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## Taiwan

## Fresh Deciduous Fruit

## Annual

2006

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## Report Highlights:

The significant absence of a phytosanitary closure of the Taiwan market to US apples was largely behind the $13,000 \mathrm{mt}(27 \%)$ boost in US fresh apple exports to this market in MY2005. Supply stability can easily add another 10~15K mt annually to US orders in the coming 2~3 years, although, under current economic and marketing conditions, demand for fresh apples is expected to remain steady at 130~140K mt per year - with the US share anticipated to stabilize at around 50 percent. Further expansion of US apple exports is possible with focused marketing / promotion efforts (e.g., successful domestic promotion of increased fruit / vegetable consumption; US suppliers consider selecting and promoting "new to market" varieties (as Japan has done in recent years)).

## Executive Summary

While the apple remains by far the most important item in Taiwan's fruit import profile, it faces plateauing demand as economic conditions hold back liberal consumer spending and an increasing variety of fruits (both imported and domestic) prize consumer dollars away from traditional stand-bys. Volumes are anticipated to remain in the $135 \sim 145 \mathrm{~K}$ mt range through the next several years.

A continued general preference among Taiwan importers for US apples (best taste, good appearance, stable quality) must be tempered by an understanding that Taiwan is a market that calculates profits very carefully. Improving supplier capabilities worldwide, particularly in the southern hemisphere, promises to pressure US suppliers with increasing crop volumes and improved cold storage capabilities.

The significant absence of phytosanitary-induced disruptions of US apple imports during MY 2005 brought welcome relief to both exporters and importers, and infused cautious stability into a market that, since 2002, has been regularly hit by temporary suspensions of US apple imports during peak sales months. This return to "normalcy" was reflected in a sharp rise in exports from the United States that outpaced an already significant upswing in demand and consumption. Stability in supply (e.g., through further amelioration / resolution of codling moth problem) is believed to be worth $10 \sim 15 \mathrm{~K} \mathrm{mt}$ in added demand for US apples each year essential to US suppliers reclaiming a 50 percent share of total imported volume.

Apples from China (PRC) remain absent from the market due to the lack of a phytosanitary protocol on apples (as well as most fresh fruit and vegetables) between the two economies. This situation makes Taiwan a particularly important export market for deciduous fruit exporters in northern hemisphere countries like the US, Japan and Korea.

## Production

Even prior to accession to the World Trade Organization (WTO) in 2002, Taiwan's annual apple crop, grown in orchards set in Taiwan's temperate central mountain range, was not significant ( $10 \sim 15 \mathrm{~K}$ mt per year). Since WTO accession and market liberalization, cropland has been steadily taken out of production, so that in MY2005 less than 7,000 mt of fresh apples were harvested. At its best, local production is currently able to supply only some $5 \%$ of domestic demand, making the impact of annual fluctuations in local crop yields on imports insignificant. The industry is likely to continue slowly contracting due to high production costs and labor retention problems.

Local production is principally the Star King variety. Eighty-percent of commerciallygrown local apples are estimated as sold for fresh consumption, with the remainder being used in prepared foods -- processed typically not very far from the orchard.

Taiwan's apple growers face significant financial difficulties to make crop operations earn a sustainable profit and continued contraction of field acreage used for commercial production defines the long-term trend for the industry. However,
current sustained economic difficulties in the economy at large will likely mitigate the move out of the industry in the short term and the area harvested is not expected to change significantly over the next 1~2 years. Historically high unemployment rates of 5 percent or more have resulted in a boost to agricultural employment.

## Marketing

Relatively high prices for produce during MY2005, the result of poor domestic crop conditions (typhoon damage in southern growing areas), was a principal driver behind increased domestic demand for imported fruit (of which apples comprise the largest component). Apple imports rose by 17 K mt last year. With produce prices once again high and quality problems with certain other imported seasonal fruit more pronounced this year, apples have an opportunity to advance in volume still further in MY2006. The apple remains relatively resilient in terms of consumption, even with the encroachment of different fruits and varieties seen since Taiwan entered the WTO in 2002. In terms of imports, apples continues to hold steady at between 30~35\% of all HS category 08 imports (fruits and nuts) by volume and between $25 \sim 30 \%$ by value. This is not expected to change significantly over the coming 2~3 year period.

Again, given stable prices and the reliable presence of US suppliers in the market during the fall and early winter months, Taiwan is expected to continue to raise its apple consumption to 140 -thousand mt consumption level in MY2006.

The apple is, far and away, the most heavily consumed imported fruit in Taiwan. Only oranges, $96 \%$ of which are grown domestically, are consumed in greater quantity. However, in terms of real growth, the apple is losing ground to a host of other imported fruits, including grapes, cherries, and berries (see chart below). Due to the variety of imported and domestic fruits now available, consumption of apples is not expected to reach the highs seen in the late 1990s without some new factor or factors changing the competitive picture (e.g., such as new positive findings regarding the health benefits of apples or an expansion of fruit consumption in general).


Nearly all fresh fruit imports, apples included, are consumed as fresh produce. The Taiwan consumer's emphasis on both convenience and freshness helps channel about half of all fresh apple sales through traditional / neighborhood wet markets. Of the remainder, around $20 \%$ are sold in small fruit shops and $10 \%$ by traveling vendors, with the rest absorbed by grocery stores, hypermarkets and large hotel and restaurant accounts. Warehouse grocers (hypermarkets) reportedly now account for close to $11 \%$ of domestic fresh apple sales. Their increasing market share has been gained principally at the expense of supermarket / grocery chains, although hypermarkets are increasingly eating into neighborhood wet markets as the convenience and pricing offered in hypermarkets is winning business from Taiwan's small-scale retailer communities (particularly in the Taipei metropolitan area) which traditionally purchased produce in wet markets.

Fuji, with its sweet taste and firm texture, remains the overwhelmingly favored variety - retaining slightly better than 80\% of total retail apple sales. The remainder is comprised Iargely of Gala, Pacific Rose, Red Delicious, and Granny Smith. The former two are principally used to fill gaps in supply of Fujis experienced during late season months.

Lacking the Western penchant for sweet snacks \& desserts and blessed with a rich variety of native fruits, the vast majority of Taiwanese view fruit as an important part of the daily diet. Fruit is frequently eaten as a snack as well as dessert and is the most common food prepared to serve to visitors in the home or office.

The Taiwan consumers' preference for the apple over other fruit is grounded in a number of factors, including appreciation of nutritive/health benefits, relatively low price, a strong quality image, attractive appearance, and relatively long shelf life. Furthermore, the year-round availability of the apple is attractive to retailers,
because point-of-sale formats need not be rotated - as is necessary for fruits available only at certain times of the year.

## Good "Face Value"

Two of the apple's popularity factors noted above, attractive appearance (red, round, shiny) and quality image, reflect consumer priorities which tend to be more uniquely Taiwanese (or Chinese) than others mentioned (which tend to be more universal). Unless bought solely for personal consumption, the color, size, and general appearance of fruit is typically quite important to the retail customer. Serving good-looking fruit to family, friends, or clients intimates good manners, generosity, and warmth. The "best-looking" fruit, often specially presented on store shelves or sold in gift packaging, fetches the highest prices. The most expensive apples on the market, Japan-grown Fujis, sell well at premiums of $100 \%$ or more over slightly smaller rivals because of their size and consumers' quality perceptions.

While countries like the United States, Chile and New Zealand continue to focus on supplying the Taiwan market with traditional (read "Fuji") varieties, Japan is having some success at introducing less common varieties into the market to maintain its "premium" image and justify higher prices to consumers.

## Seasonal Preferences

While eaten year round, Taiwan consumers purchase significantly more apples during the autumn and winter months - the prime production months for northern hemisphere growers. Reasons for this include general perception of the apple as a "cool weather" fruit and the incorporation of apples into the many festivals held during this time of the year.

The chart below illustrates the higher-than-average apple imports during Taiwan's autumn \& winter months recorded over the past two and a half years.

Chart 2.
Source: Taiwan Customs
Import Volume per Month (6/2002-6/2006) as multiple of overall average for the period


## Trade

Trade in MY2006 is expected to remain relatively stable at roughly 130 K mt , reflecting stability in supply and demand factors. US suppliers remain vulnerable to coddling moth detections in imported fruit and the resultant temporary closing of the market to all US fresh apple supplies after a third detection during the season (the so-called "three strikes" system). This has encouraged importers to both diversify their supplies away from the United States (despite the quality factors). Winners in this have included Japan and, remarkably, Canada, which has historically had a difficult time selling into Taiwan due to both sizing and taste issues.
Chart 3.
Source: Taiwan Customs


Again, a resolution of coddling moth concerns among the trade, either through more successful screening at the production end or a reworking of how Taiwan authorities respond to detections, can increase the US share of the market over a 2 to 3 year period by another $25 \sim 35 \mathrm{~K} \mathrm{mt}$ (largely at the expense of Japan and early season southern hemisphere).

Trade volumes are still well off the peak reached in MY1998 - when a combined economic boom and limited imported fruit supplies channeled significant consumer buying power into apples. Today, Taiwan's consumption of apples, in the 115-130K mt range, likely represents a "floor" demand that will continue to hold unless significant consumer preference changes (either for or against apples) occur.

With the Taiwan fresh apple consumption "pie" looking set to remain at about the same size for the coming few years and the market open to all major producers (with the important exception of China), importers have a broad choice of suppliers and countries from which to choose. How the "pie" is divvied up from year to year may vary significantly based on supplier prices, seasonal product quality, and availability.

In general, while Taiwan buyers do express a continued preference for U.S.-origin Fuji apples due to factors including long-term relationships, responsive suppliers, and stable, high product quality, as return on investment remains the top priority for fruit buyers, apple importers have shown themselves more than willing to shift purchase orders to other competing supplier countries when cost factors run against U.S. exporters. High relative U.S. crop prices in recent years have opened the door to sales from other northern hemisphere growers (mostly in Japan). At the consumer level, Japanese apples have received mixed to positive reviews (generally good taste, relatively small size, average appearance, competitive price), although the strong marketing value of "made in Japan" should ensure that country a growing share of overall consumption through the coming several years. Korean apples, while typically priced at a discount to U.S. and Japanese apples have, to date, been supplied with inconsistent quality and average appearance and sweetness. Therefore, growth of the market share for Korean suppliers has fallen behind other competitors.

In terms of northern hemisphere suppliers, the U.S. is expected to remain the dominant player through the coming years with a total market share of between 50 and $60 \%$. A good Japan crop in MY2005 combined with their continued diversification into unique varieties and large sizes. Japanese exports rose by nearly 70\%, further shriveling Korea's share of the market (due to widespread market concerns with Korean apple quality) and stealing some of the thunder from other northern hemisphere suppliers. Japanese suppliers have de-emphasized traditional Fuji production in favor of targeting new to market varieties that capture consumer attention and also fit into the "good face value" category (large sizes, bright colors, consistent quality).

Taiwan's 2002 entry into the WTO eliminated previous quota restrictions on all countries formerly approved to export to the island under quota (Chile, New Zealand, Australia, Japan, South Africa, Argentina, and the European Union) and removed a previous ban on apple imports from South Korea. China remains prohibited from exporting fresh apples to Taiwan.

Taiwan currently applies a 20\% tariff on apple imports, down significantly from the 50\% tariff applied prior to January 2002. Taiwan Customs assesses tariff due on a shipment based on a region-specific reference price rather than invoiced value.

## General Phytosanitary Requirements

Taiwan currently bans or subjects to pest-free certification requirements imports of apples from countries with the following pests: (1) Mediterranean fruit fly, (2) Peach fruit fly, (3) Codling moth, (4) Apple maggot, (5) Mexican fruit fly, (6) Plum curculio, (7) Queensland fruit fly, (8) South American fruit fly, and (9) Western Flower Thrips. Phytosanitary certificates are required stating that apples are free from (3), (4) (5), (6), and (9).

In August 2003, the U.S. and Taiwan agreed on a new systems approach quarantine work plan for apples that requires improved pre-screening in the packing shed, while also putting in place a system of graduated penalties for detection of codling moth, permitting three codling moth detections in the course of routine inspections in Taiwan before the market is shut down to suppliers from the affected country and investigations are made.

Taiwan defines maximum residue levels (MRLs) for around 60 chemicals. Shipments are checked on a random basis. Taiwan's Department of Health (DOH) is currently reviewing current permitted chemicals and MRLs for each. The Agricultural Affairs Section at the American Institute in Taiwan and U.S. industry have worked to ensure that all pesticide and other chemicals of concern to U.S. industry are permitted under temporary arrangement during the review period as well as to see that chemicals and residue levels will be defined in such a way as to not become a trade barrier to U.S. suppliers. The DOH review process is expected to run several years during which formal announcement of new MRLs will be made.

## The China Factor in Competition in the Taiwan Apple Market

Private investment has been flowing from Taiwan into China to develop Fuji apple production - particularly into Shandong province, China's major deciduous fruit farming area. As the world's largest producer of apples, China, and its potential to export large quantities of cheap, good quality apples to Taiwan now that both are in the WTO, is of concern to many apple exporters.

The entry of Chinese apples into Taiwan presently hinges on Taiwan's certification of China's phytosanitary controls in apple growing areas and handling processes. Certification will not happen until the two sides agree to negotiate how such certification is to be done. Continued uneasy political relations between the two sides of the Taiwan Strait give no indication as to when such negotiations may start. Therefore, industry believes it highly unlikely that Chinese apples will arrive in the market during the coming 2~3 year period. However, presuming that Chinese apples will eventually be permitted in, some in the industry believe that the United

States can still retain its position as leading apple supplier to the island. Factors in support of this opinion include:
(1) Quality. While China has cultivated apples for centuries, the Fuji apple - in greatest demand and still fetching premiums in international markets - is a relative newcomer. Experience and time is required to develop not only the technical infrastructure (such as proper storage, handling/packing, \& transportation facilities) but also the expertise to cultivate, select, grade, package, and deliver the premium Fuji apples in the manner which Taiwan distributors and consumers expect. Apples from China smuggled into Taiwan and sold on the market in 1997 \& 1998 elicited significant curiosity from consumers but reportedly failed to impress with their appearance, taste, or price.
(2) Price. Industry watchers report that, when China exports its highest quality apples, quoted prices have not been significantly different from those quoted by U.S. suppliers. Factors for such may include continued limited high-quality supply from growers, high non-labor-related production costs, and the fact that investment in new Fuji cultivation in China comes principally from small-scale domestic, Taiwan, and other investors interested (at least in the near term) to "meet" market prices in order to recoup investment costs.
(3) Season. China's apple season is similar to that of Washington State. Apples from other growing regions in the U.S., such as California, should face less direct competition in Taiwan from China growers.
(4) Domestic Consumption. China's own blossoming domestic demand for high quality apples may meet or even exceed domestic production capacity, leaving less for export - even as production volume expands. Also, Taiwan investors in Chinese orchards are reportedly most interested to develop domestic PRC market sales.
(5) Phytosanitary Controls. Taiwan's strict controls on codling moth in apples will likely be difficult for Chinese growers and packers to meet. Even if the two quarantine services can eventually reach agreement on a quarantine work plan, there is some doubt as to China's capability to ship pest-free fruit.

## Prices \& Marketing

Since 1998, the apple industry in Taiwan has faced a downward pricing curve as stagnant or decreasing demand is being met by increasing volumes available for import. With most producing countries supplying apples here, Taiwan continues to be a "buyers' market" with demand influenced significantly by supplier marketing and pricing strategies. Prices between and within apple varieties vary greatly based on seasonal consumption variations, supplier country-of-origin, supplier pricing competition, and so on. The current market bears little resemblance to that of a decade ago, when Fuji apples were available in extremely limited quantities and suppliers could demand, and receive, high premiums on sales.

As mentioned earlier in this report, the apple symbolizes many positive things to the Taiwan consumer. When purchased as a gift or to serve to others, the country of origin, size, appearance, and taste remain as important as price in the consumer's decision to buy. Therefore, to maintain its dominant position - particularly against
"new" competitors such as Japan, Korea and (eventually) China - U.S. suppliers are recommended to continue working closely with Taiwan importers, distributors, and retailers to reinforce the strong positive image that U.S. apples presently enjoy in Taiwan to ensure continued consumer lo yalty to U.S.- origin apples.

## Statistics

## PSD Table

## Country Commodity

## Taiwan

Apples, Fresh
2005 Revised

2006 Estimate 2007 Forecast UOM

## Market Year Begin

Area Planted
Area Harvested
Bearing Trees
Non-Bearing Trees
Total Trees
Commercial Production
Non-Comm. Production
TOTAL Production
TOTAL Imports
TOTAL SUPPLY
Domestic Fresh Consump
Exports, Fresh Only
For Processing
Withdrawal From Market
TOTAL UTILIZATION
$\begin{array}{r} \\ 6 \\ 6 \\ 1150 \\ 121 \\ 121 \\ 12 \\ \\ \\ \hline \mathbf{I X}\end{array}$
Country Taiwan
Commodity Apples, Fresh
Time Period Imports for: U.S.

Others


Others

| Chile | 24450 | Chile | 32028 |
| :--- | ---: | :--- | ---: |
| New Zealand | 22858 | Japan | 18031 |
| Japan | 10126 | New Zealand | 16734 |
| Korea | 2894 | Korea | 1513 |
| South Africa | 1596 | Canada | 668 |
| Australia | 1386 | Australia | 844 |
| Canada | 2486 | France | 331 |
| France | 576 | South Africa | 512 |
|  |  |  |  |
|  |  | 70661 |  |
| Total for Others <br> Others not Listed <br> Grand Total |  |  |  |

## Export Trade Matrix

Country Taiwan
Commodity Apples, Fresh

| Time Period | MY 04/05 | Units: | mt |
| :--- | :--- | :--- | :--- |
| Exports for: | 2004 |  | 2005 |
| U.S. | 0 | U.S. | 0 |

Others

|  |  |  |  |
| :--- | :--- | :--- | :--- |
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|  |  |  |  |
|  |  |  |  |
| Total for Others |  |  |  |
| Others not Listed |  |  |  |
| Grand Total |  |  |  |

## PSD Table

## Country <br> Commodity

Taiwan
Apple Juice, Concentrated
(MT) 2005 Revised 2006 Estimate 2007 Forecast UOM USDA Official [OId] Post Estimate[New] USDA Official [Old] Post Estimate[New] USDA Official [Old] Post Estimate[New]
$\quad$ Market Year Begin
Deliv. To Processors
Beginning Stocks
Production
Imports
TOTAL SUPPLY
Exports
Domestic Consumption
Ending Stocks
TOTAL DISTRIBUTION
$0^{01 / 2005}$
0
0 0 0 0
0
0 0 a

01/2006

| 0 | 0 |
| :--- | ---: |
| 0 | 150 |
| 0 | 0 |
| 0 | 6428 |
| 0 | 6578 |
| 0 | 40 |
| 0 | 6388 |
| 0 | 150 |
| 0 | 6578 |

0
0
0
0
0
0
0
0
0

01/2006 MM/YYYY 0 (MT)
150 (MT)
0 (MT)
6500 (MT)
6650 (MT)
40 (MT)
6460 (MT)
150 (MT)
6650 (MT)

## Import Trade Matrix

Country Taiwan
Commodity Apple Juice, Conc.
Time Period Imports for: U.S.

Others


Others

| China | 5789 | China | 6312 |
| :--- | ---: | ---: | ---: |
| New Zealand | 220 | Canada | 10 |
| Austria | 10 | Austria | 26 |
| Chile | 30 | New Zealand | 5 |
|  |  | Chile | 75 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  | 6428 |
|  |  |  |  | | Total for Others |
| :--- |
| Others not Listed |
| Grand Total |

Export Trade Matrix
Country Taiwan
Commodity Apple Juice, Concentrated
Time Period Exports for:
U.S.

Others

| Hong Kong | 18 | Hong Kong | 23 |
| :--- | ---: | :--- | ---: |
| Malaysia | 15 | Malaysia | 5 |
| Singapore | 8 | Singapore | 5 |
| Canada | 2 | Canada | 1 |
| Nigeria | 40 |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  | | Total for Others |
| :--- |
| Others not Listed |
| Grand Total |

