

# Lemons and Lemon Products

## new trends in market development of fresh and processed uses of lemons face the industry

Sidney Hoos

The most profitable distribution of the lemon crop among the fresh and processed outlets is a major problem of the California lemon industry.

Grower income from lemons in the state has averaged 40 to 45 million dollars annually.

Production reached its peak in 1940 and has tended to decrease since, due to declining yields and bearing acreage. Inflationary influences have increased production and harvesting costs, particularly the cost of labor, pest control, frost protection, taxes, and insurance.

The larger part of the lemon crop has been harvested and shipped for fresh use. The lemon processing industry was primarily a by-product operation, using that volume of fruit which could not be sold profitably in operations of the fresh market.

Recently, new developments—such as frozen lemonade concentrate and canned single strength lemon juice—have changed the relative importance of the market for processed lemon products. The change reflects a shift toward increased production of the more valuable lemon products—such as the frozen concentrates—and a decreased production of low-value products—as citric acid.

### Competitive Demands

Price and availability of lemon processed products—canned single strength juice, and frozen lemonade concentrate—are factors which affect the market for fresh lemons.

There appears to be some competitive demand interrelation between fresh lemons and canned lemon juice. Adequate experience is not yet available to indicate the market demand relations between fresh lemons and frozen lemonade concentrate; yet, market information generally reflects the opinion that some competitive demand relation exists between the two products.

The competitive demand relations between fresh lemons and various processed lemon products emphasize the problem of utilizing most advantageously the lemon crop to promote market expansion and increase returns to the industry. This question has become of increased significance fairly recently—since canned lemon juice and frozen lemonade concen-

trate have reached important market development.

The question of distributing the lemon crop, in a given year, among the fresh and processed outlets involves some difficult planning and marketing problems. Their solution affects returns to growers in the short and the long run. The problems concern the distribution of the lemon crop among the total fresh and total processed outlets; among the winter and summer fresh markets; and the distribution among the various processed lemon products.

### Domestic Demand

The domestic demand for fresh lemons tends to be such that—within the usual range of marketings—increased shipments yield lower f.o.b. gross revenues than do smaller shipments. This applies to both fresh summer and winter lemons, but somewhat more so for the fresh winter lemons.

The demands for both fresh summer and winter lemons increase and decrease along with national income. The demands for both fresh summer and winter lemons are responsive to changes in temperature, but in different ways. As the temperature gets warmer, the demand for summer lemons increases. But as the temperature gets colder, the demand for winter lemons increases.

These demands for fresh lemons—especially summer lemons—however, are also being affected by the new lemon products such as frozen lemonade concentrate and canned single strength lemon juice.

### Imports

The demand for domestic lemons is also affected now by lemon imports. In contrast to other citrus, lemon imports are an important factor influencing the domestic markets.

In 1950, the tariff on lemons was cut in half. During the past year, imports increased as a result of the tariff cut, as well as in consequence of the Italian demand for dollar exchange, and the market situation.

Imports reached a level which has become of concern to domestic growers and shippers. These high imports affect not

only fresh lemon prices, but also the distribution of the lemon crop among the fresh and products markets in the United States.

### Additional Problems

Adjusting the allocation of the lemon crop among the fresh and processed outlets involves other problems. Increased industry returns is an important goal but related problems must be kept in mind. Among them are grower equity problems arising from relations among producing districts, and the allocation of the crop from the various districts to the alternative outlets; and the maintenance of satisfactory stability in the industry, and the efficient use of fresh marketing and processing facilities. Nevertheless, adjustments may be necessary to take advantage of changing market conditions so that the markets for both fresh lemons and processed lemon products may be developed and expanded.

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*The foregoing article is based upon a detailed report by Sidney Hoos and R. E. Seltzer, and available without charge as Bulletin 729, "Lemons and Lemon Products, Changing Economic Relationships."*

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Progress Reports of Agricultural Research, published monthly by the University of California College of Agriculture, Agricultural Experiment Station.

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