USDA Foreign Agricultural Service GAI N Report Global Agriculture Information Network

Date: 11/20/2006
GAI N Report Number: AR6041

## Argentina

## Blueberries

## Voluntary

## 2006

## Approved by:

Bob Hoff
U.S. Embassy

## Prepared by:

David Gallagher

## Report Highlights:

Argentine blueberry production has grown remarkably since the first cultivation in 1996.
Production has grown by over 70\% per year over the last five years. Total output in 2005 was 3,000 tons. Exports were 2,700 tons, valued at US $\$ 25$ million. Growth is predicted to continue at an advanced rate for the next five years and production in 2006 should reach 4,500 tons. Exports for 2006 are forecast at 4,000 tons.

## Table of Contents

Executive Summary ..... 3
Production ..... 3
Domestic Consumption ..... 4
Trade ..... 4
Factors Affecting I ndustry Structure ..... 6
Import and Export Regulations ..... 8

## Executive Summary

Argentine blueberry production has taken advantage of its counter- seasonal harvest and an abundance of demand during the Northern Hemisphere's winter to grow into a US $\$ 25$ million export industry. In 2005, Argentina harvested 3,000 tons of blueberries, at a growth rate of 75 percent, and exported 2,700 tons. Production in the short-term is forecast to continue growing through at least 2011, when all 3,400 hectares planted today should be bearing their maximum potential. International prices should decline steadily during this period, reaching equilibrium between Northern Hemisphere demand and world supply between 2008 and 2010. Factors that may contribute to further growth would be development of the domestic market and procurement of more controlled atmosphere containers, which would allow for cheaper maritime shipment during times of lower prices.

## Production

Argentine blueberry production has grown remarkably in the last five years, from 320 tons in 2001 to 1,700 and 3,000 tons respectively in 2004 and 2005. This growth in production has been fueled by a strong demand which has led to a boom in hectares planted, from 400 in 2001 to 2,500 in 2005. According to industry sources, for the 2006 season Argentina has 3400 planted hectares, 40 percent of which will bear fruit. In 2005, Argentina exported over US $\$ 25$ million in blueberries and is predicted to export US $\$ 40$ million in 2006. While blueberries are recent to Argentine agriculture, in Argentina today, blueberry production is very sophisticated, using domestically propagated plants, drip-irrigation, anti- hail and antiwind measures, and modern packing facilities. Growers are staying abreast of changes in technology via attendance of international seminars and through the sharing of information.

| Table 1. Argentine Blueberry Production |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Year | Hectares | Change (\%) | Tons | Change (\% ) |
| $\mathbf{2 0 0 6}$ (Forecast) | 3,400 | 36 | 4,500 | 67 |
| $\mathbf{2 0 0 5}$ | 2,500 | 56 | 3,000 | 75 |
| $\mathbf{2 0 0 4}$ | 1,600 | 45 | 1,700 | 98 |
| $\mathbf{2 0 0 3}$ | 1,100 | 57 | 860 | 47 |
| $\mathbf{2 0 0 2}$ | 700 | 75 | 580 | 83 |
| $\mathbf{2 0 0 1}$ | 400 | - | 320 | 59 |

Source: Secretariat of Agriculture, Livestock, Fisheries and Foods (SAGPyA)
The conditions in the valleys of Argentina are ideal for cultivation and very similar to those in the United States; acidic, well-drained soil and irrigation water ranging from neutral to slightly acidic. The first Argentine blueberry farms were planted in the Entre Rios and Buenos Aires provinces ten years ago; today each has 1,500 planted hectares. The Entre Rios province has a sub-tropical climate and sandy soils, and Buenos Aires has a temperate climate with heavy soils. Recently, the province of Tucuman has been planted heavily, owing to its tropical climate and the possibility of harvesting blueberries in late September and early October when world demand is much greater than supply. An estimated 400 hectares are planted in Tucuman, with another 600 to be planted in the next two years. Expectations are that blueberry planting in Argentina will slow to 800 hectares this coming year, and 400 the next, until arriving at a final total of approximately 5,000 hectares. At present, the 3,400 hectares planted are bearing an average of 1.5 tons each, with an average potential of seven tons per hectare, and the possibility of yields as high as 10 to 13 tons per hectare in Tucuman and Buenos Aires.

## Domestic Consumption

The domestic market for blueberry consumption in Argentina is growing rapidly, but is currently very limited. Berries available in Argentina come from the small portion of the harvest (about 10 percent of total production) that is considered unsuitable for export. This fraction is made up of small or imperfect berries, which are either sold fresh or used for industrial products such as jams, jellies, candies, and juice. However, it is not widely known that locally sold blueberries are an inferior product, so substandard fruit quality is not a variable in determining limited domestic demand. What does constrain demand is the relative newness of blueberries to Argentina, which are not indigenous and are considered to be a novelty. Additionally, a general Argentine impression of blueberries as bitter compared to other fruits and a lack of public awareness of the health benefits of blueberries have also hindered growth of the domestic market. Blueberries are a great source of antioxidants, protect against macular degeneration, and reduce the effects of oxidative stress on the brain. Industry sources indicate the presence of at least one independent group that aims to increase public awareness through a public information campaign, but this group is not well funded. To date there has still been no widespread effort to market blueberries in Argentina and they overwhelmingly remain an export crop. The most promising progress has been in blueberry juice, which is either consumed alone or in cocktails. However, only 300 liters are produced monthly and all other industrial production has been likewise limited.

## Trade

Blueberries are a very profitable export crop for Argentina, with 90 percent of production shipped abroad, valued at over US $\$ 25$ million in 2005. The U.S. imports two-thirds of total volume and value, having imported 1,892 tons, worth US $\$ 19$ million, in 2005. Most remaining exports go to the European Union, Switzerland, and Japan, with the United Kingdom importing 5,207 tons, the Netherlands 2,045 tons and J apan 522 tons.

| Table 2. Argentine Blueberry Exports |  |  |  |
| :--- | :---: | :---: | :---: |
| Year | Tons | US\$ million | US\$ per Kilogram |
| $\mathbf{2 0 0 6}$ (Forecast) | 4,000 | 40.0 | 10.0 |
| $\mathbf{2 0 0 5}$ | 2,699 | 28.3 | 10.5 |
| $\mathbf{2 0 0 4}$ | 1,547 | 16.2 | 10.4 |
| $\mathbf{2 0 0 3}$ | 783 | 7.0 | 9.0 |
| $\mathbf{2 0 0 2}$ | 533 | 5.8 | 10.8 |
| $\mathbf{2 0 0 1}$ | 291 | 3.8 | 13.1 |

Source: National Institute of Statistics and Censuses (INDEC)

| Table 3. Argentine Blueberry Exports by Destination |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | United States |  | Canada |  | E. U. and <br> Switzerland |  | Japan |  |
|  | Tons | \% Of <br> Total | Tons | \% Of <br> Total | Tons <br> Total | Tons | \% Of <br> Total |  |
| $\mathbf{2 0 0 5}$ | 1,853 | 68 | 13.8 | .5 | 820 | 30 | 32.4 | 1.2 |
| $\mathbf{2 0 0 4}$ | 1,048 | 67 | 16.7 | 1.1 | 479 | 31 | 21.5 | 1.4 |
| $\mathbf{2 0 0 3}$ | 535 | 68 | 14.4 | 1.9 | 236 | 30 | 3.7 | .5 |
| $\mathbf{2 0 0 2}$ | 392 | 73 | .225 | .1 | 140 | 26 | .507 | .1 |
| $\mathbf{2 0 0 1}$ | 217 | 74 | 2.3 | .8 | 71 | 25 | .016 | .005 |

Source: INDEC

Ninety-eight percent of world blueberry production occurs between early May and November, mostly in the United States and Canada. Argentina, Chile, South Africa and New Zealand have taken advantage of their Southern Hemisphere counter-seasonal growing periods to deliver blueberries during the Northern Hemisphere's winter, when demand is much greater than supply. A growing public awareness of the health benefits of blueberries in North America, Europe, and Japan has caused this demand to grow by as much as 30 percent per year, with an average growth of around 5 percent. The United Kingdom market has been a particular source of growing demand, more than doubling each of the last two years. As such, despite a boom in Southern Hemisphere blueberry production, demand is still much larger than supply during the months of October, November, March and April.

| Table 4. Argentine Blueberry Exports to the E.U. and Switzerland by Country (Tons) |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Year | UK | Neth. | France | Italy | Spain | Germany | Switz. |
| $\mathbf{2 0 0 5}$ | 461 | 219 | 55 | 50 | 24 | 9.2 | 0.7 |
| $\mathbf{2 0 0 4}$ | 206 | 128 | 48 | 33 | 24 | 36 | 3.3 |
| $\mathbf{2 0 0 3}$ | 82 | 90 | 30 | 10 | 12 | 6.9 | 3.8 |
| $\mathbf{2 0 0 2}$ | 55 | 17 | 18 | 27 | 15 | 6.3 | 1.7 |
| $\mathbf{2 0 0 1}$ | 35 | 10 | 7 | 2 | 5 | 8.6 | 2.3 |

Source: INDEC
In Latin America, Chile has been exporting blueberries since 1988, ten years before the first Argentine exports were made. Chilean production has been growing at 17 percent per year and is larger than Argentina's by a factor of six, at 15,147 tons last year. Although the geographical proximity of Argentina and Chile to the U.S. market would indicate that they are close competitors, in reality their harvest periods complement each other, and many Chilean blueberry growers have planted in Argentina to take advantage of its earlier harvest. A large majority ( 97 percent) of Argentine blueberries are harvested between September and December, while 81 percent of Chilean blueberries are harvested between December and January. Only in December are the two in competition. However, the harvesting of Argentine blueberries will be concentrated more in October by 2011, when recent plantations in Tucuman, which are harvested in late September and October, mature to reach their maximum potential yield. At present, the very earliest harvest of Argentine blueberries in September is a full three weeks before berries are harvested in Chile, allowing early exporters to command prices as high as US $\$ 32$ per kilogram ( kg ), as opposed to a return of US $\$ 5$ per kg in December. By harvesting earlier and taking advantage of limited demand during the U.S. Thanksgiving season, Argentina should be able to avoid the problem of Iow prices which Chile has suffered due to high production in January and February; Chilean exporters have received prices as low as US $\$ 1$ per kg , equivalent to those during the peak of the Northern Hemisphere's harvest.

Domestic experts have confided that they would recommend to potential planters against further blueberry planting in Argentina, as production in the Southern Hemisphere will grow so much in the next few years that equilibrium between world supply and demand should be reached between 2008 and 2010. In 2005 and 2006, several joint seminars were conducted between Chile and Argentina to foster a spirit of cooperation, and to ensure that overproduction does not glut the Northern Hemisphere's market.


Source: FAS based on private industry contacts


Source: FAS based on private industry contacts
The USDA's Animal and Plant Health Inspection Service (APHIS) has determined that Argentine blueberry plantations north of Patagonia are hosts for the Mediterranean fruit fly. As such, blueberry producers wishing to export to the U.S. are required to treat their blueberries by either fumigation with methyl bromide or by cold treatment (maintaining the fruit at 35 degrees Fahrenheit for a period of 15 to 17 days). Since getting blueberries quickly to market in order to receive the best price and to offer the best fruit quality is very important, 90 percent of exports are treated with methyl bromide and sent by airplane. Shipment by air has been successful to date, but contains a degree of risk, as exporters are required to search for available space on passenger and cargo airplanes returning to the Northern Hemisphere. In the near future, Argentina blueberry production may outgrow this supply of available space and alternative modes of transportation may need to be explored. One viable option is maritime shipment. Today, 10 percent of blueberry exports are shipped by sea during times of low prices, mostly to the Netherlands. Further exports by sea are being looked into as a future possibility as prices drop due to increased supply, but the short shelf-life of fresh blueberries and a shortage of controlled atmosphere containers may limit the usage of this option.

## Factors Affecting I ndustry Structure

Argentine production by 2011 could possibly reach as high as 24,000 tons if the 3,400 hectares planted today yielded an average of seven tons each. It is estimated that 800
hectares will be planted in 2006 and 400 more in 2007. After 2007 total planted area could stabilize at 5,000 hectares, bearing a potential annual harvest of 35,000 tons. If indeed such volumes were reached, Argentina would likely face bottlenecks with shortages in chambers for rapid chilling and available airplane space. These bottlenecks could be avoided by developing the domestic market and utilizing more maritime transportation. The option of treating blueberries for fruit flies by cold storage while in transit also makes shipping by sea a viable and cheap option during times of low prices, but more controlled atmosphere containers will need to be acquired before increased maritime transportation becomes a possibility.

Blueberry production tends to be atomized, with many producers owning small farms of five to twenty-five hectares. Blueberry exportation, though, is concentrated, due to the need to locate available airplane space at a moment's notice, and the logistical concerns of transporting large quantities of highly perishable blueberries. At present there are 16 blueberry exporters in Argentina; the leading three are responsible for 60 percent of exports, and the top six are responsible for 80 percent. Only 10 percent of producers are exporters, but many are aware that expanding into exportation on their own would greatly increase their net profits, especially as FOB prices drop below US\$10 per kg in the future.

Entry into the blueberry industry is expensive, with an average cost of US $\$ 40,000$ per hectare for initial planting, and an estimated US $\$ 10,000$ per year for upkeep and harvesting. Additionally, most regions report that plants do not bear suitable fruit or returns until the third year. However, the opportunity for large profits rewards those who are willing to take the risk. The average yield per hectare can vary from five to thirteen tons, and at an average price of US $\$ 10.50$ per kg FOB, producers selling under consignment show annual net margins of around US $\$ 30,000$ per hectare. Blueberry plantations typically become profitable between their fourth and fifth years. Plants are estimated to be harvestable for an average of 20 years; thus, opportunities abound for large long-term returns. Some of the initial enthusiasm for blueberries as a "retirement" crop has waned as prices slowly decline, but efficient producers in the industry continue to show high profits. There has been a definite learning curve among producers; some have even stated plans to replant those hectares first planted, as they have had much greater success with subsequently planted hectares after gaining experience.

While some blueberry farms maintain close ties with American universities that have done research on blueberry plant propagation, plants themselves are no longer imported from the U.S. due to phytosanitary restrictions. The Argentine National Service of Agricultural Food Safety and Quality (SENASA) has quarantined all blueberry plant imports due to fungus. As a result, in Argentina today, blueberry propagation has become self-reliant and very sophisticated. Ten nurseries are involved and they utilize the most recent technology. Most varieties propagated are Southern Highbrush, and the most common of these are Misty, O'Neal, Revielle y Blue Cuinex. Misty, in particular, has received much praise from local farmers for its early harvest, high tolerance of cold temperatures, and its large and sweet blueberries. Argentina continues to research and improve upon its varieties in order to develop plants with a guaranteed quality level. Researchers aim to earn Argentina an international reputation for the quality of its blueberries and also strive to improve its ability to harvest in October.

## I mport and Export Regulations

| Table 5. Export and Import Regulations |  |
| :--- | :--- |
| For countries outside MERCOSUR area |  |
| Import Tariff | 10.00 |
| Statistical Tax | 0.50 |
| Export Tax | 10.00 |
| Rebate for cases containing 2.5 Kg. or less | 6.00 |
| Rebate for cases containing 2.5 - 20 Kg. | 4.05 |
| Rebate for cases containing more than 20 Kg. | 2.70 |
| For countries within MERCOSUR area |  |
| Import Tariff | 0.00 |
| Export Tax | 10.00 |
| Rebate for cases containing 2.5 Kg. or less | 6.00 |
| Rebate for cases containing 2.5 - 20 Kg. | 4.05 |
| Rebate for cases containing more than 20 Kg. | 2.70 |
| Saure |  |

Source: www.tarifar.com

