



## Market and Trade Data

### South China's Dairy Industry Primed for U.S. Alfalfa

**By Kang Chen**

South China's robust economy is boosting demand for many food products among its increasingly affluent and health-conscious consumers, and demand for dairy products is swelling along with the overall trend. In its efforts to meet demand, the region's dairy industry is expanding. Limited supplies of quality domestic forage at affordable prices, and favorable import tariffs, are making dairy producers receptive to importing U.S. alfalfa.

#### **Dairy Appetite Growing**

Historically, dairy products have not played a significant role in Chinese diets; but this is changing with growing workforces and consequently higher household incomes. Both the Chinese government and consumers recognize dairy products as one of the best sources of nutrients such as calcium and protein, especially for children and the elderly. A number of municipal governments have school milk programs. In Guangzhou, for example, students can buy fluid milk products at cheaper prices at school because such products are subsidized by the government.

Facing strong competition from UHT (ultra heat-treated) milk from North China, South China farms strive to defend and further market share by labeling their pasteurized milk as fresh. Many Chinese consumers consider pasteurized milk to have more nutrients and vitamins than UHT milk, which is processed at higher temperatures that destroy most of the nutrients and vitamins in raw milk. Such consumers willingly pay premium prices for pasteurized milk.

#### **Improving Dairy Industry Still Faces Challenges**

Recognizing growing demand, South China farmers introduced dairy cows into the area 40 – 50 years ago. Significant advances in breeding, feeding, and overall management during recent years have improved milk production.

However, there are special challenges that center on feed, climate, and dairy cattle health. The high price of land in and around densely populated cities reduces pastureland. Thus, dairy cows in the region have traditionally been confined to barns or corrals and fed fresh corn stalks, corn silage or freshly cut grasses. With such feeds, it is essentially impossible to supply balanced diets to maintain sound body condition and ensure satisfactory milk production, reproductive capability, and animal



Holstein dairy cows on a South China farm savor U.S. alfalfa

*Photo courtesy of USDA/FAS Agricultural Trade Office, Guangzhou, China*

health. Large amounts of grains, grain byproducts, and protein supplements have been used to compensate for low forage quality, but this approach often creates health and production problems as adequate amounts of good forage are critical for dairy cattle health.

Additionally, the Holstein breed (which predominates in South China herds, as it does in many dairy herds around the world for its high milk production) and the less common Jersey breed and Jersey-Holstein crossbreed were developed for cooler climates. Heat stress caused by hot, humid weather can reduce milk production and calving.

### Chinese Import Requirements

Below is a list of requirements for U.S. exporters and Chinese importers of hay. Because such requirements are subject to change, prospective exporters are advised to consult and confirm with their Chinese importers.

#### For U.S. Exporters:

- **Commercial Invoice** stating:
  - description of goods
  - value of each item
  - name and address of shipper and consignee
  - country of origin
  - place and date of shipment
  - number and types of containers
  - marks and numbers
  - weights (net and gross)
- **Bill of Lading** stating:
  - name of shipper
  - name and address of consignee
  - destination port
  - description of goods
  - all charges
  - number of bill of lading full sets
  - carrier acknowledgement of receipt of shipment
- **Phytosanitary Certificate** issued by USDA's Animal and Plant Health Inspection Service. For details, go to: [http://www.aphis.usda.gov/import\\_export/plants/plant\\_exports/index.shtml](http://www.aphis.usda.gov/import_export/plants/plant_exports/index.shtml)

#### For Chinese Importers:

- **Import License** giving the importer proper business registration to import or export
- **Certificate of Import Phyto Quarantine** issued by China's General Administration of Quality, Supervision, Inspection, and Quarantine, and applied for through the provincial CIQ (Department of Inspection and Quarantine) in the importer's area
- **Waiver on Value-Added Tax**, which must be applied and issued before an importer clears goods with customs and CIQ at port

On average, a cow in the Southern United States produces 8 – 10 metric tons of milk a year, while a cow in South China produces only 4 – 5 tons. To minimize heat stress, South China producers must improve their herds' diets and shelter facilities (e.g., with fans and sprinklers).

### ATO Guangzhou, U.S. Hay Industry Help Out

To help improve the South China dairy industry, ATO Guangzhou (the FAS Agricultural Trade Office in Guangzhou, China) and the National Hay Association implemented a dairy improvement project in 2004-2006. During the project's initial phase, U.S. veterinarians and U.S. dairy specialists provided educational programs for the dairy industry and consulted farmers. In the project's second phase, researchers evaluated feeding U.S. alfalfa hay to lactating cows on three South China dairy farms. In the third phase, hay association staff made farm visits. At meetings sponsored by ATO Guangzhou, the National Hay Association, and local dairy associations, South China dairy farmers received management recommendations, the research results, and hay marketing information.

As a result of these efforts, receptive Chinese dairy producers became convinced of the need to improve management techniques, reduce heat stress, and provide quality forage, such as alfalfa hay. Alfalfa increases cows' forage consumption, gives them more nutrients to produce milk, and maintains better breeding condition and health.

South China dairy associations want to boost average milk production per cow to



Field of cut alfalfa in the United States

*Photo courtesy of Ron Anderson, Chairman, National Hay Association, International Market Development Committee*

six tons a year. The ATO Guangzhou and National Hay Association project has helped them put this goal within reach.

However, it isn't easy for South China dairy producers to obtain alfalfa. It cannot be successfully grown in the area, and transportation costs for alfalfa from North China are steep. Moreover, supplies from that region can be spotty and low in quality.

### Weighing U.S. Alfalfa Prospects

The shipments of hay for the research feeding trails in the project have demonstrated the advantages of U.S. alfalfa to the South China dairy industry, and some sales have taken place.

At this time, U.S. baled alfalfa faces negligible competition from other countries for the South China market and several South China dairy farms are ordering U.S. alfalfa. Due to China's lack of a grading system for alfalfa, dairy producers must be educated about scientific ways to discern quality differences.

However, to be competitive, U.S. alfalfa exporters need to factor trucking and processing costs, as well as expenses for Chinese tariffs, shippers, and agents, into their prices.

Container vessels offer the best choice in terms of cost, speed, and commodity protection. Alfalfa can be sourced from the Western states and shipping costs tend to be reasonable because many vessels bringing in Chinese goods can take shipments back. South China has highly developed ports, such as Yantian, Shekou, and Huangpu.

Large South China dairy farms prefer to buy directly from U.S. exporters to minimize costs. Nevertheless, a trustworthy import agent is critical for a U.S. exporter planning to sell products to mid- and small-sized farms. These farms tend to purchase small volumes, and lack the staff to handle importation matters. A good import agent finds customers; handles payment, usually by letter of credit; and helps navigate Chinese import requirements and paperwork. An agent normally charges farms a 1- to 2-percent handling commission on the total commodity value and about 5 percent to cover the government-mandated resale tax.

To promote milk production, in 2001 the Chinese government instituted a policy to waive the 13-percent value added tax on imported baled alfalfa. Importers must still pay a tariff of 9 percent of the value of cost, insurance, and freight on baled alfalfa, and 5 on alfalfa meal or on pallets.

Before baled alfalfa can be shipped, it may have to be fumigated. After fumigation, a phytosanitary certificate from USDA's Animal and Plant Health Inspection Service must be provided to the



Dairy beverages from a Chinese supermarket

*Photo courtesy of USDA/FAS Agricultural Trade Office, Guangzhou, China*

Chinese importer, who submits it for clearance by Chinese Inspection and Quarantine.

Growth of U.S. alfalfa sales in the South China market are expected to be significant. The National Hay Association estimates that baled alfalfa shipments could reach 5,000 tons, valued \$1 million, in calendar year 2007. In the foreseeable future, with growth expected to climb 5,000 tons per year, the South China market could become comparable to that of Taiwan, which imported 52,633 tons of U.S. alfalfa hay valued \$10.6 million in 2006. As far as the China market is concerned, it could become comparable to that of South Korea, which imported 128,500 tons valued \$25 million last year.

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