

Apples of varieties that will fruit well in southern California have rather good flavor in cool, fairly humid coastal districts, but are woody and nearly flavorless when grown in the hot, dry interior valleys. Is this difference a response to heat or to intense sunlight and dry air (large daily water deficits)? Since at about the same latitudes in humid regions east of the Rocky Mountains fruit of these varieties do not have this dull flavor, I think much of it may be due to the high daily water deficits in the dry hot air. Some varieties such as White Pearmain do not have their flavor impaired so much by being grown in these hot, dry districts. And Bartlett pears grown in these same hot, dry districts have the best flavor and the best market quality of any that I have seen. Yet I have never tasted a Bosc pear grown in these districts whose flavor approached that of Bosc pears grown in cooler, more humid New York.

Elberta peaches seem to me to have their best flavor when grown in such hot districts and certainly have very poor flavor in cool coastal districts. Both Elberta and J. H. Hale peaches grown in the coolest parts of the area around San Francisco Bay are too bitter to be eaten. Yet fruit of Peregrine and of some other varieties have good flavor when grown there, although not as good as when grown in somewhat warmer air.

In districts where winters are as warm as those in coastal districts of southern California, with considerably less than 1000 hours at temperatures of 45°F or lower, nearly all varieties of deciduous orchard fruits except figs and Oriental persimmons are highly unsatisfactory. Very small differences in winter temperature may make the difference between fair growth and fruiting and less than an inch of shoot growth, and no fruiting.

A few varieties of most deciduous fruits other than the cherry do fairly well after such warm winters. And a small percentage of seedlings from varieties with chilling requirements too great for this district may do fairly well there. Again responses are somewhat complicated. Twig temperatures of 113°F in spring or early summer may assist in breaking the rest period, so that in hot interior districts, trees of a variety may grow and fruit fairly well after winters of insufficient chilling. Such mild winters would cause trees of the same variety to be weak and unfruitful if the twigs in springs and early summers were cooler, because of lower air temperature or less intense sunlight.



### Northeast Regional Plant Introduction Station

A Northeast Regional Plant Introduction Station was established in 1953 at Geneva, New York, the fourth of its kind to be established in this country. It serves the twelve states that make up the region. Dr. A. J. Heinicke serves as the Station's Administrative Director, Dr. A. F. Yeager is chairman of the Technical Committee, and Dr. D. D. Dolan is secretary of the Technical Committee and Regional Coordinator.

The purpose of the Plant Introduction Station at Geneva, and that of the other three stations, is to evaluate, propagate, and disseminate plant materials, including fruits, collected from foreign countries by the United States Department of Agriculture. It is also charged with the preservation of germ plasm of commercial importance in the region.