REVISTA BRASILEIRA DE FRUTICULTURA

v. 34, n. 1, p. 001 - 319

THE PLUM CULTURE

Tânia Eidam; Alexandre Pozzobom Pavanello; Ricardo Antonio Ayub

Source of B complex vitamins, vitamin C, potassium, riboflavin, phosphorus, and high laxative power, plums stands out for its nutritional composition and low caloric value of approximately 36 kcal per 100 grams. Moreover, this fruit also has antibacterial and antiviral action arousing the interest of the consumer.

The plum tree is cultivated in Brazil for many years, but no one knows for sure when this species has been introduced in the country. Currently, the major producers are the states of Rio Grande do Sul, with annual production estimated at 12,200 tons, followed by Santa Catarina, with 11,000 tons, Parana with 7,000 tons, São Paulo with 6,011 tons and Minas Gerais with 1,600 tons. And the main cultivars are Gulfblaze, Irati Reubennel, Harry Pickstone, Polli Rose, Fortune and Leticia.

However, the domestic production of fruits is not enough to supply the market. Annually are imported about 10,000 tons of plums from countries next to Brazil, while the exports do not exceed 400 kg per year, demonstrating the potential for expansion of the culture in the country.

Belonging to the Rosaceae family, subfamily Prunoidae and genus Prunus, the plum is part of the stone fruit group, typically grown in regions of temperate climate. Among these fruit group the plum tree showed the smallest improvements due to the lack of suitable cultivars, phytosanitary problems and fruit yield of low quality.

In the 70s, the bacterium Xylella fastidiosa, which causes leaf scald, was responsible for the eradication of orchards from the south of the state of Rio Grande do Sul until the state of Paraná. The plum planting in the region was taken from the 80's, with the use of seedlings free of bacteria obtained by tissue culture.

Ever since breeding programs have been working with the objective to make available to the producer cultivars well adapted to climatic conditions and less susceptible to the leaf scald. However, the incidence of viral diseases has been observed in the culture, representing a new limit to their development. As is the case of the bacteria causing the scalding, the main way to control viruses is to use quality seedlings.

As to the management of the plum culture, research institutions have been working with the objective of providing support to the producer to produce better quality fruits. In order to increase the size of the fruits, hand thinning is being replaced by chemical thinning.

The commercialization of the fruits is also a challenge for the producers, since the main market in Brazil is the fresh fruit marketing, given that the main form of plum industrialization is dehydrated, unusual technique used in Brazil because of the absence of tradition of such processing.

Therefore the culture still finds some barriers to their advancement, highlighting the uncertainty of the farmer in relation to recommendations for the sector. However, when using cultivars well adapted to the region, it can achieve very good yields and good financial return. When harvested in September, October and November, with a caliber of IV and V, good health and coloration, the marketing prices reach values ranging from R$ 3.00 to 3.50 per kilogram.

Agronomist, Master Student– UEPG – Ponta Grossa-PR
E-mail: taniaeidam@hotmail.com
Agronomist, Master Student– UEPG – Ponta Grossa-PR
E-mail: alexandrepavanello@hotmail.com
Agronomist, Prof. Dr., Dept. of Plant Science. UEPG – Ponta Grossa-PR
E-mail: rayub@uepg.br