

## Development of the Cactus Pear Industry in Argentina and Possibilities for Export to the United States

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The cultivation of tunas, i.e., cactus pears of *Opuntia ficus-indica*, in Argentina has stimulated great interest in recent years. We really should say that it is rediscovered since it has been used traditionally in the Argentine Northwest for many years (Ochoa de Cornelli, et al. 1992). Cactus pears can be found as high as 3600 m above sea level in the Puna of northeastern Jujuy between latitude 22° S. and 23° S. However, at this elevation only noncultivated isolated single plants exist. However, there is better vegetative growth and good fruit production at elevations of about 2500 m (e.g., at Tilcara, 2461 m, lat. 23°34' S. and at Quebrada de Humahuaca, lat. 25°23' S., (Neumann, pers. com.) where small areas are cultivated without irrigation. Unfortunately, these areas have low productivity and variable profitability. Cactus pears are widely used in this region due to the limiting climatic conditions and marginal lands that prevent cultivation of other crops.

Under these climatic conditions and management conditions, the fruit yields are about 8 t/ha. The fruits are marketed as fresh fruit, jams, or syrup (from the concentration of fruit juice). The principal characteristic of the syrup is that it does not contain additional sugar. Cactus is also valued as emergency forage, in the semi-arid zone of Santiago del Estero and other provinces, (Martilotti, 1947).

In 1995, the area planted to cactus pears was estimated to be about 500 ha. There has been a continuous growth in the area planted to cactus pears in the period from 1989 to 1994. During the 1994-1995 season, an additional 100 ha were planted. The maximum potential area planted to cactus pears will probably be about 10,000 ha.

The most widespread variety (90 percent of the area) is the yellow type without thorns. Other types have red, orange and pink fruits, but these are less desirable because they have thorns or because their fruits are not as desirable.

The fruits are consumed almost entirely as a fresh fruit in the southern hemisphere summer, i.e., from December through April. The fruits are sold in markets and on street corners in 1 kg packages.

In Argentina, the greatest demand for the fruits is in the province of Buenos Aires. To have a better understanding of the potential market for cactus pears in Argentina, it is important to realize that 40 percent of the inhabitants of the Province of Buenos Aires are originally from the interior of the country and, of those, 70 percent are from the north and northeast of Argentina. All of the Buenos Aires inhabitants originally from the north and northwest know the cactus pears very well. As a result, we find that there is an unsatisfied internal market. A similar situation occurs in the United States in California where the production is marketed principally to the Mexican population.



**Figure 1.** Nursery of Cactus Pear in North Cordoba (50,000 plants)



**Figure 2.** Red Cactus Pear After Three Months at 8°C

## **Marketing of Cactus Pears**

The central market in Buenos Aires, where all the country's fruit crops are marketed, sells about 2000 t of cactus pears per year. This is a small volume compared to the planted areas. More than half of the plantations with good management will have peak production in 1995-1996.

The fruit that arrives at the central market of Buenos Aires comes from the provinces of La Rioja, San Juan, and Santiago del Estero in Argentina. Some fruit also comes from Chile. The fruit begins to arrive in February and lasts till the beginning of April. The greatest volume of sales are for the green Chilean fruits, followed by the spineless yellow variety from Argentina, and then the red Argentine variety.

The fresh fruit is packaged in wooden boxes, cardboard cartons, or PVC containers. The fruits from the Argentine countryside are packaged in wooden and cardboard boxes of 6 kg. The fruits of Chilean origin are marketed in cardboard or wooden boxes of 5 to 6 kg. All that is received is marketed. The purchase price includes freight to the marketing center. The purchase price varies from US \$10 to \$12 during February and decreases to US \$8 to \$10 in March and April. The selling prices to the public vary from a maximum of \$4/kg to a minimum of \$2.50/kg (Bulletin of Markets Information, Apr. 95).

The products with the greatest potential for growth are obviously those with the greatest selling price. It is necessary to improve the presentation of the product along with a campaign to increase the visibility of the product in the marketplace to make cactus pear production more profitable.

With respect to the world market, it is necessary to realize that there are different selling prices for the different countries. For example, probable marketing prices are: USA, \$1.45/kg; United Arab Emirates, \$1.58/kg; Canada, \$1.94/kg; Spain, \$2.17/kg; Belgium, \$1.74/kg; Germany, \$2.65/kg; Austria, \$2.08/kg; and Puerto Rico, \$1.67/kg. (Central Market, Buenos Aires)

## **Conclusion**

Given the situation for this new activity in our country, the opportunities and problems are:

### **OPPORTUNITIES**

Currently, it is a revaluated cultivation

Technological packages are available for production

The supply is very low

### **THREATS**

There is a ceiling for the demand in Argentina

There is little equipment for this new activity

Over planting of planted areas, which might depress prices

Lack of cultivar identification

## MARKETING

Direct sale without difficulties

Good price for the product is US \$1.00 to \$1.50/kg.

Good price for cactus pear products, e.g., jams, is \$10/kg.

## WEAKNESSES

Long distances to the large marketing centers

Lack of promotional material

Lack of information about supply and demand

Given the current situation of the cultivation and the great potential that *Opuntias* have in the Argentine Republic, there is a great deal to be done to realize its full potential.

## References

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