% of our tree numbers of non-bearing age to maintain production. Today, with better cultural methods, milder sprays, dwarf trees, fruit-spur type semi-dwarf trees, we can maintain production with much less acreage in this classification.

Apple production should substantially increase in the next few years, unless abandonment of eastern marginal orchards and removal of obsolete varieties in the West is greatly accelerated. The big increase will be in **Red Delicious** and **Golden Delicious**.

It should be kept in mind, however, that the American population is increasing in explosive proportions, and that we will have plenty of people to eat the increased tonnage of the right varieties, either fresh or out of cans, if we provide a good product and the right promotion.



National Fruit Trials in Great Britain

In 1922, the British Ministry of Agriculture and the Royal Horticultural Society together established the Commercial Fruit Trials at Wisley, in Surrey, to assess the value of new and little-known varieties of fruits. These were renamed the National Fruit Trials in 1943. A new larger site, the Brogdale Farm, south of Faversham, was acquired for the Trials in 1952.

Among the materials tested are selections resulting from the breeding programs carried on at the research stations at East Malling, Long Ashton, John Innes, and the Scottish Horticultural Research Institute.

J. M. S. Potter, who directs the Brogdale tests, points out that they are interested in finding new early and late apple varieties; new pears; and sweet cherry varieties less subject to splitting and more resistant to bacterial canker.