# The citrus juice market

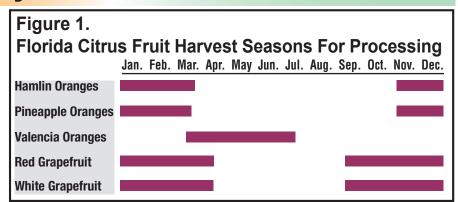
## By Robert A. Morris

unique characteristic of both orange juice and grapefruit juice (hereafter referred to together as citrus juices) is that consumers can and do squeeze fresh oranges and grapefruit at home, when they are in season (Figure 1). In contrast, other fruit juices such as apple, grape or pineapple are not as easy to squeeze or make in fresh form at home as citrus juices. Thus, most consumers have no measure of fresh-squeezed taste for these other juices. Consequently, fresh-squeezed sets a

other fruit juices do not have.

Citrus juices deteriorate quickly once the fruit is squeezed. Enzymes in citrus juices break down its flavor,

taste standard for orange juice and grapefruit juice that most



and citrus juice brands

and its sugar content causes bacteria, yeasts and molds to grow rapidly and produce off-flavors. Processes have been developed that increase the time

of flavor stability of citrus juices, but all involve trade-offs among time, costs and flavor.

Finally, as women have taken jobs outside the home and real disposable incomes have grown, consumers have increasingly demonstrated a preference for and placed a value on convenience. Citrus juices, which deteriorate rapidly in fresh-squeezed form, must live up to the higher flavor standard of fresh-squeezed, yet also meet consumers' growing preference for convenience. The challenges faced by citrus juice marketers to meet these exacting and often conflicting criteria tell the story of the successes and failures in the U.S. citrus juice markets.

There are currently four national citrus juice brands: Tropicana, owned by PepsiCo; Minute Maid (including Simply Orange), owned by the Coca-Cola Company; Florida's Natural Growers, a Florida grower-owned cooperative; and Ocean Spray, an international grower-owned cooperative. Minute Maid does not market grapefruit juice other than a line for foodservice accounts, and Ocean Spray does not market orange juice. According to AC Nielsen market data, the three national orange juice brands account for 66 percent of the Nielsenmeasured orange juice market and 90 percent of the more value-added notfrom-concentrate (NFC) segment. The three national grapefruit juice brands account for about half of the Nielsenmeasured grapefruit juice market and 80 percent of the NFC segment. The balance of the citrus juice markets is private label and regional (unadvertised) labels.



**Table 1. Changes in the U.S. Orange Juice Market** 

Year	FCOJ \$/Gal. Vol. Share		NFC \$/Gal. Vol. Share		RECON \$/Gal. Vol.Share	
1997/98	2.88	21.7%	4.80	30.1%	3.48	47.1%
2007/08	4.68	7.9%	6.73	51.9%	5.04	39.2%

Source: Florida Department of Citrus, Economic and Market Research Department. Citrus Reference Book, pp. 66. "Nielsen Retail OJ Sales in All-Outlet Stores." Gainesville, Florida, May 2009

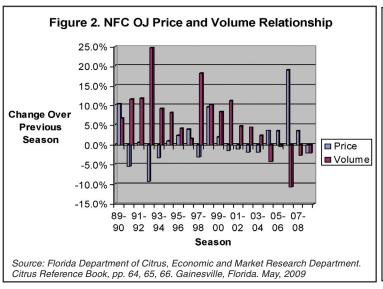


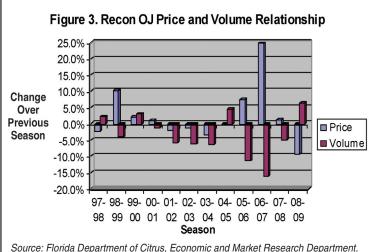
Table 2. Changes in the U.S. Grapefruit Juice Market

Year	FCGJ \$/Gal. Vol. Share		NFC \$/Gal. Vol. Share		RECON \$/Gal. Vol.Share	
1997/98	2.99	7.8%	4.93	37.0%	4.04	55.4%
2007/08	4.14	4.1%	6.92	57.8%	5.92	38.1%

Source: Florida Department of Citrus, Economic and Market Research Department. Citrus Reference Book, pp. 70. "Nielsen Retail GJ Sales in All-Outlet Stores." Gainesville, Florida, May 2009

Table 3. Changes in Price and Volumes for NFC and RECON OJ **NFC Price** Volume **RECON Price** Volume \$/SSE Gal. Mil. SSE Gal. \$/SSE Gal. Mil. SSE Gal. **Change Over Same** -12.8% 14.2% **Period Prior Year** -3.4% -2.1% 8/29/09-6/6/09 to 6.55 90.21 4.36 77.96 8/30/08-6/7/08 6.78 92.18 5.00 68.29 Note: SSE is a single strength equivalent Source: State of Florida Department of Citrus. "Nielsen Retail OJ Sales Summary, Report Number 12 of the 2008/09 Season and the 2007/08 Season," September, 2009. Gainesville, Florida.





## **MINUTE MAID AND FCOJ**

Minute Maid was the first brand to successfully market frozen concentrated orange juice (FCOJ) nationally. FCOJ is a product developed by the U.S. Department of Agriculture and the Florida Department of Citrus in the mid-1940s. At that time, FCOJ was the closest tasting to fresh-squeezed juice, and more convenient to make. FCOJ comes in cardboard or plastic cans and is mixed with water by the consumer to make single-strength orange juice. Frozen concentrated grapefruit juice (FCGJ) is also mixed with water to make single-strength juice.

Minute Maid's successes with FCOJ led veteran beverage marketer Coca-Cola to acquire the company in 1960. It subsequently expanded into ready-to-serve reconstituted citrus juices, and now also markets NFC orange juice under the Simply Orange brand that it launched in 2001. In 2007 Minute Maid also launched Simply Grapefruit, but no data are available yet to compute its contributions to the top brands' share of the grapefruit juice market.

## INNOVATIONS FROM TROPICANA AND ANTHONY ROSSI

Tropicana, started by Italian immigrant Anthony Rossi in the late 1940s and now the largest brand in both orange juice and grapefruit juice, focused on chilled ready-to-serve (RTS) orange juice rather than FCOJ. It stored its juice for the off-season in frozen single-strength juice blocks rather than as bulk concentrate. Demographics began to weigh in favor of RTS by the 1970s and it soon became more popular than FCOJ.

In response to increased competition in the RTS segment from single-

strength juice made by firms that simply packaged reconstituted concentrate (recon), in the mid-1980s Tropicana differentiated its orange juice as "Not-From-Concentrate" (NFC). Consumers thought it was more like fresh-squeezed and sales and profits soared. Tropicana was purchased from Seagram by PepsiCo in 1998 for a little more than \$3 billion.

Between the differentiation of NFC in the late 1980s and the mid-1990s, NFC almost tripled its market share in spite of looking and tasting like recon. NFC also costs consumers more than \$1 a gallon more than recon. During the last 10 years, NFC almost doubled its share again, growing to more than half the market (Table 1). FCOJ, 78 percent of the market in 1970, is now less than 8 percent of the market, despite being the lowest-priced product form.

Similar to the orange juice market, the grapefruit juice market has been characterized by the continued growth of NFC and the decline of FCGJ and recon. NFC grapefruit juice, just over one-third of the grapefruit juice market in 1997/98 (Table 2), is now almost 60 percent of that market, in spite of being continuously higher-priced than FCGJ and recon. Recon's share of the market declined from 55 percent in 1997/98 to 38 percent currently.

## FLORIDA NATURAL'S UNIQUE MESSAGE

Prior to the late 1980s, Florida's Natural Growers marketed FCOJ, recon and canned citrus juices primarily in the eastern United States, but entered the NFC market in 1989 with an exceptional red grapefruit juice. This was successful enough that Tropicana followed with its own red grapefruit

juice NFC in the early 1990s. Now the third largest national brand, Florida's Natural's base of 1,100 grower-owners improves its fruit sourcing alternatives and gives it a unique marketing message: "We own the land, the trees and the company."

#### **OCEAN SPRAY**

Citrus Reference Book, pp. 64, 65, 66. Gainesville, Florida. May, 2009

Ocean Spray started in 1930 as a cooperative owned by cranberry growers in Massachusetts and New Jersey, and launched the first cranberry juice cocktail that same year. In 1976, Ocean Spray expanded its membership to include grapefruit growers from Florida and entered the grapefruit juice market. It soon followed with grapefruit juice cocktails and grapefruit-based juice blends. The company's main focus is shelf stable juices, juice blends and cocktails.

## **RECENT TRENDS**

During the most recent four Nielsen periods (6/6/09 - 8/29/09), recon OJ volumes have increased by 14.2 percent, stimulated by a 12.8 percent price decline, compared to the same four periods a year ago. NFC actually lost volume – by 2 percent, although prices declined by 3.4 percent (Table 3). This has propelled recon from 39 percent of the OJ market to 45 percent, a share recon took directly from NFC as it tumbled from 52 percent to 49 percent of the OJ market. Loosing volume and share when prices are declining has never happened to NFC since it was introduced to the market in 1988-89, until the 2008-09 Season (Figure 2). Recon has frequently lost volume at lower prices, particularly when NFC was replacing it (Figure 3). Most of the NFC market's history

has been characterized by increasing volumes and prices.

No doubt strained consumer incomes as a result of the recession are a factor in the more income-elastic NFC volume declines. But what happens

when NFC, from increasingly highpriced Florida oranges, made from higher-cost volume-starved plants, continues to widen its cost premium over Brazilian-produced recon? Does recon become the way consumers choose to go?

Robert A. Morris is associate extension scientist and economist, Food and Resource Economics Department, University of Florida Citrus Research and Education Center, Lake Alfred.