

# The Potential of Florida Lychee to Cross Over to American Consumers: An Industry Perspective

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**Lychee (*Litchi chinensis*) is an exotic subtropical fruit crop and is considered economically important for many Asian countries. In 2006, approximately 800 acres of lychee were grown in South Florida, mostly in Miami–Dade County. Florida lychees are only available from late May to early July and are mainly sold fresh to Asian markets, mostly along the east coast of the United States. Recent consumer tastings indicated that the majority of those who tried a sample of lychee fruit said they liked it. With such a positive acceptance of lychee by consumers, the question for many industry people, including growers and shippers, has been “Why is lychee not as popular among American consumers as mango and pineapple?” A survey to answer this question was conducted among growers, packers, shippers, wholesalers, and retailers doing business with lychee. Respondents indicated that “lack of year-round availability,” “lack of consumer awareness,” and “lack of sufficient investment in promotion and advertising” are the main reasons lychee fruit is not as popular among American consumers as other tropical fruits.**

**OVERVIEW OF THE LYCHEE INDUSTRY IN FLORIDA.** Lychee, a subtropical fruit, is native to southern China, where it has been cultivated for thousands of years and is considered a very important crop in terms of both economic and cultural value (Zee et al., 1998). Lychee was introduced to Florida in 1880 in Sanford (Seminole County). In 1903, an American missionary named Brewster brought the cultivar Chen Purple from China to Florida, where it was propagated and distributed to growers as ‘Brewster’. This cultivar made a significant contribution to developing the Florida lychee industry (Knight, 2001). Currently, the major lychee cultivar grown in Florida is ‘Mauritius’. Growers prefer ‘Mauritius’ because the fruit can be harvested 2 to 3 weeks earlier than ‘Brewster’, at a time when market prices are higher. Also ‘Mauritius’ is believed to be more reliable in terms of producing fruit every year in comparison to ‘Brewster’ (personal communication, Carlos Balerdi). In 2006, approximately 800 acres of lychee were grown in South Florida, mostly in Miami–Dade County. Florida lychees are only available from late May to early July and are mainly sold fresh to Asian markets, mostly along the east coast of the United States (Steel, 2006). Before lychees were allowed to be imported to the United States, Florida lychee growers enjoyed higher prices. However, in recent years, US lychee prices have declined and growers now have to compete with imported lychee from Mexico, Taiwan, China, and Israel. In 2005, Hurricanes Wilma and Katrina caused severe structural and consequently economic damage to most of the tropical fruits grown in Miami–Dade County. Lychee groves were severely affected by strong winds and flooding. The effects of Katrina and Wilma continued in 2006. Combined with warmer-than-usual weather conditions in Fall 2006 and part of Jan. 2007, lychee production remains significantly lower than it was prior to the hurricanes of 2005 (personal communication, Carlos Balerdi). The lower prices resulting from imported lychees, combined with low

productivity in recent years, have caused some growers to question the economic viability of lychee production in Miami–Dade County. However, there are other growers who believe lychee is a very unique fruit with considerable potential to cross over to American consumers. These growers feel that the American lychee market can be greatly expanded.

A survey of lychee growers, packers, shippers, wholesalers, and retailers was conducted to determine their assessment of lychee’s potential to appeal to American consumers and eventually become as popular as other tropical fruits, such as pineapple and mango (see the survey on the next page).

**CONSUMER SURVEY RESULTS.** In 2003, a consumer survey was conducted in Broward and Miami–Dade Counties to determine the acceptance of lychee among consumers (Rafie, 2004). In this study, a sample of lychee fruit was provided to participants. They were asked if they knew lychee was grown in Florida; 41% of the respondents said “No.” (Fig. 1). When the respondents were asked if they had seen lychee in their local supermarket before, 75% said “No” (Fig. 2). After trying a sample of lychee fruit, participants were asked whether they liked lychees or not, and 91% of them indicated they did like them. Six percent said they did not, and 3% said they were not sure (Fig. 3).

**INDUSTRY SURVEY RESULTS.** In 2007, a survey of Miami–Dade County lychee growers, packers, shippers, wholesalers, and retailers that sell lychee at the national level was conducted. “The Produce Blue Book” was used to obtain a list of wholesalers and retailers. The survey listed a total of 16 production, postharvest, and marketing factors that were considered to limit lychee fruits from crossing over to American consumers. Respondents were asked to select only 10 of these factors, and to rank them from 1 to 10 in order of importance (1 being very important and 10 not important at all). A total of 350 questionnaires were either faxed or sent by e-mail to potential industry respondents. A total of 50 questionnaires was returned, for a response rate of 14%. The results of the survey were sorted and presented as representing

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## The Survey

Your business type. Please choose all that apply:

Grower \_\_\_ Packer/Shipper \_\_\_ Broker \_\_\_  
 Importer \_\_\_ Wholesaler \_\_\_ Retailer \_\_\_  
 Chef \_\_\_ Food writer \_\_\_ Food Service Distributor \_\_\_  
 Others, please indicate \_\_\_\_\_

Have you grown and/or sold lychee in the last 5 years?

Yes \_\_\_ No \_\_\_

Given the right conditions and effort, do you believe that lychee has the potential to become as popular as other tropical fruits such as banana, pineapple, and mango among American consumers?

Yes \_\_\_ No \_\_\_

Select only 10 of the following factors and rank them 1–10 in order of importance, as factors limiting lychee fruit from becoming as popular as other tropical fruits such as banana, pineapple, and mango among American consumers (1 being most important).

Factors	Rank
Lack of year-round availability.	
Production too sensitive to weather conditions.	
Low production/acre (low yield).	
Profitability is too low as production forecast is erratic.	
Inadequate domestic supply.	
Lack of sufficient quality imported fruit.	
Lack of consumer awareness.	
Lack of information about this fruit among wholesalers and retailers.	
Lack of sufficient investment in promotion and advertising.	
Lack of printed and internet information to inform consumers.	
Expensive at the retail level.	
Texture/or taste not as acceptable.	
Too perishable.	
Fruit appearance not too attractive.	
Lack of proper packaging and presentation at the retail stores.	
Inadequate postharvest treatments to extent shelf life.	

Please indicate any other factors not listed above that you think are limiting lychee fruit from becoming as popular as other tropical fruits among American consumers. \_\_\_\_\_

either growers or non-growers according to the information they provided. If a grower also packed and/or shipped lychee, he/she was considered as a grower.

When respondents were asked, “Given the right conditions and effort, do you believe that lychee has the potential to become as popular as other tropical fruits such as pineapple and mango among American consumers,” 80% of the growers said “Yes” in comparison to 59% of the non-growers (Fig. 4). Such responses indicated that growers are somewhat more optimistic about the future market prospect for lychee than non-growers. When respondents were asked to rank production, postharvest, and marketing factors that in their opinion limited lychee from becoming as popular as pineapple and mango among American consumers, growers selected “lack of year-round availability,” “lack of consumer awareness,” and “lack of sufficient investment in promotion and advertising,” as the top three most important

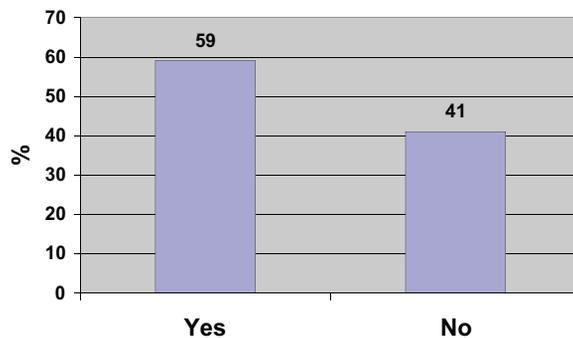


Fig. 1. Percentages of respondents who knew lychee is being grown in Florida.

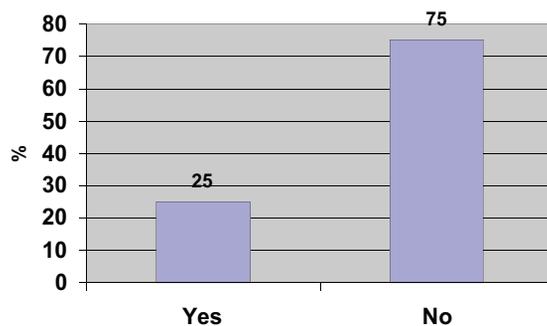


Fig. 2. Percentages of respondents who had seen lychee fruit in local supermarkets.

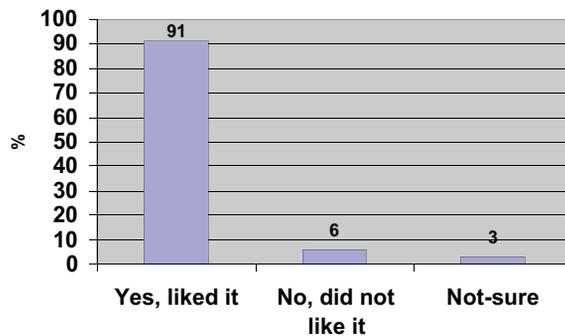


Fig. 3. Respondents' evaluations of a sample of lychee fruit.

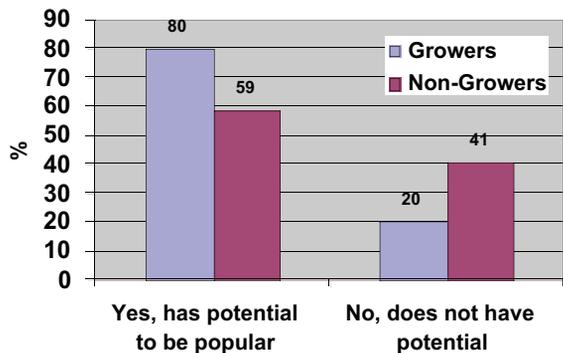


Fig. 4. Percentages of growers and non-growers who believe that lychee has the potential to become as popular as other tropical fruits, such as banana, pineapple, and mango, among American consumers.

reasons. For non-growers the top three factors were “lack of consumer awareness,” “lack of year-round availability” and “expensive at the retail level.”

Growers also considered factors such as “low production per acre (low yield),” “profitability is too low as production forecast is erratic,” and “inadequate postharvest treatments to extend shelf life,” to be important in limiting lychee from becoming as popular as pineapple and mango among American consumers. Non-growers also considered important factors such as “inadequate domestic supply,” and “lack of information about this fruit among wholesalers and retailers.”

Based on all respondents’ opinions, “lack of year-round availability” and “lack of consumer awareness” are top priorities to consider if the lychee industry in Florida plans to fully promote lychee among American consumers. The “lack of year-round availability” factor depends on selecting new cultivars that produce fruit out of season and/or identifying horticultural techniques to manipulate current lychee cultivars grown in Florida to produce fruit out of season (off-season flower inducement for other fruit crops such as mango and longan are a common practice, which

is done by applying certain types of fertilizers at specific times of the growing season). Further, considerable investment is needed to create consumer awareness in the United States. Creation of a partnership among Florida growers and exporting countries may be feasible to assure sufficient funding to promote lychee in the United States.

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