

MARKETING RECOMMENDATIONS FOR THE HAWAII BANANA INDUSTRY

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ABSTRACT

Results of a consumer preference survey indicate the most important factor in the purchase of Hawaii-grown bananas is taste; for imported Central American bananas, the most important factor is price. Problems are consumers' misperceptions about Hawaii bananas, Central American imports, and apple bananas, and their ignorance of the advances in cultivation and handling of Hawaii bananas. Based on the survey results, recommendations are made in three areas for Hawaii growers who want to increase their market share:

1. Provide consistent and reliable quality by maintaining or developing first-rate cultural and handling practices.
2. Provide consistency and reliability of supply by influencing the key decision-makers in the market channel.
3. Provide consumer education and information.

Keywords: bananas, consumer-survey, preferences, marketing, marketing-recommendations, supply, quality, consistency.

INTRODUCTION

Within the past 25 years the Hawaii banana industry has gone through a large reversal of fortunes. It supplied virtually all the bananas consumed in Hawaii until as recently as 1966. Imported bananas have eroded the market dominance of Hawaii bananas, however. As used here, the term "Hawaii banana" refers to the Cavendish types (including Williams, Valery, and Chinese) *grown in Hawaii*. It does not refer to the so-called apple banana except where noted.

Hawaii bananas compete directly with bananas imported from Central America. According to *Statistics of Hawaiian Agriculture*, local producers supply about 40 percent of the total market (Hawaii Agricultural Statistics Service, Department of Agriculture, August 1987). This relationship has been fairly stable over the past few years. As Figure 1 illustrates, there is some variation in market share during the year, but Hawaii does not come close to replacing imports even during the months of greatest local production.

A combination of bad weather, high production costs, and inconsistency in supply and quality has plagued the industry. While these problems are still present to a certain extent, improved cultural and handling practices have reduced the quality differences between Hawaii and Central American bananas. Increases in local banana production have been projected, but it appears that without renewed and innovative marketing efforts on the part of the local industry, any increases in local production will

only be met by reduced prices without permanent increases in market share.

The problem is how to market local bananas so that Hawaii producers can capture a larger share of the market while still earning a fair return. Or put another way, does the product need to be modified so that it is more attractive to wholesalers, retailers, and ultimately the final consumers? The term "product" is used broadly to include everything that influences a buyer's purchasing decision, such as price, reliability of supply, appearance, size, taste, and services included as part of the final product.

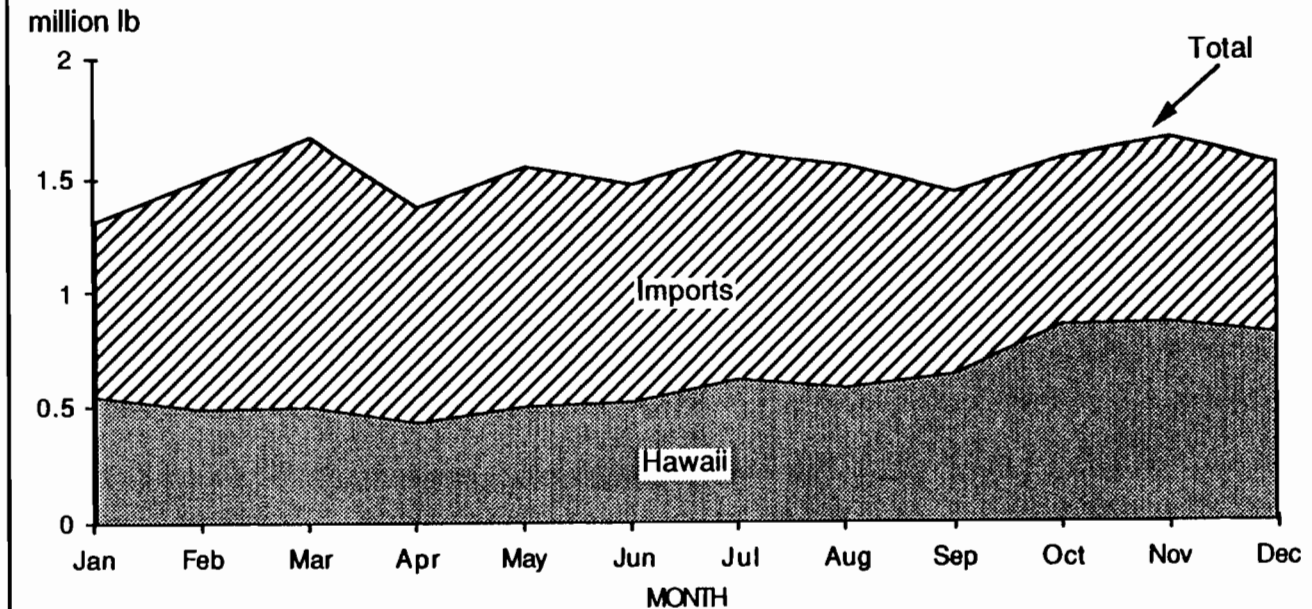
If the Hawaii banana industry is going to expand sales, the increase will largely be achieved through the replacement of imports from Central America. As a basis for the industry's efforts, Hawaii consumers were surveyed to identify factors they considered in selecting and purchasing a banana. Based on the survey results, this report makes recommendations aimed at helping Hawaii growers increase their market share.

OBJECTIVES

An in-store survey was conducted to determine local consumers' preferences for bananas and the factors that affect the purchase decision. More specifically, the study was to answer the following questions:

1. Do Hawaii consumers perceive differences between local bananas and imported Central American bananas?

Figure 1. 1986 HAWAII BANANA MARKET SHARES



2. If so, what are these differences?
3. Do these differences affect the purchase decision?
4. Given the results to the above questions, what should the industry's response be?

Four retailers cooperated in the study. They were Foodland in Hawaii Kai, Holiday Mart on Kaheka Street, Star Market in Moiliili, and Safeway in Manoa.

During the week of June 30 to July 6, 1987, shoppers were observed making their banana selection (local Cavendish varieties, Central American import, and/or apple banana). The shoppers were then asked why they had made their selection, and what factors had affected their choice. In order to make the choice as unambiguous as possible, cooperating retailers were asked to do the following:

1. Physically separate the Hawaii bananas from the imported bananas and from the apple bananas.
2. Clearly identify the bananas by source: Hawaii or Central America.
3. Insure that the bananas displayed and the displays themselves were of comparable appearance.
4. Keep the displays adequately stocked.
5. Price the bananas identically.

The survey covered three basic areas: (1) why the customer made a particular selection, (2) how the customer rated Hawaii bananas relative to

imported bananas, and (3) some demographic information.

FINDINGS

During the survey period 1640 surveys were collected, of which approximately two thirds were returned by women. Over 90 percent of the respondents said they usually do most of the household shopping. About 80 percent of the respondents were 30 or older. Eighty percent have lived in Hawaii for at least 10 years and over half were born in Hawaii. Approximately three quarters of the respondents said they purchase bananas at least once a week. Ethnic backgrounds and household incomes were skewed by the location of the survey sites. Nevertheless, there were no significant differences among shoppers due to sex, age, ethnic group, household size and income, or home location. (Detailed results of the survey will be presented in a forthcoming research publication.)

After the consumers made their selection they were asked what type of banana they had chosen (Table 1). More shoppers reported Hawaii bananas as their choice, but 25 percent of all respondents also said that what they had purchased was not their usual selection. The last column represents the breakdown as it would be if all respondents had made their usual selection. The shares of Hawaii and imported bananas are much closer but still different from the DOA statistics cited earlier (see

Figure 1), in which the Hawaii:import ratio over the year is 40:60. Sales data from one store also showed higher sales for imports during the trial period. The respondents who didn't know what type they had bought might account for the discrepancies. As will be discussed below, other explanations are survey bias and an identification problem.

Table 1. Reported and adjusted banana selection by Hawaii shoppers

Banana type	Reported (raw) percentage	Usual (adjusted) percentage
Hawaii	47	43
Central American	35	39
Apple	9	9
Don't know	9	9

Consumers were asked to list the most important factors they consider when purchasing a banana. As Figure 2 indicates, there are differences depending on whether a Hawaii or a Central American banana was selected.

Figure 2 illustrates some important points. First, the most important consideration by far in selecting Hawaii bananas is taste. Second, there is apparently a considerable amount of goodwill towards local farmers among shoppers who purchase Hawaii bananas. Many buyers of Hawaii bananas also consider freshness and shelf life to be important. In contrast and as might be expected, supporting local farmers is a low priority among consumers of imports. Third, purchasers of Central American bananas attach greater importance to price, appearance, size, and availability than do purchasers of Hawaii bananas. This implies they perceive Hawaii bananas to be more expensive, less attractive, and less available. Yet, current retail practices of mixing bananas from both sources and the display setup during the survey should have minimized or eliminated differences in these factors. The implications of these findings will be discussed shortly.

Hawaii Compared to Central America

Consumers were asked to directly compare Hawaii bananas to Central American bananas and indicate which, if any, were superior. Respondents were able to apply their own definition of superior. Approximately 58 percent of all respondents said

Hawaii bananas were superior to Central American bananas. Only 12 percent said Central American bananas were better. The remainder thought there were no differences.

About 43 percent said they usually purchased Hawaii bananas, yet 58 percent thought Hawaii bananas were superior. The difference can be explained partly by the important factors in the purchase decision. Forty-four percent of the people who purchased Central American bananas cited a better price as a reason, and 24 percent said Central American bananas are more available than Hawaii bananas. Although the two types were displayed next to each other and were selling at the same price, many consumers still perceived differences.

Improving the Marketing of Hawaii's Bananas

Consumers were asked for suggestions to improve the marketing of Hawaii's bananas in an open-ended question. The five most common groups of responses are shown in Figure 3.

In general, these responses mirror the important purchase factors of the consumer segment selecting Central American bananas. Again there is a perception that Hawaii bananas are higher priced and less available. Many people expressed concern that Hawaii bananas were not cheaper than Central American since, according to respondents, "transportation costs must be less than for bananas grown overseas."¹

IMPLICATIONS AND RECOMMENDATIONS

The process and results of this survey identify several areas the local industry needs to address if it intends to increase its share of the local market. Three points must be made before specific issues are discussed, however. First, due to survey bias, the results tend to be more favorably disposed towards Hawaii bananas than is the actual situation. That is, survey respondents tend to give the answer they think the surveyor wants to hear. Since the study was conducted by a state institution, it was likely that responses would be biased towards Hawaii bananas.

Second, it should be noted that the survey is technically not based on a random sample. Thus, it is *statistically* not valid to take these results and make inferences about the population, which in turn consists of people who purchase bananas, *not* the

¹Thus, for some shoppers, the price of Hawaii bananas must be lower to get the same price:value ratio as for imports. This idea is analogous to a \$3/lb T-bone steak being perceived by most consumers as a better bargain than \$3/lb hamburger.

Figure 2. Five Most Important Reasons for Purchase of Bananas, by Source

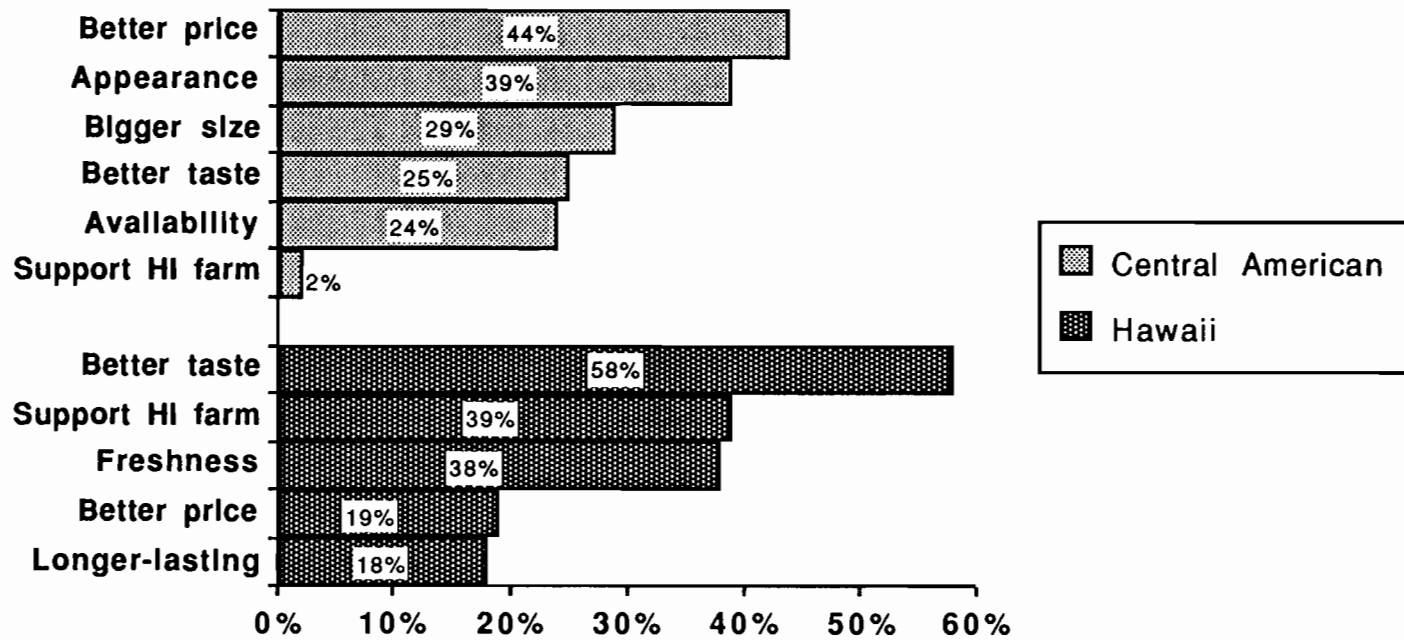
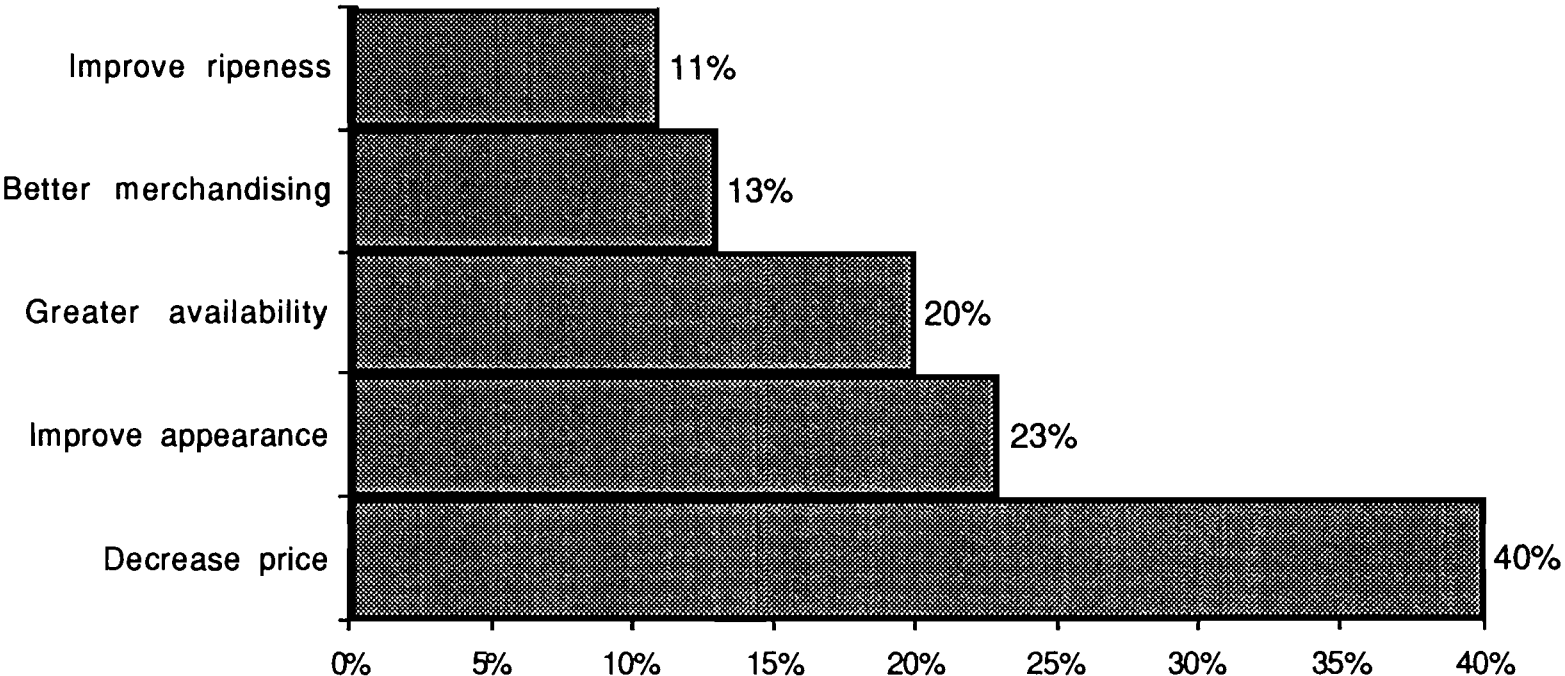


Figure 3. Top Five Suggestions to Improve Marketing of Hawaii Bananas



general public. According to a study by the International Banana Association, however, the hours (10 a.m. to 6 p.m.) in which the survey was conducted are when 75 percent of all bananas are purchased, and the surveying was coordinated with the stores to coincide with peak-traffic days during the week. Furthermore, the selection of stores provided for a wide range in incomes and other demographic variables. Thus, while statistical inferences cannot be made, there is no apparent reason why those results should not be generalizable to the rest of the banana-consuming population.

Third, regardless of the bias, the industry can also benefit from examining the negative responses as well as the positive ones. The pluses of Hawaii bananas may be overstated, but the strengths of imports (weaknesses of Hawaii bananas) are also important.

The results of the consumer survey give rise to three broad, interrelated sets of recommendations: (1) to provide consistent and reliable quality via cultural and handling practices, (2) to provide a consistent and reliable supply by influencing key decision-makers in the market channel, and (3) to provide consumer education and information.

Consistent and Reliable Quality

Although the bananas observed during the survey period were of comparable quality, the responses to the survey indicate a need for continued improvement and vigilance with respect to quality. Historically, Hawaii bananas were viewed as inferior to Central American bananas in appearance (bruising and color), shelf life, and size. Recently, though, Hawaii's producers have demonstrated that they are able to produce and market bananas that are indistinguishable from Central American bananas by the typical consumer.

Figure 2 illustrates that, for those respondents who purchased Central American bananas, appearance and size were the second and third most important factors affecting their decision. The ability to reach these consumers is contingent upon supplying a good appearance and size on a consistent basis. Those respondents who purchased local bananas did not list these two factors among the top five factors affecting their decision. One explanation is that they do not believe Hawaii bananas and imported bananas differ in appearance and size. There is no evidence to suggest that improvement with respect to these attributes would decrease Hawaii bananas' desirability in their eyes. On the other hand, it is certain that neither a decrease in

quality nor inconsistent quality will improve market share.

The key to producing large bananas with superior appearance is a combination of first-rate cultural and handling practices. The Hawaii industry has made great strides in this area. Continued and even increased emphasis must be placed on industrywide practices that are recognized standards for producing and marketing high quality fruit. These standard practices might include bagging of fruit; proper fertilization techniques, including soil and tissue testing and appropriate chemicals and application; optimal pest and disease control; culling of off-grade hands; uniform maturity of harvested fruit; harvesting, washing, and packing techniques and materials; proper storage and transportation; state-of-the-art ripening; and optimum display and stocking at the retail level.

At the same time, it is essential for the market participants' financial well-being that costs of production and marketing be controlled in the pursuit of quality. One suggestion is to use group efforts to develop market power and economies of size. Group efforts include partnerships, cooperatives, and associations. Another suggestion is to take advantage of specialization—that is, to pay another party to do a task if it is cheaper than doing it oneself.

Tied in with practices is the need for stringent and demanding grades and standards that provide the benchmarks and definitions of quality. Monitoring and enforcement are necessary for grades to be effective. The industry may need to consider self-regulation rather than relying solely on an outside party.

These actions may also require that separate markets or uses be developed for bananas that are not of top quality. Mixing lower grades with the best products contributed to the industry's current problems. Past experience shows that the reputation of an industry is based on its worst members rather than its best. If the industry as a whole is to grow, it needs the cultural and handling practices and discipline that insure that Hawaii bananas not only are top grade, but match or surpass the quality of the competition.

Consistent and Reliable Supply

Ultimately, the ability of the local banana industry to significantly replace imports lies in convincing the key decision-makers, the wholesaler and retailer, that consistent performance can be provided. While most would like the consumer to demand Hawaii bananas, a more reasonable goal, at least for the near future, is to have consumers

purchase more Hawaii bananas, with or without knowing their source. One reason imports have a high market share is consistency in quality and in supply. The first set of recommendations addressed quality. To gain market share, local producers must also be able to match the consistency in supply of Central American producers.

Consistency in supply means that a known quantity of known quality can be expected at the market on specified dates with the certainty that mainland suppliers are able to give. Actual sales data at the retail level indicated that the sales breakdown between Hawaii bananas and Central American bananas is primarily a function of supply. Retailers will sell what is delivered by the wholesaler. Consistency in supply, though, does not mean that total quantity supplied is unchanging from week to week. Rather, wholesalers must be sufficiently aware of changes in local supply so they have the appropriate lead time to place mainland orders as necessary to fill their requirements. The supply and timing from Hawaii growers must be predictable.

With consistency and reliability in supply, primary reliance could be placed on Hawaii producers. In effect, Hawaii bananas would be sold first, so fluctuations in Central American imports would reflect changes in local supply. The historical situation seems to be the opposite case, in which Central America is the primary source. Thus, we experience "overproduction" and market "gluts," although most of the supply is imported! Given similar quality, this assumes Hawaii bananas are competitive in price.

New and improved cultural and handling practices have improved quality, and have resulted in significant contributions toward consistency in supply as well. Producers are now apparently able to predict yield and its timing with a high degree of accuracy, and well in advance of actual harvest. With standardized handling procedures and some record keeping, the subsequent movement of fruit up to the retail level can also be scheduled in advance. Several methods are proposed for transferring information. First, individual growers could work with their respective buyers. This could range from the informal, such as telephone calls, to formalized forward contracts selling a crop while it is still in the field or even before it is planted. Second, the information could be collected and summarized by a third party—for example, a growers' association or a cooperative—then distributed to buyers. Third, growers could also take a more active role by aggregating not only information, but the actual

bananas as well. This would add another dimension to consistency in supply, in which volume is not only predictable but also more regular. At the extreme, this group could go so far as to import its own bananas to insure a steady supply. The primary emphasis must be on predictability, however.

The mechanisms are available for a consistent and reliable supply of Hawaii bananas. The breakdown appears to be a failure to pass the correct information from the producers to the key decision-makers. Overall, producers need information to answer the "when" and "how much" questions concerning their production. They also must convince decision-makers that the information is important, that it is available, and that using the information will result in consistency and reliability in supply. The key to success is communication between the parties involved. Growers also need information on how much lead time is required before delivery, the desired maturity of the fruit, and other market characteristics. Both parties could give and receive feedback in an effort to improve their performance.

Consumer Education and Information

During the actual survey and as seen in the results, it became apparent that a significant number of consumers were confused about what a Hawaii banana is. This confusion centered on three broad misconceptions. One misconception is that the only Hawaii banana is the apple banana. A second source of confusion is to associate the brand names of two of the leading Central American bananas with companies operating in Hawaii (although their labels list the actual source) and to assume they are Hawaii bananas. The third misconception is that the quality of Hawaii bananas has not improved from what consumers had become accustomed to (i.e., poor appearance and smaller size).

The first misconception leads consumers to believe that Hawaii bananas are higher priced, less available, smaller sized, and less pleasing in appearance. It could also explain the belief that Hawaii bananas taste better. As has been mentioned, Hawaii bananas during the survey rivaled Central American bananas in appearance and size. They are normally identically priced to Central American bananas at retail outlets and are usually available year-round.

The second misconception leads consumers to purchase Central American bananas when they mistakenly believe they are purchasing Hawaii bananas. Many consumers strongly identify these companies with Hawaii, although the firms are international in scope. This assumes consumers have

a preference for Hawaii bananas, whether for taste or to support local growers.

The third misconception is associated with consumers being unaware of the increase in Williams and Valery varieties being marketed, and of the improvements in quality of Hawaii bananas. Thus, anything of high quality is automatically labeled (in the consumer's mind) as Central American, while everything else reinforces the old, increasingly inaccurate image of the Hawaii banana. Again, the consumer uses the worst examples to form an image of the local industry.

These misconceptions point out a need and an opportunity for consumers to be informed and educated. These efforts should concentrate on two themes. The first is to correct those misconceptions regarding Hawaii bananas. That is, the consumer needs to be told that high quality bananas are produced in Hawaii, and they are not more expensive, less available, smaller in size, or inferior in appearance to their Central American counterparts. The second is to clearly identify the Hawaii banana and distinguish it from those bananas labeled with Hawaii firm names. The industry should make it easy to find and identify Hawaii bananas.

A promotional and educational campaign could tie in to the state's ongoing Island Fresh program. The Island Fresh logo is gaining wide recognition with Hawaii produce, so it could mean a "free ride" for local bananas. It is proposed that such a campaign will be more successful if undertaken by as large a group as possible—the industry, a cooperative or association, or all the growers associated with a given buyer. For example, it would be easier for consumers to deal with one Hawaii-grown sticker rather than one for Burt's Bananas, a second for Joe's

Jumbos, a third for Molokini Brand, a fourth for the Rosana Banana, and so on. The main message can easily get lost as individuals compete with each other rather than the industry's main competitor—Central American imports.

For the industry to benefit, labeling must be conducted on an industrywide basis. Presently, some local producers are labeling their bananas. The intent of this recommendation is not to diminish the individual producers' ability to attain brand recognition. Rather, these individual efforts could incorporate the commonly recognized Island Fresh logo. This would allow individual brand recognition while contributing to the overall health of the industry, as well as reducing potential confusion among consumers.

Besides a labeling or sticker program, a second activity that is commonly used is point-of-purchase materials such as posters, displays, recipes, and give-aways. A public relations effort is a third possibility, and is often free or inexpensive, as in newspaper special features, magazine articles, and TV news—special interest programs. Finally, the tourist or people attractions throughout the state could be used more. Examples are exhibits at the annual Farm Fair; at shopping centers; and at attractions such as the Maui Tropical Plantation, Waimea Falls, and Paradise Park.

In the long run, these efforts are aimed at a so-called pull strategy, i.e., more demand by consumers for *Hawaii* bananas. The goal is to correct misconceptions and point out Hawaii bananas, but consistency and reliability in quality and supply are needed. Otherwise, the misconceptions may as well be true, as the program will only end up identifying the lemons—not the bananas.

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