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## **Peach Cultivar BRS Libra**

Originated from China, but before the nineteenth century many believed it came from Persia - hence the name *Prunus persica* – the peach tree was one of temperate species that quickly spread around the world. In China, where there are reports of the existence of wild peach trees, which date from 6000 to 7000 BC, the peach tree is considered a symbol of longevity.

Few fruit species have adapted to such diverse climatic situations like this. Although most of the producing areas are between latitudes 30  $^{\circ}$  and 45  $^{\circ}$  N and S, the breeding programs around the world, coupled with management practices, including differentiated pruning, treatments for breaking dormancy, frost control, among others, allowed the cultivation of peach even in areas of latitudes as low as 18-20  $^{\circ}$ .

In Brazil, the peach tree was introduced in 1532 by Martim Afonso de Souza in the Captaincy of São Vicente, today state of São Paulo. Indeed, it was in that state, in the early 1950s, at the Instituto Agronômico de Campinas, which had started the first Brazilian breeding program of peach, aiming to adapt to a mild winter condition. A few years later, a similar program was initiated in Rio Grande do Sul, in the Taquari Phitotechnical Station, and later, in 1957, transferred to the Experimental Station of Pelotas, today Embrapa Temperate Climate Station. The Sao Paulo program worked with germplasm with even less need to cold than the South program, however, the biggest difference between the two programs is that the South program had as priority the development of cultivars producing fruits whose characteristics were suitable for processing. Even today, this program maintains a breeding line for this sector. This is due to the characteristics of peach production in the southern Rio Grande do Sul, where more than 90% is destined for industrialization. About 40 to 50 million cans are processed there annually.

In the beginning of the southern peach breeding program, the only industry type cultivar grown in Rio Grande do Sul was the 'Aldrighi' (named after the producer who selected it), whose fruits ripen at the end of December. The harvest lengthened for about 15 days, with a peak at the end of December, which consequently was the period of industrialization. With the advance of the breeding program, the harvest period was extended for 100 days, being the most striking result, the early harvest. The first early cultivars, usually obtained by hybridization between a clone of cv. Aldrighi or any material introduced from outside by a table cultivar, precocious and "backcross" (modified) with an industry type cultivar were harvested usually only three days to a week before the 'Aldrighi '. The big progress was made in the 1970s, when it was launched the Diamante cultivar with harvest 20 to 30 days before the traditional 'Aldrighi ' cultivar. The work continued and in 2009, Embrapa Temperate Climate Station launched BRS Libra, the first industry type cultivar, protected in Brazil.

In the southern Rio Grande do Sul, BRS Libra matures in mid or early October, so at least 50 days before the season, when the program starts. Hardly, fruits harvested early have good flavor or aroma. It is not the case with BRS Libra. In general, the industries in the South are not yet canning peaches at the time that this cultivar is being harvested, but the fruit good taste, intense and pleasant aroma, combined with a round shape, yellow coat and low hairiness, make them attractive for the fresh market.

Currently, this cultivar is being validated in several regions of Brazil. It was also tested in southern Spain - where preserved peach is consumed, in the fresh market - and attracted interest from a major Spanish company of fruit marketing, as the peaches BRS Libra matured in Huelva (southern Spain) in May 20 and had total soluble solids content of 13° Brix, with a mean diameter of the fruit between 8 and 8.5 cm. In southern Brazil, the diameters of the fruit are between 4.7 and 6.6, but in the orchards where this cultivar was tested were not used irrigation and the management of the plant was the commonly adopted in the region, and held at the same time as the later cultivars.

It is known that only five years after its release, a new cultivar becomes to have a significant expression in the culture. But it can be anticipated that BRS Libra has a high possibility of success for the high productivity of good fruit appearance and quality, both for consumption 'fresh' as for industrialization. For this, it is important to pay attention to the fact that, as it is an earlier cultivar, all cultural practices such as thinning, fertilization, etc.. should be executed earlier than the other cultivars.