## REPORT FROM THE NORTH — TULARE COUNTY KEEPS TRYING

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Just a couple of years ago, early in the spring of 1963 to be exact, most observers were ready to throw in the towel for the avocado growers in Tulare County. It appeared as if the low temperatures of December 1962 and January 1963 had taken their toll.

At that time there were about 100 acres of avocados scattered throughout Tulare County in small experimental or semi-commercial orchards. These plantings were located on "warm ground" in the citrus districts at the base of the Sierra foothills. Most orchards were young—one to five years old.

These plantings were made by growers who had observed Mexican seedlings which have thrived for many years throughout central California. Further plantings were encouraged by the success of the Case and Case Ranch near Orange Cove which had successfully shipped Fuertes from a small planting for nearly 40 years.

Particularly attractive to Tulare County growers were the fall maturing, cold hardy varieties such as Bacon and Zutano. These varieties mature about October 1st when high prices prevail because of a shortage of fruit on the market. All in all, the prospects looked good, providing the trees would survive and bear fruit in the somewhat unlikely avocado-growing climate that exists in Tulare County.

The first big test came in the winter of 1962-1963. Early in the spring of 1963 most young trees, even of the more hardy Bacon variety, were completely defoliated. The bark and woody tissue of the previous season's growth, as well as large limbs and trunks, were streaked with brown. Temperatures, which were below 20° F. for several hours night after night, appeared to have made a myth of the hopes that an avocado industry could be established in central California.

New growth was slow to start in the spring. Small tufts of foliage began to appear throughout the damaged trees. Even some of the buds along the smaller, brown-streaked branches began to swell and grow. Many one- and two-year-old trees, which appeared to be dead, began to grow from swollen buds long after larger trees had tufts of green leaves throughout their limbs.

Avocado trees normally grow rapidly in the spring and fall in central California but put on very little new growth during the three hottest summer months of June, July and August. However, the summer of 1963 was mild. Temperatures rarely went above 100° F. and the trees continued to grow. When the cooler fall weather arrived, the trees kept growing rapidly until the cold November nights stopped growth.



Zutano tree near Orosi, Tulare County, in the early spring of 1963. Notice the tufts of new growth beginning to appear on the frost damaged tree.



Same Zutano tree in December, 1963, following a good season's growth. Trees in this orchard produced a good crop in 1964

The winter that followed the long growing season was mild and trees burst into a heavy bloom in the early spring of 1964. Early indications were for a heavy fruit set. This generally proved to be the rule, even in spite of the fairly heavy drop which occurred following high temperatures in June and July.

Most Zutanos had a good crop and Bacons bore according to their age—the older the trees, the better the crop. Zutanos seem to come into bearing at an earlier age than Bacons, and generally produce heavier for the first few years.

With the appearance of a crop on young trees, good growth for a couple of years and (he prospect of more to come, optimism is creeping back into the avocado-growing areas in Tulare County. Although there is still some dead wood in many trees to serve as a reminder of that cold winter, few trees show further effects. Perhaps the fact that almost all trees planted in Tulare County are early maturing more frost resistant Mexican type, helped to pull them through. Or perhaps, like citrus, the trees in central California go more dormant than trees in other areas with milder climates, allowing them to withstand lower temperatures with less damage.

Now these same observers who were ready to throw in the towel in the spring of 1963 are surprised to find the small avocado industry still thriving in Tulare County. With fingers crossed we look for the best in the future, but we hope it will be a long time before we see another winter like 1962-63.