

Market development and diversity of varieties of berry fruits in Brazil

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Brazil is a continental country, with over 37 thousand native vegetable species. However, only a few of them are considered domesticated and have a defined production chain. Thus, most of what we consume in Brazil, was introduced from abroad and adapted here. This is also true with the most important berry fruits. Even though, five species of *Rubus* are found in Brazil (*R. urticaelis*, *R. erythrocladus*, *R. brasiliensis*, *R. sellowii*, e *R. imperialis*), the development of the blackberry crop started only in the 1970s with the introduction of a small variety collection from the United States. Years later, a bunch of seeds was also introduced and a breeding program started in Southern Brazil, with selections and controlled crosses. Nine varieties were released from this program, being 'Tupy' the most important, so far, and widely planted in warm areas of the world. Over 200 selections are under evaluation. Also different plant management aiming to schedule the harvest season, adaptation to new production areas as well as plant nutrition, pests and diseases, post-harvest of new selections have being studied over the years. At first the crop development was very slow, in part due to lack of interest by consumers. But recently this crop production has grown, mainly as part of family farming and in the last three years the number of families involved in this activity increased more than 10 times. Around 90% of the fruit is sold as frozen or processed, mostly by cooperatives or through enterprises of different capacities (from 40 tons to over 1500 tons of frozen fruits).

The history of blueberries, raspberries and *Physalis* does not differ much of the previous, except that they are being developed at even slower pace. Among them, blueberry is the most important and even though it was introduced in Brazil as cuttings, in 1979 (planted in 1983), of a small collection mainly of rabbiteye cultivars from Florida, USA, it was only during the last decade or so that the blueberry industry in Brazil started to flourish. Reasons for this delay were lack of knowledge by the domestic market, initial difficulty with plant propagation, limited variability available in Brazil (mainly among highbush) and less research effort. It was after some studies made at the University of Brasilia proven that the old American cultivar Biloxi could produce even in areas without chilling accumulation that growers got enthusiastic about that crop. Today, Embrapa has a breeding program with several selections being tested in different sites . The Brazilian area on blueberries is estimated between 800 to 1000 hectares, mostly cultivated in pots, and the tendency is for increasing the area and productivity. Raspberry is being studied in private companies to some extent and the production is limited mostly because the high initial investment and its fragile post harvest conservation. *Physalis* has a very narrow market and it is kind of stable. Acerola (*Malpighia puniceifolia*), another berry, is used both for fruit or vitamin C extraction (from immature fruits).

Some berry species, native of Brazil, should be mentioned including, surinane cherry (*Eugenia uniflora*), strawberry guava (*Psidium cattleianum*), feijoa (*Acca sellowiana*), jaboticaba (*Plinia cauliflora*, *P. jaboticaba*), etc. They are usually found in local stores or even in regional supermarkets as fresh fruits, pulp or juices. They are also used in beverages and to add flavor to some craft beers. Research has been carried out mainly with genotype selection, chemical composition and functional proprieties and uses. All these species could surely be more consumed which would need marketing actions, educational activities, involvement of the media, cuisine chefs, because most potential consumers do not know how rich they are in vitamins, antioxidants or how to use the fruits.