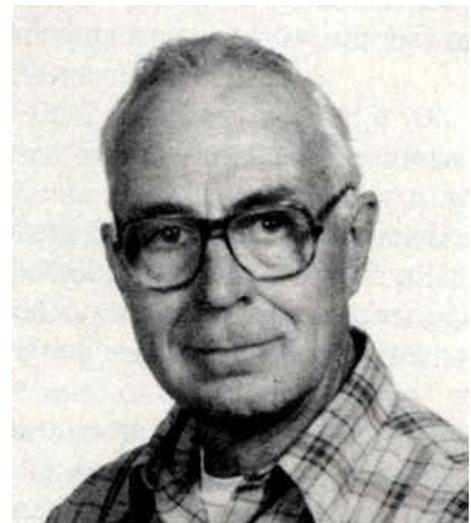


## Introducing New Cultivars: Needs vs. Risks

### W. H. Brokaw

President, Brokaw Nursery, Inc., and Director, California Avocado Society.



New varieties in produce are essential to progress in the fresh food industry. Every year, we have new varieties of annual plants; and farmers eagerly plant them. New subtropical fruit varieties are a different matter. Many of them are considered, but few are adopted. A principal reason is the risk entailed by planting unproven perennial cultivars which require formidable capital investments to bring into production. After that comes the marketing challenge, especially if a satisfactory variety is already available in quantity.

So, there is a double bind: new varieties are important; wrong choices are very expensive. What to do?

### Needs Versus Risks

Yankees have a special faith. It is that customers will always prefer any reasonable priced product of better quality.

In the actual commerce of varieties of seasonal fruits, however, the product does not always sell, and expected profits are not always realized. The introductions are savored by their discoverers, friends, and others; but they rarely make it to the larger market place.

Sometimes, the product really isn't better; it only appears and tastes as if it were. Perhaps it is really flawed: it ships poorly, only ripens well when it is still on the tree, isn't prolific, and/or possesses some other deficiency. Sometimes, though, the variety really is good; yet, even so, its introduction is difficult, slow, and chancy. This is ironic, for we need an assortment of suitable varieties. An industry too dominated by a single variety, or that produces too few varieties, is vulnerable. It is more threatened than it needs to be by diseases, changes in the weather, and the natural cycles of over-and under-production. Further, it is subject to strict season limitations.

Ideally, we need many varieties, so that we can produce fruit all year long and more or less equally abundantly from year to year.

What follows is a story about how California growers have been introducing the Pinkerton variety of avocado, with an account of some of the problems they have encountered and the lessons they have learned. Their experiences, so far, have parallels with the introduction of the Hass, a predecessor by some forty years that now is the world's most popular avocado variety.

## **Pinkerton History**

About 1968, the late John Pinkerton found a seedling avocado in his grove which bore abundant green fruit of high quality. It was prolific; tasted good; and had a rough, tough, Hass-like skin and a small seed. Further, it ripened more slowly than most varieties, giving it a long shelf life that was thought to be an advantage.

Everyone loved John's new variety. Friends topworked a few trees to it, and had high hopes. John patented it.

About 1973, John's foreman approached me about the variety, and recommended that I plant it. When he informed me that it matured about April, in the Hass season, I politely declined his recommendation. Upon learning, however, that when harvested earlier, it might compete with the Fuerte variety, I was interested. The Fuerte was in trouble in California on account of its erratic and mostly meager bearing habit. Hass was not then being marketed in volume until mid-March.

Brokaw Nursery planted the first commercial orchard of Pinkerton—2,400 trees—in 1974. It was noticed by other early-adopting growers. Indeed, most of these Pinkertons, both ours and those of others, bore well as had been predicted. There were some early problems regarding excessively long and "necky" fruit, but these generally became less serious and nearly disappeared with time. There were problems in ripening and uneven ripening with barely mature fruit. The extra long shelf life proved not to be the advantage we had expected, since new industry marketing efforts aimed at increasing fast turnover of fruit at retail. There were, however, desirable qualities: the fruit was large, handsome, tough, had a small seed, and was as good as Hass in April and better than Hass in January.

About 1983, we heard criticism by packers. "Pinkertons are too 'necky'," they said. They wouldn't ripen evenly, and they couldn't be stored under refrigeration. The packers reported a stream of "bad arrivals." They said, "The consumer doesn't want them; she wants Hass." The supply of California avocados was excessive, at the time, and Hass were being harvested greener and greener, earlier and earlier, into the early season months of November and December.

The outlook for Pinkerton growers was grave, since most of the adverse reports came from Calavo Growers of California, the dominant cooperative and largest of California's avocado packers, that handled about 85 % of all Pinkertons.

Growers were skeptical of the criticisms because, in the prior year, Pinkertons had become, on a per-pound basis, the second best revenue producing avocado variety in California. They suspected that the packers were too occupied with other, major varieties. Consequently, in 1984 they banded together in an informal organization called "Pinkerton Growers of California"—PGC.

PGC financed itself on a voluntary basis. Grower-donated funds were used for such things as merchandising calls, sample fruit cartons, point-of-sale materials, and advertising. Participation was marvelous. In 1986, the organization hired a professional merchandiser.

Serious problems showed up in 1985-86. There were many bad arrivals, and there was a strong backlash against Pinkertons at the buyer level. Grower investigations indicated that the spoiled Pinkertons had been overharvested because of a temporarily "hot" market. Handlers endeavored to hold out for high prices in order to please Pinkerton growers. Consequently, PGC sponsored postharvest research projects and continued to work with handlers.

PGC made a big difference, but part of that difference came from two unexpected quarters. First, Safeway Stores, after nearly rejecting the variety on the basis of its reputation, ordered Pinkertons from Index Mutual, the smaller of the industry's marketing cooperatives. So pleased was Safeway that they began to run a season-long special on extra large Pinkertons, at premium prices. At last, Pinkertons had at least one continuing market. Index took notice, saw an opportunity, and began to woo Pinkerton growers, reasoning that their recruitment would bring in added Hass volume, as well.

Second, Henry Avocado Company, of Escondido, began to precondition winter fruit with ethylene to induce quicker ripening of the fruit on supermarket racks, and thereby accelerate turnover. The Henrys found Pinkertons to be ideal for the purpose.

Through the years, Pinkerton returns to growers have been generally good. On a price-per-pound basis, annual averages have consistently outperformed all varieties other than Hass; and in 1986-87 slightly bested even that variety. We have found that, in general, when Hass is scarce, its price advantage relative to other varieties is large; when Hass is abundant, Pinkerton may have the price advantage, simply because it is mostly harvestable during the "pricey" winter season.

Pinkerton is now at a critical point in its history, and has a new and different problem. Now that customers have come to know, like, and use the variety, our problem is that Pinkerton growers cannot supply enough of it. They cannot offer the dependable, continuous supply of uniform fruit that the large modern retail grocery chains require. Consequently, they are having to limit sales to small "high-end" chains—outlets that feature unusual and consistently high quality products at high prices.

## Hass/Pinkerton Market Development Comparisons

Early Hass history differs in important respects from Pinkerton history, but there are some striking similarities as well. Hass, too, was perceived as having a different season than Fuerte, which was then the standard. The "upstart" Hass was criticized because it was black-skinned, rough, and small. It received little special attention by the industry's principal marketer (Calavo) or by avocado handlers generally. Only one small handler, United Avocado Growers, promoted and aggressively marketed the variety as "premium-worthy." Acceptance of Hass as a superior commercial variety was slow—by packers, distributors, retailers, and end users.

Although Hass was always a relatively better revenue producer than its chief competitor, Fuerte's near-universal acceptability was a problem for Hass; and Hass growers wisely stayed away from the Fuerte season. Hass, they said, was a summer and fall (May-October) variety.

Pinkerton growers tried to do the same thing: market into the winter when there were no Hass. The strategy was partly neutralized when over-produced Hass in the 1980s were stuffed into that market as well as remaining in the summer market.

As noted, Calavo and most independent avocado marketers took the Hass in stride, allowing it to find its own market niche without major special promotion. Although my historical view is that the major marketer, Calavo, "rejected" the Hass in its early history, a Calavo source vigorously denies charges of "rejection" of Hass or "bias" in favor of Fuerte. Calavo, the spokesman argues, did recognize the superior qualities of the variety and placed the limited volume available (less than 300 pounds in 1940, the first year of Hass receipt by Calavo; about 60,000 pounds five years later) in selected markets where acceptance could be built.

Many of the early Hass growers were small producers not affiliated with Calavo. Their production was marketed through United Avocado Growers, a packer that became a specialist in Hass with tailor-made merchandising and promotion. I believe this was a fortunate factor in speeding the introduction of Hass as a commercial variety.

The Henry Avocado Company might have served Pinkerton growers in a similar fashion, but chose not to do so because it did not control enough of the supply. Most growers of Pinkerton were larger producers and were more closely tied to Calavo than was the early situation of Hass. Index Mutual, however, maintained a special interest in the opportunities for Pinkerton and paved the way toward more effective merchandising of it.

Where Pinkerton will go from here is a guess. Its days of "bad press" appear to be over. It is now recognized as a superior variety and a good alternative to Hass when Hass sizes are too small. But we need more fruit, if a market is to be developed. The problem

has become not "why Pinkerton?", but "where are the Pinkertons?" The future really depends on growers.

## Summary

Study and experience of the introduction of these two varieties furnish some valuable lessons, if we can just remember them. I have summarized below some of the things I believe Pinkerton growers have learned:

1. No new variety makes it on its own. It needs a sponsor, "political" support, and a handler who will learn its eccentricities and back it up.
2. An industry-dominant cooperative is likely to be a frustrating medium for new variety introduction for growers impatient for returns on their investment. It is large, likely to be conservative, has established its "product," and tends toward inflexibility because of these characteristics. I believe its attitude may reflect concern by owner-directors that a new variety threatens their variety investments.
3. Most packers and nearly all secondary distributors do not want to be bothered with another variety, "new-and-improved" or not. They are too busy. Distributors, for example, are selling potatoes, turnips, broccoli, and a hundred other items over a buzzing phone; one more variety of avocado is one more complication.
4. When a handler or distributor says, "The housewife doesn't like it," take the message with a grain of salt. It may be his code for, "I can't be bothered."
5. When a handler says, "Nobody wants it," watch out. Take a box of samples to a buyer and see if that is true.

Pinkerton growers who personally promoted the variety really offended some handlers when they did this. The handlers protested, "That's our job. You are confusing the buyers." Don't be dissuaded. The growers sold lots of Pinkertons that way.

6. Form a variety-support committee of cooperative growers. Organized, they have clout, and handlers pay attention.

Warning: Cooperate with the handlers. They will respond, especially if you cooperate more than the industry average. Early-adopters usually do.

7. Once you know the consumer likes your product when it is properly presented, refocus your efforts to the middlemen, handlers, and buyers. These are the decision makers, and they need most of your attention. If you can convince buyers that you have a superior product, can produce it consistently (that is, have enough supply), and that they can sell it, they will get behind you.

8. Plant a significant acreage early. One needs a "critical mass" of fruit to start. I believe that our 950 acres of Pinkertons were barely enough to get started in the U.S. market. Already, Pinkertons are under-produced, and the insufficiency of supply threatens the variety. Acreage is a variety's capital: it is needed to build outlets.

New products such as new varieties are a lot of fun. and they benefit all kinds of people. One needs to be a bit wary, however, in introducing them. A hunger for work and a feel for politics help, too.

Bear in mind that an industry resting on too few varieties is terribly vulnerable—to disease, to environmental stresses, to desperate and shortsighted efforts of growers to stretch out the seasons, and to foreign competition when seasonal supplies are low. Know that message, preach the message, and keep the new varietal candidates coming!