

## HOW MUCH DO SOUTH FLORIDA CONSUMERS KNOW ABOUT THE AVAILABILITY OF FLORIDA GROWN LYCHEE, LONGAN AND STAR FRUIT?

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**Abstract.** Two consumer surveys were conducted using Florida grown lychees and longans during the summer of 2003. A third consumer survey was conducted using star fruit during the spring of 2004. These surveys are part of a promotional campaign for tropical fruits and were designed to determine how much south Floridians know about the production and availability of these locally grown fruits. Consumers were randomly selected in various public places and they were provided with a sample of lychees, longans or star fruit for tasting. The three surveys were conducted separately during the season for each fruit. When participants were asked, "Do you like lychees?" 84% responded, "Yes." When the participants were asked, "Have you seen lychees in your local supermarkets before?" 75% of respondents said, "No." A similar pattern was observed when consumers were offered longans and star fruits. When the respondents were asked, "Do you prefer locally grown produce over imported ones?" 75% responded they preferred locally grown produce. These results indicate that there is a need for educating south Floridians and promoting locally grown tropical fruit. The results from these surveys will be made available to tropical fruit growers, packers and shippers.

Tropical fruits grown in south Florida are an important part of the overall economic impact of agricultural production in south Florida. In 1997-1998, agriculture's total economic impact on Miami-Dade County was estimated to be \$1.08 billion. Tropical fruits contributed 13% or \$137 million to the total economic impact of agriculture (Stevens, 2002). Currently, there are approximately 13,000 acres of various tropical fruits planted in south Florida (Balerdi, 2004. University of Florida, personal communication). Avocados, mangos, longans, lychees, mamey sapotes and star fruits (carambola) are the primary tropical fruits in terms of economic importance and area of production. Papaya, guava, banana/plantain are a secondary group. For many years, tropical fruit growers in south Florida enjoyed high market prices paid mainly by Asian consumers for these Asiatic exotic fruits. In recent years, as a result of foreign competition, the prices for tropical fruits have fallen and it is becoming more difficult for growers to compete with imported fruits. Higher retail prices, short production season (for lychees and longans), and lack of consum-

er awareness are mentioned as limiting factors to promote these fruits among mainstream consumers. Many of the tropical fruits are available during the summer months when they have to compete with traditional summer fruits and consumers are not willing to pay higher prices for these exotic fruits.

In 2002, the Tropical Fruit Growers of South Florida (TFGSF) obtained a USDA grant to market and promote these fruits mainly in mainstream retail markets and to the food service industry. In order to effectively promote tropical fruits, there was a need to assess consumers' perception about tropical fruits and to determine if they would purchase them at their local supermarkets. To achieve this, three different consumer surveys were conducted with lychees, longans, and star fruits.

### Materials and Methods

A survey was designed and used to obtain consumer information from randomly selected individuals that happened to be at the point where samples of tropical fruits were provided. Those individuals were asked to try the fruit and fill out the survey questionnaire. Two consumer surveys were conducted using Florida-grown lychees and longans during the summer, 2003. A third consumer survey was conducted using star fruit during the spring, 2004. The consumers that tried samples of the lychees were residents of Miami-Dade and Broward Counties in Florida. For both star fruits and longans, the consumers were residents of Miami-Dade County. The total number of consumers that sampled fruits were 217 for lychees, 197 for longans, and 125 for star fruits. "Arkin" was the fruit cultivar used for star fruits, "Brewster" for lychees and "Kohala" for longans. The surveys were summarized, tabulated and reported.

### Results and Discussion

Table 1 shows the ethnic background of the consumers that participated in the three surveys. Hispanic consumers were the largest group followed by the Afro-American group. The percentages of samplers in this study represented the different ethnic groups residing in Miami-Dade County as reported by the U.S. Census of 2002; 57% Hispanic, 23% Black (U.S. Census, 2002).

When consumers were asked if they knew that Florida produces lychees, longans and star fruits, 41% for lychees, 58% for longans and 32% for star fruits said "No." More consumers were aware of the star fruits than the other two fruits

Table 1. Ethnic background of the consumers that participated in the three tropical fruits surveys.

Fruits surveyed	Percentage (%)			
	Hispanic	Afro-American	Non-Hispanic White	Asian
Lychees	46	24	19	10
Longans	46	32	20	2
Star Fruits	53	15	19	13

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used in the survey. This is attributed to the effort of the local packers in the past to promote star fruit more than any other tropical fruit.

In all three surveys, consumers were asked if they liked lychees, longans, and star fruit, depending on which fruit they tasted. The responses for all three surveys were overwhelming. A total of 91% of the consumers that tried lychees said they liked it. The responses for the same question was 81% for longan, and 84% for star fruit. Of those that tried the fruits, only six percent said they did not like lychees and longans. Only three percent said they did not like star fruit. The percentage of participants that tried the fruit samples and said that they were not sure if they liked the fruit was 3% for lychees, 13% for longans and 12% for star fruit (Fig. 1).

Participants were asked if they had seen lychees, longans, and star fruits in supermarkets. The percentage that said they had not seen these fruits were 75% for lychees, 98% for longans, and 44% for star fruits. These data indicate that more consumers have seen star fruits than had seen lychees and longans.

Participants were asked what price they would be willing to pay for a pound of each tropical fruit. For lychees, 56% said they would pay less than 3 dollars per lb, and 44% said they would pay 3 dollars or more. For the longans, 71% said they would pay less than 3 dollars per lb and 29% said they would pay three dollars or more. For star fruits 78% said they would pay less than 3 dollars per lb and 28% said they would pay three dollars or more.

For both the lychee and the longan surveys, participants were asked if they preferred locally grown produce over imported produce. In the lychee survey, 88% said they preferred locally grown produce; 12% said imported produce. For the longan survey, 63% said they preferred locally grown produce, 10% said imported produce and 27% had no preference.

### Conclusion

Averaging all three surveys and all respondents, it can be concluded that 44% said that they did not know that south Florida produced the three tropical fruits in these surveys, and that 85% liked the tropical fruits used in these surveys. Most survey respondents (72%) had not seen these fruits in their local supermarkets, and 33% said they would pay three dollars or more per lb for these fruits. On the average, 75% of participants in the lychees and longans surveys said they preferred locally grown produce.

### Literature Cited

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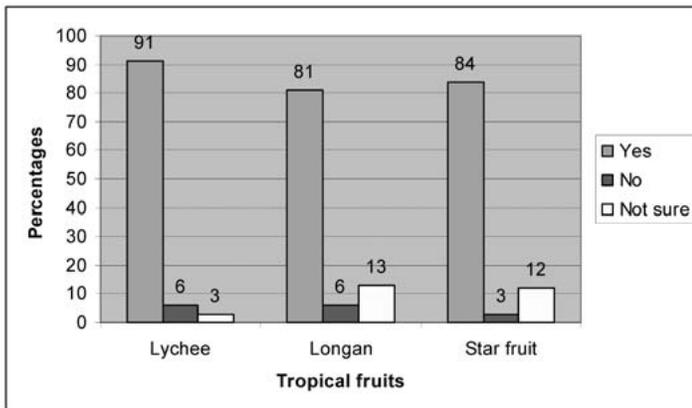


Fig. 1. Consumers opinion when asked if they liked lychees, longan, and star fruit.