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THIRD CLASS  
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## Research briefs

### Ready-to-eat avocados

Avocados in most areas do not ripen on the tree. After harvest they are quickly cooled to prevent ripening and to maintain the texture and quality of the delicate fruit until purchased by the consumer. The fruit then must be kept until it reaches full flavor.

Plant physiologist I. L. Eaks, U.C., Riverside, has developed a method of treating avocados with ethylene, a gas normally produced by fruit during the ripening process; fruit that usually takes 10 to 12 days to ripen is ready to eat in 3 or 4 days. This practice is used with bananas and is seen as a possible sales stimulant for avocados. It does what nature does, but in less time. (BCH 2771)

### Olive pollination

California has over 42,000 acres of commercial olives, with Manzanillo, Sevillano, Mission, Ascolano, and Barouni being the principal varieties cultivated. Although growers tend to specialize in producing one variety, an orchard may contain more than one. There is controversy regarding the self-compatibility of olive cultivars and whether cultivars should be interplanted for cross-pollination.

Results of an extensive pollination

study by pomologists H. T. Hartmann and W. H. Griggs, U.C., Davis, in University orchards, greenhouses, laboratories, and commercial orchards indicate that the degree of self-compatibility varies with different temperature levels. The scientists found that in most years, cross-pollination will result in larger olive crops than will self-pollination. Studies indicated the distances that wind may be expected to carry olive pollen for effective cross-pollination and resulted in recommendations for interplanting cultivars within 100 feet of each other. (POM 3374)



### Wine aging and improvement

The mystery of wine has long intrigued connoisseurs, vintners, and—more recently—scientists. Why does one wine improve with age and become an aesthetically pleasing, valuable product with a delicate bouquet, while another grows harsh with age and is of little worth?

With the financial support of California's large and economically important wine industry, scientists from the Department of Viticulture and Enology are conducting long-range research to clarify this difficult and obscure area. Quality development of wine during aging has been dissected by viticulturist V. L. Singleton, U.C., Davis, into changes produced by oxidation, by storage in oak cooperage, by anaerobic reactions during bottle aging, and by other specific processing treatments.

An early advance in this work was the discovery of objective proof that the more complex the composition of a wine's flavor, the better the wine. This led to further studies, which showed that many treatments could increase the complexity and therefore the quality of wine, provided the flavor change was subtle and did not overpower the existing flavors.

Though directed principally at wine, this research has important implications for relatively poorly understood storage reactions in beverages and foods generally. (VIT 3266)