REVISTA BRASILEIRA DE FRUTICULTURA

v. 32, n. 2 p.343-656

JABUTICABA TREES (Plinia sp.)

The jabuticaba tree (*Plinia* sp.) belongs to the *Myrtaceae* family and is native from the Central, the South and the Southeast Brazil, with a secondary center of spreading in Paraguay and Argentina. Nine species are known, one is considered extinct, five are only found in some research sites, and only three have natural dispersion and in crops in Brazil. These last ones are: *Plinia trunciflora* (Berg) Mattos (jabuticaba of stalk); *Plinia cauliflora* (DC.) Berg (jabuticaba Paulista ponhema or assu) and *Plinia jaboticaba* (Vell.) Berg (jabuticaba sabará), being this one the most cultivated and known in Brazil, mainly in the states of Minas Gerais and São Paulo, which have some commercial orchards.

The Jabuticaba trees occur predominantly in the Atlantic Forest biome. The fragmentation of this biome by human action has resulted in reduced genetic diversity of these species. Moreover, the lack of knowledge about their potential and consequent low commercial use, has contributed to its genetic erosion. Jabuticaba germplasm banks restrict to small collections of plants in certain research institutions. Therefore, *in situ* and *ex situ* conservation and the characterization of genetic resources of these species are fundamental subjects in strategies to reduce the damage already caused and increase the exploration of this fruit plant in commercial crops.

The jabuticaba fruit has great marketing potential as it is greatly appreciated for both fresh consumption and for the manufacture of jelly, fermented beverages, vinegar and liqueurs. Moreover, the fruits can be used by the pharmaceutical and food industries due to its high content of antioxidants. The use of jabuticaba trees as an ornamental plant is also indicated by the exuberance of its architecture and beauty of flowering and fruiting.

The jabuticabeira tree is being tested on crops in Florida (USA) and in countries of Central and South America. In Brazil, the commercialization of fruits has increased annually. In 2008 about 2,000 tones of jabuticabas fruits were sold in the warehouses of CEAGESP (General Warehouses of São Paulo) and in CEASAS (small warehouses in Curitiba and Belo Horizonte). In some regions, the commercialization is done mainly in the fresh form in the edges of highways, for needy families who collect the fruits of native plants (extractive system). Thus, this informal activity covers an economic and social importance as it provides additional income to these families during the harvest period. As defined by the Brazilian Forest Code, this fruit can reconstruct the legal reserve of ownership and be operated economically as an alternative income in family farming.

Despite this recognized potential, the literature is quite limited in number of references to this plant. Likewise, commercial production is small and limited to certain regions and is still considered a fruit plant in home orchards.

The commercial cultivation of jabuticaba tree can be amplified and conquer markets, if could be developed a basic and technological research in this culture. Studies should be encouraged of floral and molecular biology, reproduction ways, germplasm characterization, vegetative propagation, post-harvest storage, among others, together with *in situ* and *ex situ* conservation of germplasm. This work should encourage future breeding programs, in order to select clones that have superior agronomic characteristics and also to improve cultivation techniques, similar to what is done for other native Mirtaceas from Brazil.

.

Idemir Citadin¹, Moeses Andrigo Danner and Simone Aparecida Zolet Sasso ¹Universidade Tecnológica Federal do Paraná / Pos-graduated Program in Agriculture idemir@utfpr.edu.br; moesesandrigo@yahoo.com.br; iosasso@ibest.com.br