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Report Highlights:

Fresh deciduous fruit cultivation remains a key sector of China's rural economy. Off-season imports continue growing, but the window of opportunity is narrowing as China's growing season expands. China's apple production during MY 2003 is forecast down 3 percent at 18.5 million MT, while exports are forecast at 600,000 MT, an increase of 20 percent from the previous year. As China's fruit quality and variety rapidly improves, government officials are aggressively negotiating access to new overseas markets. New pricing data for fruit cultivars illustrates how China is increasingly becoming a U.S. competitor both within China and across the region. Retail marketing in China is becoming more sophisticated for imported and domestic fruit.

Includes PSD Changes: Yes
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Executive Summary

China remains both a market for imported fruit and a growing competitor for fresh U.S. deciduous fruit. Post estimates that China's 2003 apple production will decrease by around 3.5 percent, pear production will increase by 5 percent, and grape production will increase by around 10 percent. Post estimates 2003 Concentrated Apple Juice (CAJ) production will increase, as well. Estimates are based on trends in production and planting acreage as supported by past production, grower costs, consumer preferences, trade data, policy initiatives, fruit prices, and more sophisticated marketing.

The State Statistics Bureau (SSB) issued its preliminary report on 2002 fruit production in May. At that time, apple, pear, and grape production were 19.241 million metric tons (MMT), 9.309 MMT, and 4.479 MMT respectively. Industry sources estimate, China's 2002 Concentrated Apple Juice (CAJ) production capacity stood at 400,000 metric tons (MT) with utilization near 88 percent.

Growers' costs remained relatively stable. Labor costs are not a large factor of production as growers provide most of the work and seldom contract out labor. Many growing regions face water deficits, and water scarcity makes irrigation an expensive necessity. Agri-chemical and organic inputs (pesticides, fertilizers, and growth regulators) are the largest portion of production costs.

Industry sources believe 70 percent of fruit production is consumed fresh with fruit processing representing another 10 to 15 percent of total fruit utilization. Industry contacts believe total fruit waste could be 20 percent in some areas, but that the volume of wasted fruit has been steadily decreasing in recent years with improved distribution to juice manufacturers who can purchase low-grade fruit for their expanded facilities.

The Chinese government is making a concerted effort to open new markets and capture revenue from existing border trade. China's fresh apple exports increased 38.8 percent by volume to 499,903 MT and 40.9 percent by value to US \$173.24 million from July 2002 to June 2003. China exported nearly 370,000 MT of CAJ; a 235 percent increase from the previous year. Fresh pear exports increased 40 percent by volume to 272,137 MT and 53.3 percent by value to US \$68.605 million. China exported 5,863 MT of grapes valued at US \$2.289 million, a 778 percent increase in volume and 730 percent increase in value. Through the first six months of 2003 grape exports increased 12.6 percent to 842 MT.

China's State General Administration for Quality Supervision, Inspection, and Quarantine (AQSIQ) is aggressively negotiating market access in other countries to promote China's increasingly competitive, expanding deciduous fruit industry. Policy encouragement and reforms from MOA and the State Forestry Administration (SFA) led to increased planting of some deciduous fruit crops in certain regions around the country.

This annual report includes a new section with wholesale market pricing data from China's Ministry of Agriculture (MOA). The data, albeit limited, provides an indication for major cultivars market prices and seasonal availability throughout the country along with an indication for exported product competitiveness.

The percentage of total fruit purchasing in retail locations as opposed to street vendors or wet markets has increased. Retailer sophistication and marketing of imported fruits through sales-driven marketing efforts and of domestically produced fruit through societal-marketing efforts has improved consumer awareness of fresh deciduous fruits. Growing concerns by consumers to purchase attractive, "green" fruits have led retailers to carefully consider fruit sourcing from growers and traders. (See marketing section of this report).

Production

China's government officials realized growers must pay attention to product quality, food safety, and production management. Therefore, the previous rural economic improvement plan, calling for increased planting area and production of high value products, was not the best means to improve the rural agricultural economy. In order to establish a system where Chinese rural agricultural producers can prosper, the Chinese MOA established guidelines in a 5-year plan entitled the Regional Plan for Farm Products (2003-2007). In brief, the 5-year plan suggests China possesses comparative production advantages for 11 different agricultural commodities. Of the eleven commodities, apples and citrus were the only two horticultural products included in the plan. The plan suggests these commodities have potential for production growth and government support in different regions across China. (See apple production and policy sections of this report).

In an effort to improve fruit quality and export competitiveness, the Chinese government has created and published both industry standards and national standards for domestic fruit grading. Many of the fruit standards contain not only requirements for fruit size and appearance, but also for intrinsic features (i.e. sugar/acidity content) and residues. Standards, also, may differ by fruit variety. For example, the standard for exceptional Fuji apples is different from the standard for exceptional Red Delicious apples. Provincial agricultural bureaus continue working hard to extend grading guidelines and information to growers so that farmers are able to receive premium payments for their produce when it is shipped to market or purchased from the farm gate. According to government officials and industry representatives, around 30 percent of China's total domestic fruit production was of exceptional quality in 2002. Following that, another 50 percent of total domestic fruit satisfied grading requirements. Much of the remaining 20 percent of fruit that did not meet the standards was sold to processors for juicing or possibly consumed at home by growers. There is also fruit that is never brought to market or that is never harvested. This fruit is not included in production statistics.

The Chinese government continues encouraging growers to make proper variety selection (i.e. plant new cultivars with desirable traits for fresh consumption or processed utilization). Extension work on varieties is primarily conducted through agricultural universities. In some instances, however, the provincial agricultural and forestry bureaus or the local grower industry organizations provide variety recommendations. Recommendations for the grower follow principles of ecological suitability for the region (e.g. temperature, soil, sunlight, water, fertilizer needs) along with assessing opportunities for receiving the highest economic return on investment.

Although ecological and economic principles still guide new plantings and variety grafting, processing operations and packinghouses are beginning to contract variety planting and/or top grafting for production with growers. In some newly planted areas of the Northwest Loess region, apple and pear production is extensively driven by traders and packinghouses, while in the Bohai Gulf, much of the new grape planting is contracted by wineries. In many instances, growers agree to produce fruit cultivars using guidelines provided by the packinghouse or processor. Although the enterprises do not operate as a corporate farm, hundreds or thousands of growers may depend upon them to purchase the fresh fruit they produce. In general, corporate growers and provincial extension specialists indicate varieties that: are early- and mid-maturing, can be planted more densely, have shorter or dwarfed trunks for easier harvesting or green house production, require less management, and have less demand for watering and other inputs are most desirable.

Based upon planting acreage changes, improving yields, and changes in market prices, post estimates that 2003 apple production continued declining by around 3.5 percent, 2003 pear production increased about 5 percent, and 2003 grape production increased by around 10 percent. Preliminary analysis from the Chinese SSB Abstract (issued in May 2003) indicates 2002 apple, pear, and grape production were 19.241 MMT, 9.309 MMT, and 4.479 MMT respectively. Although final 2002 production volumes may change when the SSB issues its final report (scheduled for release in October/November 2003), the production figures provide a general indicator for 2002 deciduous fruit production. If there is little change from the Abstract, apple production decreased 3.87 percent from 2001 to 2002 while pear production increased 5.83 percent and grape production increased 21.8 percent.

Growers' costs remained stable. Provincial institutes offer fruit tree seedlings relatively cheaply. Many growers report a desire to introduce new and commercially desirable cultivars from these institutes but that they cannot risk converting to new varieties at one time and be left without any fruit bearing orchards or vineyards. Most labor costs are not calculated as the family unit often does picking by hand without any contracted laborers or machinery. Labor costs, for tree trimming, anchoring, pruning, shaping, bud thinning, and bagging are not calculated, as well, because the grower and the grower family supply most of the labor.

Irrigation/water usage is a large share of grower production costs. Irrigation, however, is improving as micro-irrigation, drip irrigation, and spray irrigation technology are introduced from Israel, Australia, and Europe through State Owned Farms and university demonstration sites. Most orchards and fruit growing regions suffer water deficits that are compounded by inefficient irrigation techniques. Flood and ditch irrigation for fruit trees and grape vines continues to be the most common form of water supply. In many orchards, growers apply water by the bucketful or pump water from nearby streams, canals, or man-made ponds designed to act as reservoirs into ditches that run around the base of the trees or vines. In Northern China, water scarcity limits industry expansion efforts not only on fruit production, but grain production as well.

Agri-chemical and organic inputs (pesticides, fertilizers, and growth regulators) occupy the largest portion of production costs. Growers report they apply agri-chemicals and organic fertilizers six to seven times per year. There is increased consumer awareness of "Green" foods (see marketing section of this report) and this impacts growers' production utilization and costs for agri-chemical inputs. Growers are trying to cater to consumer demands by using more costly but less toxic pesticides and organic animal waste for fertilizers. Although tradition dictates most growers' livelihoods and agri-chemical application can be too frequent, many are changing input practices to prevent wasted input applications and run-off to follow better food safety and environmental guidelines. However, as growers attempt to improve fruit quality and food safety, their management time for orchards has increased.

Farmers bag specific cultivars of apples and pears in order to foster the distinguishing attributes of the fruit. Because bags are inexpensive and easy to source within the fruit production area, bagging is a common practice to improve fruit appearance. Many growers use bags to help protect fruit from wind damage, scarring, and over-exposure to agri-chemicals applied to tree foliage. Some bags have an inner plastic layer while others have an inner layer made of paper. In almost all instances the outer layer is paper and designed to reflect as much light as possible. Then, prior to harvest, the outer bag is removed to allow for sunlight exposure that will in turn deepen the fruit color. Although not common, some large commercial growers have grown pears inside a hard clear plastic shell that remains on the fruit until purchased by the consumer. The hard shell has the added benefit of protecting fruit from bruising and making fruit packing convenient for export.

Agricultural specialty product taxes occupy the remaining share of growers' costs. In most instances, growers report that although taxes are collected, there is often a discounted effective tax rate of 6 to 8 percent of the fruit value. This is because farmers and growers often pay fees or provide labor for rural development and infrastructure products and they can negotiate lower tax assessments with local tax bureaus.

Because labor costs are so low, the largest portion of manufacturers' costs is for purchasing raw materials. A large juicing operation reports that 73.3 percent and 76.8 percent of production costs were for purchasing apples in 2001 and 2002. Packinghouses and waxing operations report that operations are becoming more efficient and through contracted growing, it is easier to source products. As distribution and procurement become more efficient, costs should move lower. Most post-harvest treatment like grading, sorting, waxing, packing and storing is seasonal. Many manufacturers find they can source most of their labor from local growers who then move back to the farm or to cities for seasonal jobs.

Pick-your-own fruit operations are becoming more common as many growers of deciduous fruits, stone fruits, and other high-value crops have turned their farms into tourist destinations and weekend retreats. Many growers operating orchards near provincial capitals or large urban environments have opened up their farmlands to tourists who may visit for a day and pay a flat fee for picking as much fruit as they like or who may pay for fruit picked and taken away from the orchard. Although this type of production situation is more opportunistic, it has a value for farmers who do not have to take fruit to customers, but instead can allow customers to come to them. In many instances, farmers are putting up small inns to encourage urban residents to retreat overnight in the countryside.

Apples

As indicated in the newest MOA 5-year plan, the Chinese government developed a strategy to improve apple production competitiveness. In the plan, the government will:

- ❑ Establish a virus-free seedling cultivation system.
- ❑ Develop more early and mid-maturing varieties.
- ❑ Build export-processing bases.
- ❑ Integrate processing capacity and consolidate the comparative advantages of juicing.
- ❑ Expand exports through intensified production management and post-harvest treatment.

In addition, the 5-year plan development goal for apple production is:

- ❑ By the year 2007, increase the exceptional quality fruit production in the Bohai Gulf and Northwest Loess Plateau from 35 percent to 50 percent.
- ❑ Increase nationwide yields from the current nine MT per hectare to fifteen MT per hectare.
- ❑ Concentrate around 85 percent of national apple production in the Bohai Gulf and Northwest Loess Plateau.
- ❑ Increase exports of fresh apples to 900 thousand MT (nearly double the current level).

Despite the central government's aggressive plans, implementation will be difficult. Growers do not have financial resources to change cultivars and wait 5 years for trees to begin producing fruit. However, it appears as if the central government and provincial government are willing to spend money supporting research institutions. Furthermore, many production bases and small administrative districts are willing to encourage commercial growing through policy and financial incentives like reduced tax rates and fees for growers and processors.

China's SSB estimates domestic apple production declined 3.8 percent from 20.015 MMT on 2.2 million hectares in 2001 to 19.241 MMT on reduced acreage in 2002. Industry sources expected the decline as older bearing trees were removed and recently grafted trees have not started producing fruit. In addition, weather damage during bloom affected 2002 exceptional and good quality fruit production in the Bohai Gulf while at the same time increasing poor and out-of-grade production.

Post estimates 2003 total apple production is lower by another 3.5 percent to 18.5 MMT provided that there is no early frost damage that would affect fruit prior to harvest. Good quality apple production was closer to normal around the Bohai Gulf growing region (Hebei, Shandong, and Liaoning) and lower in the Northwest Loess region (Shanxi, Shaanxi, and Gansu). Weather was the primary factor for better production around the Bohai Gulf and poorer production in the Northwest Loess region. Apple production in the other two principle growing regions; the Yellow River Basin (Henan, Jiangsu, Anhui) and the Southwest Plateau (Guizhou and Sichuan), should decrease as growers are removing apple trees in favor of other fruit crops. Post estimates grower yields are increasing slightly to around 10 MT per hectare, still much lower than world averages.

Recently, growers planted newly introduced varieties from New Zealand, Australia, France, and other European countries in Hebei, Henan, Shanxi, and Shaanxi. In Shanxi, green apple trees, similar to Granny Smith, are producing exceptional apples after planting took place in the late 1990s. Red Fuji (Hong Fushi) apples, however, still dominate cultivars acreage and production with nearly a 50 percent share of exceptional and high-quality apples. HuangYuanShuai (9.7 percent), QinGuan (6.2 percent), Jona Gold (QiaoNaJin 3 percent), and Gala (2.8 percent) cultivars were also responsible for a large share of exceptional and good-quality apple planting acreage and production. The traditional Ralls (GuoGuang) apple variety comprised around 14 percent of the exceptional and high-quality production and acreage. The concepts of growers' rights and breeders' rights for tree fruit as agreed to by China under its UPOV commitment have not been extended very clearly to rural farmers or some research institutes. In many instances, new varieties being planted should be subject to new-Plant Variety Protection. However, it appears as if some new varieties from abroad are being extended to farmers without proper remuneration or compensation to breeders.

Most of China's apple producing areas are managed by growers who have small parcels of land with apple trees planted in uneven rows between grain and cash crops. As such, production is not very efficient, management is difficult, yields are low, and input costs for individual farmers can be high. Many growers remove bark strips from the trees to encourage greater bloom and production while limiting the tree life. Indications are that although planting acreage has been declining, the government is advocating for better-managed and increased commercial orchards. This means that as some orchards are removed, lands are replanted in a more efficient manner with trees that may take five years for commercial production. Furthermore, provincial agricultural bureaus are encouraging growers to top-graft and graft new cultivars that take less time to produce fruit with a greater commercial appeal. Also, processors and packinghouses are providing orchard management training, variety extension, and technology extension in order to source better fruit.

The Liaoning Province Agricultural Bureau reports that between 65 to 70 percent of total provincial apple planted acreage was producing fruit in 2002 with a total production of 1.2 to 1.3 MMT and that 2003 production was similar to past years. In Shandong, growers and industry representatives report the key production base of Yantai saw improved weather in 2003 with apple production volume closer to historical averages (around 6 MMT).

Concentrated Apple Juice (CAJ)

Industry sources estimate China's calendar year 2002 CAJ production capacity stood at 400,000 MT with production volume surpassing 350,000 MT. Post estimates 2003 production will increase as capacity expanded and the cost for sourcing out-of-grade juicing apples remained inexpensive. (Note: above volume is determined on a calendar year basis while CAJ PSD table is determined on a July to June basis). Furthermore, as world demand increased and the U.S. lowered countervailing duties for some Chinese CAJ exporters, processors will produce more CAJ for export.

China produces mainly sweet tasting 70 degrees brix CAJ. CAJ export prices declined over the past few years (January-June CAJ export prices averaged US \$598 per MT). The juicing industry has attempted to set a floor price for export CAJ since 1999. A recently concluded industry meeting set the following floor CFR prices for CAJ exports to the United States effective from August 1 to October 31, 2003: non-frozen CAJ US \$705/MT (Pacific coast), US \$735/MT (Atlantic coast); frozen CAJ US \$755/MT (Pacific coast) and US \$785/MT (Atlantic coast).

China's cost of producing CAJ is relatively low (between 400-500 dollars/ton), because juicing companies use low quality or out-of-grade apples for processing. Although purchasing prices for such apples increased recently with better management and fewer out-of-grade apples, CAJ producers can still make a profit because labor is cheap, apple production volume stands high, and many receive tax and fee incentives.

The constraints of sourcing low-grade apples and the increasing demand for sour tasting apple juice in the world have encouraged Chinese growers to plant more high-sour content apples. The country has planted some 13,333 hectares of high-sour juicing apples (not bearing fruits for another 3-5 years). Varieties have been introduced from Australia, France and Switzerland. Sources said China would see some 66,666 hectares of high-sour apple trees being planted within the next 3-5 years.

Industry sources indicated that around 2.8 MMT of fresh apples produced in 2002 went to processing, predominantly for CAJ but also for jams, jellies, sauces, and for flavorings or additives for candies and foods as an ingredient or an essence.

Pears

The SSB Abstract estimates 2002 nationwide pear production was 9.309 MMT, an increase of 5.8 percent from 2001 production. Production likely increased as a result of greater bearing acreage and better weather conditions in China's Bohai Gulf and in Northwest China's Xinjiang Province. Post estimates 2003 pear production increased 5 percent to 9.845 MMT. Trade and government reports indicate production increased as the Bohai Gulf region experienced better weather during Spring 2003 and bearing acreage expanded as trees planted and/or grafted in the late 1990s increased commercial scale production. Fruit specialists report that most pear trees need five years following planting to begin producing fruit in a commercial manner. The time, according to specialists, can be shortened if growers are willing to better manage the trees or if they are willing to graft onto existing trees.

Future planting acreage increases should be minor, as most pear grower prices have steadily declined. Although exports have increased, traders speculate that higher export volumes are attributed to better trade data collection from the Chinese Customs Office. Therefore, it is unlikely that significant changes to planting acreage will occur in the near future. Instead, growers interested in earning more from pear production may alter varieties or plant in greater density in order to produce more pears and offset lower prices. Provincial agricultural bureaus indicate most new pear varieties require intensive management. However, growers are not likely to provide the necessary time, inputs, or financial resources to see production thrive.

Fragrant (Xiang) pears from Xinjiang are the second highest value pear according to pricing data from MOA (highest value being Fuji Pears-see price data in this report). Although Fragrant pears comprise the greatest share of production in Xinjiang, the region began planting European/Western style pears a few years ago near the city of Korla. At present, however, only a small production volume is available. If the region is able to successfully begin exporting Xinjiang fragrant pears, Western pear exports from Xinjiang may develop in the next several years. Chinese fruit specialists indicate that the Crystal (Shui Jing) pear is the nation's major cultivars. However, there are numerous other pear cultivars that have developed in recent years as individual growers and agricultural institutions have increased grafting efforts to find the most suitable rootstock, mid-stock, and treetop stock for different ecological regions. Duck (Ya) and Crisp (Su) pears produced in Shandong and Hebei are widespread in the domestic marketplace and although an older variety, still appeal to a large domestic and export fresh consumer market. China's central government is actively pursuing market access for several pear cultivars. If successful, growers may begin producing cultivars with better export potential.

Growers in Xinjiang plant Fragrant pear trees 5 or 6 meters apart in rows spaced 6 or 7 meters apart. Fragrant pear trees require trimming and need to be kept relatively short to avoid wind damage or lost fruit caused from high winds. Often, trees are trained or anchored to the ground by weights and ropes. Some growers use splints to widen canopies for increased sunlight exposure and easier harvest. In addition, Fragrant pear trees require pollination from other varieties, most notably, the Dong Shan Pear. Production costs in the province are quite excessive, as well, because soil conditions are bad and there is little surface moisture (irrigation, however, from underground aquifers filled from snow melt is available almost year round). Many growers rent out storage space and assess that as part of their operating costs. Several growers indicated that their production costs are near RMB 2000 per mu per year (roughly US \$3600 per hectare per year).

Grapes

China's SSB Abstract indicates 2002 grape production increased 20 percent from 2001 to 4.5 MMT. This was a large and unexpected increase from earlier production and may be lowered following final analysis of 2002 production. Increased grape production is, however, probable as increases in grape planted area and the percentage of grape vineyards bearing fruit have led to stronger yields.

Reports indicate that much of the new grape acreage is for foreign invested and domestic wine making enterprises. However, there is also a lot of increased planting of table grape varieties introduced from abroad like the Globe grape. Much of the newly planted area for table and wine grapes is in the Bohai Gulf and the Yellow River Basin. However, as domestic table grape prices decrease (sometimes by as much as 15 percent per year) new plantings should decrease. Post estimates that production growth in 2003 should slow from 20 percent to 10 percent. This would indicate a production volume of 5 MMT.

The largest provincial producer of grapes is Xinjiang province in Northwest China. Xinjiang grapes from the Turpan region are primarily Pearl (Zhen Zhu, a round milky green seedless variety) and Green Horse Nipple (Qing Ma Nai, a milky green oblong variety with seeds similar to Thompson grapes). Many of the grapes produced in Xinjiang are dried by hanging the vines on pegged sticks suspended from shelters that allow for heat and air currents. However, as distribution is more convenient and cold storage improves and capacity increases, more Xinjiang fresh table grapes are arriving in China's Eastern provinces. Specialists, distributors, wholesalers, and retailers, however, complain that many of the grapes from Xinjiang and other provinces drop from the vine easily and are wasted as consumers and retailers would rather purchase grapes on the vine.

Most Chinese grape production is in rows (Li Jia) or along low-lying trellises (Peng Jia). Concrete or wooden posts with bailing wire strung between them in rows one and half to two and a half meters apart are the most commonly visible forms of grape production in Eastern China. Smaller distances between rows indicates most harvesting is done by hand and then hand carried out of the orchard to the end of the row where it can be loaded onto trucks. Wider distances are used for more commercial and mechanized grape vineyards that may pick grapes by hand and then place them in small tractors that tow carts between the rows and then transfer them to trucks. Low trellises made from cut tree branches and bailing wire provides most of the support for trellis style production in Northwestern China. Most low-lying trellises have grape vines planted in ditches that are supported for up to a meter and half high before spanning another three meters across. Growers then harvest grapes that hang below the supporting spans of the trellis. Growers report that trellis grape production acts as a further barrier from wind damage and grapes falling to the ground as a result of strong winds. In many colder climate regions, grape growers often remove the vines from the supports or trellises after harvest and bury vines up to a half-meter under soil in order to prevent freezing and frost damage.

Extension specialists indicate that Grape production in simple green houses and hot houses around provincial capitals and large urban centers like Beijing, Shanghai, and Dalian is driving some of the development of green house grape production. However, many of the grapes grown in green houses are not too distant from large and sophisticated port operations that may be able to export grapes to regional neighbors like South Korea and Japan. In many areas, producers also provide opportunities for urban residents to visit grape vineyards to pick grapes for fresh consumption or for grape juicing.

Consumption

Fresh Fruit

Increased purchasing power along with increased availability of fresh fruits throughout the year has led to increased fresh fruit consumption. China's per capita consumption of fresh fruits is estimated at 50 kilograms and growing. Consumption has witnessed slight increases over the last several years (45.48 kg in 1997, 47.86 kg in 1998, 46.07 kg in 1999, and 48 kg in 2001).

Most fresh consumption of domestic apples, pears, and grapes tends to be seasonal. Furthermore, domestic consumption tends to be higher near the production regions as the local food culture has readily adapted the fruit into its cuisine or diet. However, as products retain their attractive appearance and good quality over a longer period of time, consumption of fruits beyond the production period appears to be extending to a greater area within the country. In addition, consumers of fresh fruit in Southern China seem to be more affluent and willing to pay for higher prices commanded by domestic or even imported fruits in the region.

Industry sources believe about 70 percent of fruit consumption is fresh with fruit processing representing another 10 to 15 percent of total fruit utilization. Industry contacts believe that total fruit waste could be as high as 20 percent in some areas, but that the volume of wasted fruit has been steadily decreasing in recent years. The decrease in fruit waste has been aided by better growing practices, an increased volume of fruit produced within grade, faster and more convenient distribution paths, and improved cold storage and controlled atmosphere (CA) storage facilities. Furthermore, the decline in waste has been caused by increased production capacity and improved market awareness among fruit processing companies.

In some commercial fruit growing regions, government officials report that fruit waste is around 5 percent. In general, however, fruit waste and culling depends upon the level of processing in the area. If juicing facilities are near, storage facilities are available, and distribution channels are accessible, growers are able to sell even the most unattractive fruits by either delivering the product to processors or by using accumulators (i.e. middle-men) to deliver the product on their behalf.

One juicing operation reports that approximately 6.2 to 6.8 MT of fresh apples will equal 1 MT of 70/71 Brix concentrated apple juice. Pear nectar production, however, requires around 8 MT of fresh pears to equal 1 MT of concentrated pear nectar. According to grape and raisin growers and manufacturers in Northwestern China, approximately 4.5 MT of fresh grapes will equal 1 MT of raisins.

Processed

Domestic fruit juice consumption is small (average 1 kilogram per person a year), but the number is expected to grow dramatically in the next few years. Currently, industry sources estimate around 30,000 tons of CAJ is consumed domestically each year, with the volume expected to top 180,000 tons in five years time. Juice consumption is considered appropriate almost any time of day. Often, consumers will request fresh juice from bars and restaurants or glasses of juice or small packages while on airplanes.

Domestic consumption of dried fruit (e.g. raisins) by the food manufacturing industry is growing. Utilizing fruit pastes and fillings inside breads and cookies is also an area being developed by the food processing and manufacturing industry. At present, there appears to be very little domestic production or consumption of fruit sauces (e.g. apple sauce). However, there is some production and consumption of fruit jams, jellies, and preserves. There is also some use of fruit flavorings and essences in candies and jellied products. The China Canned Food Industry Association reports that domestic consumption of canned or tinned apple or pear products has been decreasing.

Many domestic and foreign invested juicing operations and wineries are expanding their capacity and increasing their product lines. Up until about two years ago, it was rare to see any juices other than apple and orange. Now, pear nectar, grape juice, apricot nectar, kiwi nectar, etc. along with juice cocktails using blended juices from apples, pears, or grapes and other fruits are available. Much of the fruit juice industry tends to be opportunistic (i.e. utilizing fruit grown near juicing plants and utilizing product quickly in order to avoid putting already bad quality fruit into storage). According to one industry source with a juicing capacity of over 100,000 MT, the plant operates for a six-month period following harvest when production can be profitable. Following that, the plant may release workers so that they may find other seasonal and temporary employment in cities before returning to the juicing plant later in the year.

The juicing industry, through the China Chamber of Commerce for Native Products Sub-Chamber for Juice has recently agreed to curtail capacity expansion in order to avoid over-competition. Without the fear of excessive juicing expansion, the industry believes product prices will stabilize and many of the companies can focus on becoming more efficient. Other companies may look to expand their product lines or explore export market opportunities.

Trade - General

Imports

Increased fruit imports should continue as Chinese consumers are willing to spend more income on fresh fruits year round and as tariff rates are lowered. The strongest potential for increased imports remains during the period which China does not produce deciduous fruits, or in years when production is affected by water scarcity or weather damage. Same hemisphere exports to China have potential for further increases if exporters can supply good quality fruits at low prices. As China produces more early- and mid-season deciduous fruits, however, large rates of gain for same season/hemisphere suppliers do not appear likely. Therefore increased imports may come from southern hemisphere producers and from low-priced same season producers.

Chinese traders indicate that although it is possible to import fruit directly into China at ports closer to major population centers, the infrastructure, distribution, and familiarity of importing fruit through the Lishui market (Guangzhou) in south China is still a preferred low-cost method. However, direct exports to Mainland China are forecast to increase as inspection and customs policies become more transparent and storage facilities for imported fruits improve. The number of countries exporting fruit to China has remained stable.

Some exporters of U.S. fruit have utilized the USDA Supplier Credit Guarantee Program in order to export American deciduous fruit products to the China/Hong Kong region. Some traders report a reluctance to trade with Chinese and Hong Kong importers for fear of falling into commercial disputes. In addition some Chinese importers require very lengthy payment terms, as they are extended to distributors and wholesalers who are extended to retailers, restaurants, etc. Many importers often require lengthy terms in order to make foreign currency payments, too.

Exports

China's AQSIQ actively engages other nations to open their customs doors to Chinese fruit. In addition, Chinese fruit quality, post-harvest management, and distribution are improving and becoming more efficient, making the product more attractive in export markets. Furthermore, as domestic fruit quality improves while retaining its lower than world average prices, it is less likely that Chinese fresh fruits will face unjust trade restrictions. However, many nations may limit trade of Chinese fruit based upon plant health concerns if there are justifiable sanitary and phyto-sanitary restrictions.

Although trade data indicates large export increases, some traders and industry specialists speculate the China Customs office has improved trade data for neighboring countries that was unrecorded previously or conducted on a barter basis. According to Chinese traders the customs office is making a concerted effort to collect revenue from tariffs. As such barter trade and gray channel trade is diminishing. Also, exporters, themselves, want currency rather than an exchange of goods. In addition to better data collection for trade to neighboring countries, however, Chinese exports to distant markets for apples, pears, and grapes have increased as prices are below world averages. Furthermore, the number of export destinations has increased.

Apples

Apple imports should increase slightly while exports continue surging in 2003. The Chinese growing season is slowly becoming longer and able to supply diverse varieties when, in the past, consumers needed to depend on imported product. Exports volume should expand as market access issues are resolved for Chinese apples and exceptional and good-quality apples remain over-produced and inexpensive.

The highest volume imported apple varieties continue to be Red Delicious and Granny Smith style. According to China Customs data, over the July 2002 to June 2003 marketing year, China imported 51,256 MT of apples valued at US \$23.82 million. This was a 2.5 percent increase by volume and 21 percent increase by value from the previous 2001/2002 marketing year. In the 02/03 marketing year, 88 percent by volume and 86 percent by value of imported apples entered through the Guangzhou port. Other ports recording apple imports were the ports of Dalian (2,507 MT, US \$1.23 million), Shenzhen (2,221 MT, US \$1.356 million), Shanghai (1,178 MT, US \$556 thousand), and Tianjin (41 MT, US \$18 thousand).

According to Chinese traders, Fuji is the most commonly exported Chinese apple. Following Fuji, Ralls and other traditional low-price apples are exported to many neighboring countries. Chinese exports of fresh apples in the 2002/2003 marketing year were 499,903 MT and US \$173.24 million. This was a 38.8 percent increase by volume and 40.9 percent increase by value from the 2001/2002 marketing year. In the 2002/2003 marketing year, 41.6 percent of exports by volume and 58.5 percent by value originated from Qingdao. The other top 5 exporting ports included: Nanning (59,134 MT and US \$16.611 million), Harbin (52,966 MT and US \$18.746 million), Manzhouli (41,739 MT and US \$7.144 million), and Kunming (30,846 MT and US \$7.227 million).

CAJ

China imports very limited quantities of CAJ, primarily high sour juice for blending with local products. Imported CAJ primarily entered through ports in Guangdong, and some through Shanghai and the northern port of Dalian. As China's food and beverage manufacturing industry develops, and demand for high-quality product grows, there should be slight increases in imported CAJ.

The surge of CAJ exports was partly attributed to the U.S. trade court decision that waived import tariffs to an additional five Chinese CAJ producers on November 15, 2002. Around 90% of China's CAJ production is exported. China customs data has shown that in last marketing year (July 2002-June 2003) China exported nearly 370,000 MT of CAJ. During the first six months of the 2003 calendar year, China has exported a total of 229,000 MT, up 47.4 percent on year. These numbers indicate that China could export as much as 480,000 MT of CAJ in 2003. The other reason for continued strong exports is growing world demand. CAJ was exported from China's northern ports, predominantly Qingdao (situated near the Yantai production base), with some exports through Xian, Dalian, and Tianjin.

Pears

Pear imports during the 2003/04 marketing year are expected to remain flat. Pear imports over the 2002/03 July to June marketing year increased 13 percent by volume to 750 MT and 15.3 percent by value to US \$263 thousand. In the 02/03 marketing year, over 99 percent of imports by volume and value entered through the Guangzhou port. The remaining small percentage of imported pears entered China through the port of Shanghai. Although small increases in pear imports may occur, Chinese growers produce many kinds of pears (including European/Western pears) and there does not appear to be much opportunity for market expansion. Some importers have indicated that some apple imports enter the country classified as pears in order to avoid phyto-sanitary restrictions despite the higher customs tariff charges.

Exports during 2003/04 should increase as China's government aggressively engages other countries for market access. Market access for Chinese fruit is a priority for MOA and AQSIQ. Some government and industry representatives believe that without better market access, it will be difficult to improve the livelihood of rural growers that is needed to maintain political stability. In addition, China Customs is better capturing trade data and assessing fees on exported fruit.

Traders indicate that Duck pears from Shandong and Hebei along with Fragrant pears from Xinjiang are the most common exported Chinese pears. Exports of pears in the 02/03 marketing year increased 40 percent by volume to 272,137 MT and 53.3 percent by value to US \$68.605 million. The port of Tianjin accounted for 43 percent of pear exports by volume and 37.6 percent by value. The ports of Shenzhen (44,105 MT and US \$9.413 million), Qingdao (38,693 MT and US \$13.117 million), Nanning (31,293 MT and US \$7.636 million), and Harbin (19,222 MT and US \$6.881 million) were the remaining top five exporting locations for pears and quinces. China's AQSIQ continues negotiating increased market access for domestic pears into other countries. However, questions regarding the prevention of plant pests and plant diseases may arise and lower the rate of increase for pear exports.

Grapes

As China's own grape production continues to expand over a larger season with the introduction of new varieties, the rate of increase in grape imports could slow. Increasingly, China is importing more Southern hemisphere grapes as its own Northern hemisphere production has expanded and improved. Most grape imports are dark red and green-red Globe grapes, but there are also some retailers who carry bags of "imported" Thompson grapes.

Through the first six months of the 2003 marketing year (Jan. – June), China's grape imports were 39,072 MT and US \$26.919 million, an 11 percent increase by volume and 31 percent increase by value. Chile, as a Southern hemisphere country, supplied 28,290 MT valued at US \$20.346 million from January to June while the United States supplied 10,559 MT at US \$6.458 million. Main import locations were Guangzhou (30,505 MT and US \$20.006 million), Shenzhen (4,938 MT and US \$4.455 million), Dalian (2,318 MT and US \$1.354 million), and Shanghai (1,270 MT and US \$1.073 million).

During the 2002 marketing year (Jan. – Dec.), China's grape imports totaled 54,843 MT valued at US \$32.215 million, a 12.6 percent increase by volume and a 4.5 percent decrease by value from the previous year. In 2002, Guangzhou accounted for 70 percent of grape imports by volume and 67 percent by value. Other ports with substantial grape imports in

2002 included: Shenzhen (23 percent by volume and 26 percent by value), Dalian (4 percent by volume and value), and Shanghai (2 percent by volume and 3 percent by value).

Grape exports in comparison to total production remain small. Government officials and grape exporters report the largest problems affecting increased grape exports are an inability of keeping grapes on the vine following harvest and producing few desirable varieties for export. Extension agents and traders want to focus their efforts on variety improvement that would allow Chinese growers to produce grapes that remain on the vine better after harvest. In addition, extension agents have expressed interest in the research of any types of chemical agents or compounds that would keep grapes on the vine longer.

During the first six months of 2003, China's grape exports increased considerably relative to the same period of 2002. From January to June, China exported 842 MT valued at US \$339,000. Much of this was due to increased production of varieties that can be harvested earlier in the year and exported to non-grape producing neighboring territories and countries of Russia, Vietnam, Hong Kong, Macau, and Mongolia. The cities of Harbin, Nanning, Shenzhen, Manzhouli, and Tianjin have been the top five exporting locations through the first six months of the year.

China's grape exports increased significantly in the 2002 marketing year. In 2002, China exported 5,863 MT of grapes valued at US \$2.289 million. This was an increase in volume of nearly 778 percent and in value by 730 percent from 2001. Most export locations are to areas with contiguous borders. Russia was the largest export destination for Chinese grapes with 35.5 percent of value and 23.6 percent of value. (See trade tables for other export destinations). Harbin (1,503 MT and US \$ 477,000), Nanning (1,241 MT and US \$207,000), Urumqi (780 MT and US \$ 207,000), Qingdao (601 MT and US \$ 551,000), and Manzhouli (568 MT and US \$ 63,000) were the large export bases for Chinese grapes.

Stocks

No official data exist for fruit stocks in China. Modern cold storage and controlled atmosphere facilities are developing and storing a larger portion of China's harvested fruit. According to a 2002 speech by a high-level MOA official, storage capacity was enough to accommodate 20 percent of the nation's fruit production (note: 2002 total fruit production was over 69.52 MMT). Although modern storage facilities for domestic fruit are improving, there should still be strong demand for high quality imported fruit.

In 2002, it was estimated that 85 percent of domestic cold storage capacity was in modern facilities that are mechanically controlled. The remaining 15 percent of storage capacity is in small but numerous simple ventilated facilities and underground pits. Industry sources report most modern cold storage facilities are privately run and managed. In many instances, cold storage enterprises operate under large trading companies that contract and rent out space to smaller traders, accumulators, and large farms. Several cold storage facility operators report that by April and May of year following harvest that warehouses have sold out most domestic stocks of stored apples, pears, and grapes. In many instances, storage facilities have exhausted their supplies even earlier in the year following the Chinese Spring Festival/Lunar New Year that takes place in late January to mid-February. According to pricing data, too, fresh wholesale market prices rise at these times when supplies are low.

Although it is an exception rather than the norm, industry sources report some CA facilities still have exceptional and good quality apples and deciduous fruit in storage even after the new crop harvest has began. At least one trader who still has year-old fruit in a CA storage facility recognizes that the fruit will have to be sold at a loss in order to compete with fresh

fruit that is less expensive. As China's CA storage and post-harvest treatment continue to improve, this type of scenario could become more common.

Policy

China continues negotiating with several countries to gain market access for its fruit. China's quarantine authorities, AQSIQ, are responsible for conducting and negotiating Pest Risk Assessments (PRAs). AQSIQ and the USDA Animal and Plant Health Inspection Service (APHIS) continue holding bilateral discussions on plant quarantine concerns affecting trade between China and the United States. AQSIQ continues pushing for apple exports to the United States along with Ya and Fragrant pear exports. Minutes from the annual bi-lateral discussions along with papers detailing the status of PRAs for individual fruits are available from APHIS plant quarantine officials and the APHIS website.

MOA's five-year agricultural plan established guidelines for the production of several commodities (see apple production section). Tart/sour apple production in the Bohai Gulf and the northwest Loess soil regions were signaled out in the plan. According to an industry source, growers have already begun planting and grafting some French apple varieties in the areas. Increased planting and production is expected to continue as acreage from older cultivars is removed and converted with more densely planted desirable cultivars.

Fruit trees are recognized as an economic forest crop in China and as such also fall under the administration of China's State Forestry Administration (SFA) if production occurs in a designated forest. The Chinese government has set aside money under the *Sloped Land Conversion Project* to plant economic and ecological forest crops on sloped lands that formerly produced grains and other commodities. Under the SFA managed *SLCP*, growers can retire sloped (= 25 degrees) agricultural lands and receive grain and financial subsidies to replace lost income and purchase economic or ecological tree seedlings. Within the replanted areas, 20 percent of land can be designated for economic tree plantings while the remaining 80 percent is for ecological species.

In addition, China's government has negotiated separate trade treaties to lower tariffs on certain agricultural commodities with Southeast Asian neighbors (e.g. Hong Kong-China CEPA treaty, and Thailand-China certain specialty product agricultural commodities). These tariff treaty negotiations are beyond China's WTO commitments and allow for preferential tariff treatment that is below that for other WTO member states. Although details of these trade treaties are not available, it is expected that there will be clauses requiring that the product origin or at least a certain portion of the added value take place in the treaty country. This, in effect, would prevent direct trans-shipping of commodities through tariff treaty countries as an attempt to receive preferential tariff treatment. Before treaties are finalized, many of China's administrative bodies (e.g. MOA and its affiliated agricultural academy) are conducting analysis on the impact of such treaties for domestic production.

Tariff Rate Reduction Schedule

China agreed to lower tariff rates on select agricultural commodities beginning on January 1 of each year as negotiated during China's WTO accession. Apple, pear, and grape imports are subject to double-digit tariffs and value-added taxes (VATs). Although China is not expected to lower its double-digit tariffs and VATs anytime soon, China is providing certain tariff and VAT exceptions to regional neighbors (see policy section) with trade treaties.

Deciduous Fruit Tariff and VAT Rates for 2003 and 2004							
HS Code	Description	2003		Effective Rate	2004		Effective Rate
		Tariff	VAT		Tariff	VAT	
0806.10	Grapes, Fresh	18.4%	13.0%	33.8%	13.0%	13.0%	27.7%
0808.10	Apples, Fresh	14.0%	13.0%	28.8%	10.0%	13.0%	24.3%
0808.2012	Pears, Duck (Ya) or Snow (Hsueh), Fresh	15.6%	13.0%	30.6%	12.0%	13.0%	26.6%
0808.2013	Pears, Fragrant (Xiang), Fresh	15.6%	13.0%	30.6%	12.0%	13.0%	26.6%
0808.2019	Pears, Other, Fresh	14.0%	13.0%	28.8%	10.0%	13.0%	24.3%
0808.2020	Quinces, Fresh	16.4%	13.0%	31.5%	16.0%	13.0%	31.1%

Wholesale Market Fruit Prices

Beginning last year, the MOA published sales price information from individual wholesale markets for a variety of major agricultural goods on its website (<http://www.agri.gov.cn/jghq/gp/>). The information aims to provide domestic growers and traders with greater knowledge about market conditions for agricultural goods around the country. The website provides no data regarding fruit quality or trade volume. Also, the website neither distinguishes between imported products that have filtered onto the local market, nor is each market required to report daily. The positive side, however, is that the information, albeit limited, provides a general indicator of major cultivars market prices and seasonal availability across different regions.

Converting Chinese RMB/Kilogram to US \$/Metric Ton (RMB 8.265 = US \$1.00)								
RMB/KG	RMB 1/Kg	RMB 2/Kg	RMB 3/Kg	RMB 4/Kg	RMB 5/Kg	RMB 10/Kg	RMB 15/Kg	RMB 20/Kg
US \$/MT	\$121/MT	\$242/MT	\$363/MT	\$484/MT	\$605/MT	\$1210/MT	\$1815/MT	\$2420/MT

Apple, pear, and grape prices (see individual price tables) are at their highest point when domestic supplies are low. After the onset of harvest, prices remain strong while quality is good, but then market support falls as quality deteriorates. Then, as many fruits are sold from CA facilities for the Chinese Spring Festival and lunar New Year, many prices rise as the demand for good quality fruits surges.

Marketing

Consumers are purchasing more of their fruit from retail outlets, and retailers are more sophisticated in their marketing of imported and domestic fruit. Sales driven marketing efforts such as advertisements in newspapers for imported fruits and promotional point-of-purchase/sale signs are common. Often, hypermarkets will carry good quality deciduous fruits year round. In many instances, there may be several varieties of imported fruits from several countries placed alongside domestic fruits that are indistinguishable from imported cultivars. One hypermarket mentioned that when it held a sale driven promotional event for imported U.S. Red Delicious apples, the store sold over 2 MT in a day. Many USDA cooperators such as the California Table Grape Commission, Washington Apple Commission, and Sunkist, in conjunction with the USDA Agricultural Trade Offices in China, have also encouraged more sophisticated marketing of U.S. fresh deciduous fruits.

Different Chinese government agencies (i.e. Ministry of Agriculture, Ministry of Health, State Environmental Protection Administration) have developed standards for “green food,” “wholesome food,” and “pollutant/pesticide free food.” It does not appear as if any single standard/certification has dominated the production market, but consumers generally believe these types of certified domestic foods are healthier or better for their families.

Societal marketing is used for domestically produced fruits and vegetables sold in grocery stores, supermarkets, and hypermarkets. The environmental, cultural, and societal benefits of such marketed commodities do not appear to be taken into consideration when consumers purchase fruit. Rather, the consumers would rather procure fruits that are better for their family and they pay less regard to the environmental implications. At present, no known imported fruits are marketed using any of the above-mentioned standards. However, consumers recognize imported fruit quality may be better and healthier than the domestic fruit grown with these standards. (Note: many of the standards allow for the controlled use of pesticides or other agri-chemicals and should not be considered an organic product).

Most Chinese consumers continue to peel or pare their fruit. The skin on grapes, too, is often discarded. This custom appears to be part of the culture, but also it is seen as a method to reduce the intake and exposure to chemical residues that may be on the skin and peel of the fruit. Therefore, fruit that is big and easy to pare or that is easy to squeeze out of the grape skin is consumed most commonly on the domestic market.

Chinese government and industry representatives reported that consumer preference is growing for sour and tart apples. In general, many consumers also like crisp and juicy apples and pears. New table grape varieties entering the market are sweeter than traditional varieties. In individual market tours, consumers admit that although they are willing to try imported fruits, but they do not always like the taste of imported fruits. Rather than buy the product for its taste, in many instances, consumers say they may purchase the imported fruit because of its “niche” appeal as a gift or the quality of its appearance.

Fruits, especially apples and grapes, are often eaten with meals or snacks. These fruits are often purchased from supermarkets and hypermarkets in large cities or, in less developed cities, from street vendors. Many fruits are given as gifts during Chinese holidays. Many Chinese seem to enjoy bringing gifts of fruit when visiting or calling on someone’s home. Industry representatives and government officials report that imported fruits (e.g. Washington Red Delicious, Sunkist Oranges) are packaged and given as gifts to hospital patients or to company supervisors. Also, as China’s family units tend to have only one child, parents and other relatives often purchase fresh imported fruits and high-quality domestic fruits for young children.

TABLES

Price Table for Apples (Prices in RMB/KG, RMB 8.265 = US \$1.00)

Product	GGPG			FSPG			HXPG			QGPG			HoXJPG		
Date	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
9/5/02	0.8	4		0.7	6		0.6	1.6					0.7	1.5	
11/6/02	0.6	2	1.3	0.8	4.4	2.1	0.6	2	1.1	0.5	2.7	1.3	1	1.9	1.5
12/12/02	0.6	6.1	1.7	0.7	6	2.1	1	1.6	1.3	0.6	1.6	1.1	1	1.8	1.4
1/9/03	0.8	2.03	1.26	0.7	3.6	2.14	1	1.8	1.5	0.54	2	1.22	1.6	6	3.13
2/11/03	0.8	2.5	1.45	0.6	5	2.34	1	1.8	1.5	0.8	2.5	1.58	1.2	6	3.6
3/11/03	1	2	1.32	1.4	3.4	2.15	1	1.6	1.4	0.9	1.8	1.43	1.4	1.5	1.45
4/7/03	0.9	2.24	1.36	1	4.2	2.16	1	1.4	1.2	0.35	2.3	1.31	2.4	10	5.13
5/12/03	0.6	2.1	1.32	1.2	4.5	2.44	2	2	2	0.65	3	1.51	8	8	8
6/6/03	0.6	3	1.82	0.8	6	2.87	2	2	2	0.8	3	1.96			
7/9/03	0.6	2.2	1.49	1.4	6.4	3.16	0.8	2	1.4	1.6	2.8	2.2			
8/8/03	0.6	2.1	1.16	1.3	5.5	3.18	1.1	2.8	1.8	1.2	1.6	1.4	1.3	1.3	1.3
9/8/03	1	3.2	1.81	0.9	5.5	2.75	0.75	3	1.5				1	1.95	1.49
	HuXJPG			HYSPG			QNJPG			SGPG			QPG		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
9/5/02				0.9	1.8		1.3	1.8		2.81	16		2.8	16	
11/6/02	0.7	1.9	1.3	0.8	2	1.3	0.8	5	2	2.05	20	10.7	0.7	14	7.5
12/12/02	0.8	2.2	1.4	1	2.5	1.7	0.9	2.2	1.4	7	20	13.7	1.6	18	12.9
1/9/03	1.6	4	2.28	1.2	2.6	1.93	2.6	2.6	2.6	3.9	18	12.4	1.7	19	12.1
2/11/03	1.6	3	2.3	1	2.6	1.87				4.25	17	12.5	13	17	14.3
3/11/03	1.4	2.2	1.8	1	1.7	1.35	2.4	2.4	2.4				1.5	15	11.2
4/7/03	0.5	8	2.94	1	2.2	1.6	3.8	3.8	3.8	1.1	20	12.5	1.6	20	12.2
5/12/03	0.6	7	3.8	2.4	2.4	2.4	2	2	2	8	14	11.5	1.6	14	10.4
6/6/03				3.6	3.6	3.6	2.2	2.2	2.2	9	18	12	11	14	12.5
7/9/03	1.3	1.3	1.3				2.4	2.4	2.4	9	14	11.4	1.6	16	9.4
8/8/03	0.8	0.8	0.8	0.8	1.3	1.05	2	2	2	9	18	12.2	0.8	16	6.66
9/8/03	0.5	3	1.6	0.9	1.5	1.19	1	2.2	1.2	9	19	12.8	0.5	26	11.1

GGPG= Guoguang Pingguo (Ralls Apple)
 FSPG= Fushi Pingguo (Fuji Apple)
 HXPG= Hongxing Pingguo (Crimson Star Apple)
 QGPG= Qinguan Pingguo (Large apples similar to Yellow/Golden Delicious)
 HoXPG= Hongxiangjiao Pingguo (Red-banana Apple)
 HuXP= Huangxiangjiao Pingguo (Yellow-banana Apple)
 HYSPG= Qiaonajin Pingguo (Jona Gold Apple)
 SGPG= Shegu Pingguo (Red Delicious Apple)
 QPG= Qing Pingguo (Green Apples similar to Granny Smith)

Pears (Prices in RMB/KG, RMB 8.265 = US \$1.00)

Product	YL			PGL			XuL			HGL			BL		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
9/5/02	0.7	3		0.6	0.6	0.6	0.55	4					1.2	2.5	
11/6/02	0.6	2	1	0.6	2.4	1.5	0.8	2	1.36				1	2.2	1.46
12/12/02	0.6	2	1.2	2.2	2.2	2.2	1	2.6	1.4				0.9	1.7	1.2
1/9/03	0.6	2.8	1.34				1	3	1.78				1.1	1.6	1.3
2/11/03	0.7	3.68	1.53	2.2	2.2	2.2	1	2.8	1.52				1.5	1.5	1.5
3/11/03	0.7	2	1.32	1	1	1	1	3	1.46				1.2	1.8	1.5
4/7/03	0.8	2.54	1.356	0.9	6	2.63	1	3.4	1.714				1.3	2.2	1.75
5/12/03	0.8	3	1.74	0.9	6	3.45	1	3.4	2.051				1.5	3.2	2.35
6/6/03	1	3.5	1.827	3.2	3.2	3.2	1	3	1.825						
7/9/03	1	3.5	2				2	2.6	2.4				4	4	4
8/8/03	0.5	3	1.95	0.4	5	2.2	2.8	2.8	2.8				1.2	4.4	2.8
9/8/03	0.4	3	1.27	0.6	2.9	1.43	0.66	2.4	1.35	1.5	1.5	1.5	0.8	2.3	1.5

	FuSL			SuL			XiL			FeSL			HXL			ShL		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
9/5/02				0.5	3		6	7.6								0.4	1.5	
11/6/02				0.7	2.1	1.02	3	8	4.4									
12/12/02				0.6	2.3	1.2	1	8	3.8				1.4	1.4	1.4			
1/9/03				0.7	2.5	1.32	3.1	8	4.17				1.4	1.4	1.4			
2/11/03				0.7	2.6	1.39	2.41	7	4.09				1.2	1.2	1.2			
3/11/03													1	1	1			
4/7/03	6	6	6	0.7	1.5	1.2	3	6	4.16									
5/12/03	6	6	6	0.6	2.2	1.27	3.2	6	4.454									
6/6/03	6	6	6	0.9	4	2.17	3.2	8.4	5.34									
7/9/03	6	6	6	0.9	3.2	1.6	5	10	7.4				1.4	1.4	1.4			
8/8/03	6	6	6	0.6	2.4	1.29	0.6	8.4	5.213	0.5	7	3.2						
9/8/03	6	6	6	0.35	1.6	1	0.6	6	3.26	0.88	12	4						

YL= Ya Li (Duck Pear)

PGL= Pingguo Li (Apple Pear)

XuL= Xue Li (Snow Pear)

HGL= Huagai Li

BL= Bai Li (White Pear)

FuSL= Fushi Li (Fuji Pear)

SuL= Su Li (Crisp Pear)

XiL= Xiang Li (Fragrant Pear)

FeSL= Fengshui Li

HXL= Hongxiao Li

ShL= Sha Li (Sand Pear)

Grapes (Prices in RMB/KG, RMB 8.265 = US \$1.00)

Product	QTPT			HTPT			JFPT			MNPT			MGXPT		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
9/5/02	11	33		13	35		0.6	4.5		1.4	4		1.2	6	
11/6/02	3	30	13.2	3.6	26	11.01	0.7	4.9	2.23	1.5	5	3.51	1.8	4	2.48
12/12/02	7	30	15.2	1.8	25	10.5	1	3	2.04	1.8	4	2.6	2.2	4	2.71
1/9/03	10	22	14.5	4.5	27	15.49	1.5	3.2	2.33	2	5.2	3.6	1.9	10	3.75
2/11/03	9	30	19.08	6.21	30	20.52	1.8	8	3.08	2.6	2.6	2.6	2.4	5	3.58
3/11/03	15	29	20.57	3.3	30	17.6	2	4.2	3.17				2.8	5	3.64
4/7/03	10	29	19.143	5.96	29	18.36				2.2	2.2	2.2	3	4.6	3.8
5/12/03	12	29	19.1	12	30	20.21	4.1	8	6.275				3	4.05	3.53
6/6/03	15	22	18.67	5.64	30	18.44	4	12	8.02						
7/9/03	2	25	15.4	6	24	17.8	2.3	8.5	4.2	6.5	14	10.25	2.8	4	3.6
8/8/03	3.4	22.54	16.894	5.44	22	15.75	0.55	4	2.1	0.6	7	4.87	0.9	4.6	3.28
9/8/03	1.8	26	11.1	3.2	30	19.1	0.4	3.2	1.46	0.5	4	2.43	1.1	3.8	2.15
	LYPT														
	Min	Max	Avg												
9/5/02	1.1	4													
11/6/02															
12/12/02															
1/9/03															
2/11/03															
3/11/03	1.6	1.6	1.6												
4/7/03	5.6	14	9.8												
5/12/03	5.6	15	10.3												
6/6/03	15	15	15												
7/9/03	2.2	10	6.1												
8/8/03	0.7	10	3.54												
9/8/03	2	2	2												

QTPT= Qingti Putao (Green Globe Table Grapes)

HTPT= Hongti Putao (Red Globe Table Grapes)

JFPT= Jufeng Putao (Large purple grape with thick skin and seeds that is similar to the Japanese Kyoho grape)

MNPT= Manai Putao (Large milky green grape with seeds that is similar to Thompson)

MGXPT= Meiguixiang Putao (Small dark purple sweet grape with seeds)

LYPT= Longyan Putao (Large purple grape similar in size to a dark red/purple Globe grape)

Production, Supply, and Demand (PSD) Tables
Apples

Country Commodity	China, Peoples Republic of Fresh Apples					
	2001		2002		2003	
Market Year Begin	USDA Official [Estimate [	Revised Estimate [	DA Official [Estimate [	Estimate [	DA Official [Estimate [	Forecast [
	07/2001	07/2001	07/2002	07/2002	07/2003	07/2003
Area Planted	2200000	2066000	2175000	1925000	0	1850000
Area Harvested	0	0	0	0	0	0
Bearing Trees	0	0	0	0	0	0
Non-Bearing Trees	0	0	0	0	0	0
Total Trees	0	0	0	0	0	0
Commercial Production	21000000	20014986	20500000	19241000	0	18500000
Non-Comm. Production	0	0	0	0	0	0
TOTAL Production	21000000	20014986	20500000	19241000	0	18500000
TOTAL Imports	49880	50003	60000	51256	0	53000
TOTAL SUPPLY	21049880	20064989	20560000	19292256	0	18553000
Domestic Fresh Consum	19639828	17704937	19050000	16492353	0	15153000
Exports, Fresh Only	360052	360052	400000	499903	0	600000
For Processing	1050000	2000000	1110000	2300000		2800000
Withdrawal From Market	0	0	0	0	0	0
TOTAL UTILIZATION	21049880	20064989	20560000	19292256	0	18553000

Apple Trade Matrix Tables

Import Trade Matrix**Country** China, Peoples Republic of**Commodity** Fresh Apples

Time Period	MT	Units:	MT
Imports for:	2001		2002
U.S.	See Below	U.S.	See Below
Others		Others	
U.S.	23918	U.S.	21655
Chile	12286	Chile	18894
New Zealand	13782	New Zealand	10643
France	0	France	43
Vietnam	0	Vietnam	19
Thailand	17	Thailand	0
Total for Others	50003		51254
Others not Listed	1		2
Grand Total	50004		51256

Export Trade Matrix**Country** China, Peoples Republic of**Commodity** Fresh Apples

Time Period	MY	Units:	MT
Exports for:	2001		2002
U.S.	3	U.S.	0
Others		Others	
Russia	81500	Russia	95461
Vietnam	7503	Vietnam	63059
Philippines	24923	Philippines	53145
Indonesia	33282	Indonesia	42995
Malaysia	36878	Malaysia	34789
Singapore	32135	Singapore	27161
Myanmar	34047	Myanmar	27054
Thailand	16947	Thailand	21462
Hong Kong	22969	Hong Kong	20378
Kazakhstan	0	Kazakhstan	14582
Total for Others	290184		400086
Others not Listed	69865		99817
Grand Total	360052		499903

CAJ

PSD Table

Country Commodity	China, Peoples Republic of Concentrated Apple Juice (MT)					
	2001 USDA Official [	Revised Estimate [D]	2002 DA Official [	Estimate [D]	2003 DA Official [	Forecast Estimate [I
Market Year Begin	07/2001		07/2002		07/2003	
Deliv. To Processors	1050000	1050000	1110000	1110000	0	0
Beginning Stocks	44447	44447	7000	7000	2000	2392
Production	250000	250000	300000	395000	498000	495000
Imports	622	622	600	520	1000	1000
TOTAL SUPPLY	295069	295069	307600	402520	501000	498392
Exports	264555	264555	280000	370128	462000	462000
Domestic Consumption	23514	23514	25600	30000	35000	35000
Ending Stocks	7000	7000	2000	2392	2000	1392
TOTAL DISTRIBUTION	295069	295069	307600	402520	499000	498392

CAJ Trade Matrix Tables

Import Trade Matrix**Country** China, Peoples Republic of**Commodity** Concentrated Apple Juice

Time Period	Jul-Jun	Units:	MT
Imports for:	2001		2002
U.S.	9	U.S.	14
Others		Others	
Australia	102	Australia	301
South Korea	17	South Korea	71
China	1	China	33
Taiwan	9	Taiwan	26
Germany	34	Germany	22
Hungary	11	Hungary	13
Netherlands	0	Netherlands	6
Turkey	0	Turkey	6
Japan	0	Japan	5
Spain	31	Spain	3
Total for Others	205		486
Others not Listed	35		34
Grand Total	240		520

Export Trade Matrix**Country** China, Peoples Republic of**Commodity** Concentrated Apple Juice

Time Period	July-June	Units:	MT
Exports for:	2001		2002
U.S.	38589	U.S.	121938
Others		Others	
Russia	17718	Russia	42730
Netherlands	22012	Netherlands	38716
Japan	21069	Japan	38110
Germany	23244	Germany	37763
Australia	7601	Australia	26327
Canada	9243	Canada	25025
South Africa	1565	South Africa	6041
United Kingdom	2829	United Kingdom	5015
New Zealand	1285	New Zealand	3775
Israel	1934	Israel	3264
Total for Others	108500		226766
Others not Listed	10310		21424
Grand Total	157399		370128

Pears

PSD Table

Country Commodity	China, Peoples Republic of Fresh Pears					
	2001		2002		2003	
Market Year Begin	USDA Official [Estimate [	Revised Estimate [	DA Official [Estimate [	Estimate [	DA Official [Estimate [	Forecast [
	07/2001	07/2001	07/2002	07/2002	07/2003	07/2003
Area Planted	1070600	1026000	1300000	1050000	0	1100000
Area Harvested	0	0	0	0	0	0
Bearing Trees	0	0	0	0	0	0
Non-Bearing Trees	0	0	0	0	0	0
Total Trees	0	0	0	0	0	0
Commercial Production	8820000	8796000	8800000	9309000	0	9845000
Non-Comm. Production	0	0	0	0	0	0
TOTAL Production	8820000	8796000	8800000	9309000	0	9845000
TOTAL Imports	664	664	655	751	0	750
TOTAL SUPPLY	8820664	8796664	8800655	9309751	0	9845750
Domestic Fresh Consum	8185761	8161288	8159655	8572164	0	8995750
Exports, Fresh Only	193903	194376	200000	272137	0	350000
For Processing	441000	441000	441000	465450	0	500000
Withdrawal From Market	0	0	0	0	0	0
TOTAL UTILIZATION	8820664	8796664	8800655	9309751	0	9845750

Pear Trade Matrix Tables

Import Trade Matrix**Country** China, Peoples Republic of**Commodity** Fresh Pears

Time Period	MY	Units:	MT
Imports for:	2001		2002
U.S.	0	U.S.	0
Others		Others	
New Zealand	591	New Zealand	714
Japan	0	Japan	35
Taiwan	0	Taiwan	2
Malaysia	73	Malaysia	0
Total for Others	664		751
Others not Listed	0		0
Grand Total	664		751

Export Trade Matrix**Country** China, Peoples Republic of**Commodity** Fresh Pears

Time Period	MY	Units:	MT
Exports for:	2001		2002
U.S.	8325	U.S.	7141
Others		Others	
Malaysia	44758	Malaysia	51456
Indonesia	39678	Indonesia	36159
Vietnam	4544	Vietnam	34675
Russia	14335	Russia	29536
Hong Kong	17796	Hong Kong	26569
Singapore	25265	Singapore	24373
Philippines	9004	Philippines	13714
Netherlands	5976	Netherlands	10258
Canada	8073	Canada	10132
Myanmar	1926	Myanmar	6120
Total for Others	171355		242992
Others not Listed	14696		22004
Grand Total	194376		272137

Grapes

PSD Table

Country Commodity	China, Peoples Republic of Fresh Table Grapes (HA)(MT)					
	2001 USDA Official [	Revised Estimate [	2002 DA Official [	Estimate [	2003 DA Official [	Forecast Estimate [
Market Year Begin	01/2002	01/2002	01/2003	01/2003	01/2004	01/2004
Area Planted	360000	360000	370000	380000	0	390000
Area Harvested	0	0	0	0	0	0
Commercial Production	3800000	4479000	4000000	4900000	0	5000000
Non-Comm. Production	0	0	0	0	0	0
TOTAL Production	3800000	4479000	4000000	4900000	0	5000000
TOTAL Imports	55000	54844	57000	57000	0	57000
TOTAL SUPPLY	3855000	4533844	4057000	4957000	0	5057000
Domestic Fresh Consum	3054340	3727981	3056340	3750500	0	3800000
Exports, Fresh Only	660	5863	660	6500	0	7000
For Processing	800000	800000	1000000	1200000	0	1250000
Withdrawal From Market	0	0	0	0	0	0
TOTAL UTILIZATION	3855000	4533844	4057000	4957000	0	5057000

Grape Trade Matrix Tables

Import Trade Matrix**Country** China, Peoples Republic of**Commodity** Fresh Table Grapes

Time Period	MY	Units:	MT
Imports for:	2001		2002
U.S.		U.S.	
Others		Others	
U.S.	21604	U.S.	19479
Chile	27091	Chile	35289
Thailand	21	Thailand	76
South Africa	0	South Africa	0
Total for Others	48716		54844
Others not Listed	0		0
Grand Total	48716		54844

Export Trade Matrix**Country** China, Peoples Republic of**Commodity** Fresh Table Grapes

Time Period	MY	Units:	MT
Exports for:	2001		2002
U.S.	30	U.S.	0
Others		Others	
Russia	425	Russia	2083
Vietnam	40	Vietnam	1241
Pakistan	0	Pakistan	776
Malaysia	0	Malaysia	673
Hong Kong	56	Hong Kong	430
Indonesia	0	Indonesia	213
Singapore	20	Singapore	173
Sri Lanka	32	Sri Lanka	113
Mongolia	0	Mongolia	71
Philippines	0	Philippines	35
Total for Others	573		5808
Others not Listed	64		55
Grand Total	667		5863

Historical Production Tables (Planting Acreage and Metric Ton by Province)

Apples, Pears, and Grapes (1000 Hectares (Ha) and MT) in 2001

China Apple, Pear, and Grape Production (1000 Ha and MT) by Province 2001						
Province	Apples		Pears		Grapes	
	1000 ha	MT	1000 ha	MT	1000 ha	MT
Beijing	16.00	153,174	10.28	115,197	4.08	43,361
Tianjin	9.31	68,424	4.53	27,991	6.00	114,154
Hebei	316.50	1,845,447	211.50	2,445,536	46.34	580,139
Shanxi	164.73	1,551,595	29.78	139,782	9.40	70,236
Inner Mongolia	20.90	43,081	23.56	103,160	5.04	16,004
Liaoning	161.90	1,134,657	87.60	509,942	29.70	396,991
Jilin	22.20	97,164	36.30	75,508	9.75	62,618
Heilongjiang	25.20	109,689	5.27	27,965	1.64	10,513
Shanghai	0.01	111	1.30	15,752	1.39	23,921
Jiangsu	47.73	680,191	39.71	462,768	8.10	114,568
Zhejiang	0.24	936	19.40	188,737	6.20	132,849
Anhui	20.68	259,680	34.72	672,389	5.06	76,062
Fujian	0.20	311	21.90	110,029	3.10	39,291
Jiangxi	0.00	0	19.20	42,790	1.76	3,294
Shandong	397.68	6,163,790	62.96	961,234	49.67	619,141
Henan	180.20	2,524,083	32.80	395,919	18.15	280,331
Hubei	6.80	21,800	52.80	676,761	4.90	68,301
Hunan	0.00	0	20.20	55,348	5.30	24,218
Guangdong	0.00	0	8.00	37,097	0.00	0
Guangxi	0.00	0	11.50	64,528	7.80	63,058
Hainan	0.00	0	0.00	0	0.00	0
Chongqing	1.98	6,226	18.20	89,316	1.47	10,493
Sichuan	26.90	193,972	52.30	394,805	9.10	120,980
Guizhou	7.70	7,854	25.30	66,606	3.20	11,306
Yunnan	42.28	103,496	40.90	157,491	6.30	25,414
Tibet	0.83	5,405	0.09	646	0.00	0
Shaanxi	374.29	3,912,713	57.95	451,236	6.87	58,206
Gansu	165.90	723,901	52.40	266,001	6.87	32,008
Qinghai	3.91	9,661	1.06	5,525	0.02	117
Ningxia	20.91	126,642	2.25	9,071	6.61	20,582
Xinjiang	31.17	270,983	42.67	226,967	70.55	661,524
National Total	2066.00	20,014,986	1026.00	8,796,097	334.00	3,679,680

Source: China Agricultural Yearbooks

China Apple Production (1000 Ha and MT) by Province 1999-2001

Province	1999		2000		2001	
	1000 ha	MT	1000 ha	MT	1000 ha	MT
Beijing	18.90	151,717	18.00	157,654	16.00	153,174
Tianjin	11.72	81,039	10.40	79,466	9.31	68,424
Hebei	341.13	1,871,157	328.30	1,806,155	316.50	1,845,447
Shanxi	187.70	1,748,293	177.90	1,629,575	164.73	1,551,595
Inner Mongolia	23.80	41,757	23.94	46,853	20.90	43,081
Liaoning	209.00	1,469,839	195.10	1,231,479	161.90	1,134,657
Jilin	18.83	114,604	24.07	100,543	22.20	97,164
Heilongjiang	32.20	96,962	28.60	112,086	25.20	109,689
Shanghai	0.00	0	0.00	21	0.01	111
Jiangsu	63.60	679,626	49.60	695,294	47.73	680,191
Zhejiang	0.40	1,036	0.33	845	0.24	936
Anhui	24.74	308,521	23.60	302,040	20.68	259,680
Fujian	0.20	257	0.20	380	0.20	311
Jiangxi	0.00	0	0.00	0	0.00	0
Shandong	498.20	6,432,745	444.30	6,476,586	397.68	6,163,790
Henan	240.69	2,427,717	207.00	2,388,997	180.20	2,524,083
Hubei	11.04	30,447	9.00	30,224	6.80	21,800
Hunan	0.00	0	0.00	0	0.00	0
Guangdong	0.00	0	0.00	0	0.00	0
Guangxi	0.00	0	0.00	0	0.00	0
Hainan	0.00	0	0.00	0	0.00	0
Chongqing	2.20	5,688	2.25	7,020	1.98	6,226
Sichuan	28.70	186,798	28.60	202,283	26.90	193,972
Guizhou	7.20	7,010	8.08	7,675	7.70	7,854
Yunnan	45.10	85,919	50.30	101,105	42.28	103,496
Tibet	1.00	5,506	1.05	5,299	0.83	5,405
Shaanxi	413.63	3,992,705	395.46	3,885,700	374.29	3,912,713
Gansu	195.00	629,027	167.60	690,671	165.90	723,901
Qinghai	4.11	15,897	4.00	14,144	3.91	9,661
Ningxia	23.67	170,536	21.73	159,462	20.91	126,642
Xinjiang	36.20	246,838	34.60	299,673	31.17	270,983
National Total	2438.96	20,801,641	2254.01	20,431,230	2066.00	20,014,986

Source: China Agricultural Yearbooks

Pear Production (1000 Ha and MT) by Province 1998-2001

Province	1998		1999		2000		2001	
	1000 ha	MT	1000 ha	MT	1000 ha	MT	1000 ha	MT
Beijing	8.90	105,436	9.40	98,075	10.00	102,693	10.28	115,197
Tianjin	3.00	25,305	3.74	20,075	3.71	30,172	4.53	27,991
Hebei	224.30	2,388,517	221.80	2,509,805	218.70	2,551,647	211.50	2,445,536
Shanxi	30.80	101,843	30.60	118,816	31.20	128,577	29.78	139,782
Inner Mongolia	34.50	116,421	30.20	111,872	27.14	109,605	23.56	103,160
Liaoning	82.10	610,898	82.50	424,605	85.70	455,404	87.60	509,942
Jilin	34.00	134,799	36.06	136,699	39.95	140,779	36.30	75,508
Heilongjiang	6.70	28,357	6.60	29,804	5.76	26,250	5.27	27,965
Shanghai	0.80	12,895	0.90	16,298	1.10	17,369	1.30	15,752
Jiangsu	23.00	308,453	38.20	361,118	38.60	390,137	39.71	462,768
Zhejiang	11.00	85,740	12.80	114,341	16.65	147,563	19.40	188,737
Anhui	29.50	426,452	31.15	492,525	34.40	616,192	34.72	672,389
Fujian	17.20	72,289	19.30	81,307	20.90	96,394	21.90	110,029
Jiangxi	21.30	32,784	21.00	38,899	23.60	42,109	19.20	42,790
Shandong	63.30	714,667	73.50	857,807	60.30	911,298	62.96	961,234
Henan	27.30	202,469	28.77	263,003	31.00	333,000	32.80	395,919
Hubei	51.40	564,420	54.12	541,856	56.10	633,197	52.80	676,761
Hunan	14.30	24,719	14.80	27,293	16.30	35,558	20.20	55,348
Guangdong	9.50	31,621	8.37	36,892	8.52	42,144	8.00	37,097
Guangxi	9.50	62,381	9.80	67,818	10.20	60,863	11.50	64,528
Hainan	0.80	0	0.00	0	0.00	0	0.00	0
Chongqing	11.60	52,070	13.10	53,376	15.11	76,251	18.20	89,316
Sichuan	27.80	249,712	34.20	272,066	48.20	344,472	52.30	394,805
Guizhou	2.00	38,972	15.60	46,114	18.34	47,677	25.30	66,606
Yunnan	35.30	145,803	38.90	152,099	45.60	158,112	40.90	157,491
Tibet	0.10	1,515	0.10	492	0.11	803	0.09	646
Shaanxi	52.00	376,370	52.01	432,356	55.58	458,306	57.95	451,236
Gansu	57.40	238,237	57.30	222,097	54.50	245,941	52.40	266,001
Qinghai	1.00	6,585	1.02	5,931	1.10	5,963	1.06	5,525
Ningxia	2.20	6,951	2.34	10,114	2.47	9,058	2.25	9,071
Xinjiang	25.80	108,783	28.60	198,148	33.90	194,879	42.67	226,967
National Total	918.50	7,275,464	976.78	7,742,331	1014.74	8,412,413	1026.00	8,796,097

Source: China Agricultural Yearbooks

Grape Production (1000 Ha and MT) by Province 1998-2001

Province	1998		1999		2000		2001	
	1000 ha	MT	1000 ha	MT	1000 ha	MT	1000 ha	MT
Beijing	1.60	20,318	1.90	23,070	3.10	33,961	4.08	43,361
Tianjin	3.50	56,032	4.02	76,547	5.27	102,201	6.00	114,154
Hebei	31.50	404,436	39.40	447,002	42.80	523,601	46.34	580,139
Shanxi	6.30	33,393	6.20	36,411	7.10	50,564	9.40	70,236
Inner Mongolia	2.20	16,826	2.60	14,867	3.05	15,853	5.04	16,004
Liaoning	14.20	275,557	20.80	307,457	27.80	430,282	29.70	396,991
Jilin	8.60	50,302	9.30	52,814	11.82	65,716	9.75	62,618
Heilongjiang	1.60	8,157	1.50	7,249	2.02	9,611	1.64	10,513
Shanghai	1.20	26,679	1.10	22,007	1.10	23,124	1.39	23,921
Jiangsu	4.20	71,577	5.90	77,060	5.90	87,697	8.10	114,568
Zhejiang	4.50	92,021	4.60	97,346	5.14	114,569	6.20	132,849
Anhui	3.60	34,281	3.54	48,868	4.60	56,156	5.06	76,062
Fujian	2.10	27,503	2.20	32,449	2.60	38,702	3.10	39,291
Jiangxi	2.20	2,551	2.00	2,892	2.90	2,681	1.76	3,294
Shandong	20.90	268,986	29.20	362,593	36.50	475,325	49.67	619,141
Henan	11.30	153,047	12.24	182,392	16.80	208,280	18.15	280,331
Hubei	4.00	53,893	5.27	70,952	5.10	74,788	4.90	68,301
Hunan	3.00	13,359	3.40	14,960	4.00	18,764	5.30	24,218
Guangdong	0.00	0	0.00	0	0.00	0	0.00	0
Guangxi	0.00	21,662	2.70	25,455	5.20	39,427	7.80	63,058
Hainan	0.00	0	0.00	0	0.00	0	0.00	0
Chongqing	1.00	8,618	1.00	9,142	1.17	9,917	1.47	10,493
Sichuan	5.10	82,611	6.40	97,005	7.70	116,037	9.10	120,980
Guizhou	3.40	7,621	2.50	9,077	3.54	10,241	3.20	11,306
Yunnan	1.60	11,881	2.60	15,599	3.80	17,746	6.30	25,414
Tibet	0.00	0	0.00	0	0.00	0	0.00	0
Shaanxi	4.30	41,845	4.38	37,669	5.31	41,550	6.87	58,206
Gansu	2.20	13,782	3.00	20,150	4.20	22,194	6.87	32,008
Qinghai	0.00	67	0.01	106	0.00	107	0.02	117
Ningxia	1.90	5,806	4.18	6,577	5.42	8,959	6.61	20,582
Xinjiang	32.00	555,408	41.30	610,415	59.10	683,645	70.55	661,524
National Total	178.00	2,358,219	223.24	2,708,127	283.04	3,281,698	334.00	3,679,680

Source: China Agricultural Yearbooks