

Calavo By-Products

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POLICY

It has been the aim of the Calavo Growers of California in past years, to anticipate the problem of the disposal of culls by attacking the problem before such a crisis arose. As production increases the disposal of these culls, off-grade, blemished and marred fruits becomes a problem of considerable importance. The policy adopted for by-product production is to convert only such fruit as is unsalable in its fresh state, and to make by-products pay its own way from the very start. On the surface such a policy would appear to be detrimental to the rapid advancement of by-products, inasmuch as it would limit the expenditures for promotional work and greatly restrict research. However, in this particular industry this policy has met with great success and has saved the growers many thousands of dollars.

RESEARCH

Not only has our own laboratory been vitally interested and active in the development of a profitable by-product, but Federal, State and County authorities as well have been instrumental in by-products research and have given us the greatest cooperation possible. As the canning of fruit is the foremost method of preserving it today, and as the products are compact, easy to handle and to ship and are of excellent quality, canning appeared to be the most reasonable and convenient method of preserving the avocado. Unfortunately, this has not been possible so far. The application of heat to the fruit develops a bitter substance which makes it very unpalatable and its color and texture are destroyed. Briefly stated, none of the methods tried to date have succeeded in preserving the fresh flavor of the avocado. In fact, rancidity, accompanied by a very disagreeable odor and flavor, peculiar to spoiled avocados, developed to sufficient extent in all samples to make them unmerchantable.

While in a sense the results of these experiments have largely a negative value, they also have a positive value in demonstrating the futility of attempting to preserve avocados by any of the common methods of food preservation. The results of these experiments heretofore conducted are used as a prevention of the promotion of schemes for the preservation of avocados by uninformed or unscrupulous persons. It should not be inferred from this that the preservation of avocados is necessarily impossible, but rather that none of the many methods so far tried have been successful,

and therefore the problem must be considered unsolved until some hitherto untried method has been successfully demonstrated.

Extensive experiments in the dehydration of the avocado and the subsequent removal of the natural oil have been conducted in the laboratories of the Calavo Growers during the past year. A promising method of obtaining the oil and a process for removing the slight bitter taste, characteristic of avocado oil, has been developed, and the result is a bland, sweet, nut-like oil. Avocado seed research indicates that the seeds yield a rarely found high alcohol used in technical commercial manufactures. Seeds may produce a revenue when they become too numerous for use in propagation alone.

OUTLETS

Our frozen products have been put to several uses which have grown in public favor ever since their introduction two years ago. Calavo Crushed Fruit Flavoring for ice cream has been the most profitable. At some time or other during the year Calavo Ice Cream is stocked by every Southern California Ice Cream Company. Calavo Ice Cream is also finding a place for itself on the menus of many Northern California Ice Cream Caterers.

The progress of Calavo Bread Shortening unfortunately has been retarded due to economic conditions beyond our control. Bread wars have discouraged enterprising bakers from adding new products to their lists. However, Calavo Shortening has found two new champions in the field of Melba or Dutch Toast. At present a delicious tid-bit is being offered by a large baking corporation under the name of Avocado Dutch Toast. This product may be bought in many retail stores from San Diego to Seattle. Another recent triumph for the Calavo Growers was the appointment of the bakers of the famous Melba Toast as the official bakers for Calavo Melba Toast. These two toast products are highly dextrinized and easily assimilated foods and are very popular.

Avocado oil is being used by cosmeticians in many avocado beauty preparations. These cosmetics are fast growing in public favor and are being introduced to many parts of the United States.

CONCLUSION

The Calavo By-Products Department, although still in its infancy, is widely recognized as is evident by the scores of inquiries and suggestions received during the past year. Only recently has intelligent application of scientific methods and principles been applied to food industries. Notable advances have been made in this short time, but there remains a vast amount of research to be done before even the surface of this great field has been scratched. As new processes and principles are unearthed the problem of the preservation of the avocado becomes less difficult. Development of the by-products of avocados may boost the industry far beyond the dreams of those who now raise the fruit for table use only. The fact that by-products may in time use all the unsalable and less desirable fruit will, we hope, add materially to the income of the Calavo growers, especially in years when the fruit has been affected by adverse conditions.