

PAPAYA CULTURE IN BRAZIL

The Papaya tree (*Carica papaya* L.) is one of the most common fruit in almost all countries of tropical America, being discovered by the Spanish in the region between Southern Mexico and Northern Nicaragua. After the discovery, the papaya was widely distributed in many tropical regions, extending to latitude 32 ° north and south, with the possible introduction in Brazil in 1587.

It is considered one of the most cultivated and consumed fruit in tropical and subtropical regions of the world. Its fruit, known as papaya are good sources of calcium, pro-vitamin A and vitamin C (ascorbic acid), so they are widely used in diets.

The culture is developed satisfactorily, in locations with mean annual temperature of 25 °C, with limits between 21 °C and 33 °C, and rainfall of 1500 mm per year well distributed.

According to FAO (2010), the world's papaya production represents 10% of world production of tropical fruits, turning around 8 million tones, of which 39% are produced in Latin America and the Caribbean. The main producers are Brazil, Mexico, Nigeria, Indonesia and India, while major exporters are Mexico and Malaysia.

In 2008, Brazil produced 1.9 million tons in 36,5 thousand hectares with a production value estimated at R\$ 1 billion (IBGE, 2010). Also in 2008, Brazil exported about 30 thousand tones (7% less than in 2007) producing a revenue of \$ 38.6 million (IBRAF, 2010). The European Community (Netherlands, Portugal, Spain, United Kingdom, France, Italy, Germany and Switzerland) and the United States are the main importers of Brazilian papaya, representing 80% and 14% respectively (BRAPEX, 2010).

For domestic production, the major producers are the states of Bahia (902 thousand tons), Espírito Santo (630 thousand tons), Rio Grande do Norte (106 thousand tones) and Ceara (100 thousand tones). In the exportation the state of Espirito Santo is responsible for 50% of the total.

The most exploited papaya cultivars in Brazil are classified into two groups: 'Solo' and 'Formosa'. Cultivars of the 'Solo' group have high potential for inbreeding and its fruits, smaller (\approx 0.35 to 0.70 kg), are destined for the domestic market, and mainly for exportation. The main cultivars of the 'Formosa' group are imported hybrids that produce fruits of larger size ($>$ 1.0 kg) that are intended primarily for the domestic market. The municipalities of Pinheiros-ES, Prado-BA and Porto Seguro-BA are the largest producers of papaya of the 'Formosa' group (mainly the imported hybrid 'Tainung 01') and Linhares-ES and Sooretama-ES are the largest producers of papaya of the 'Solo' group (mainly 'Golden' and 'Golden THB' for exportation and 'Sunrise Solo' for the domestic market).

To grow papaya hybrids from the 'Formosa' group in each area the producer needs to buy new seeds, a fact that raises the cost of the production. However, this year, the Espírito Santo Institute of Research, Technical Assistance and Rural Extension (INCAPER) will launch to the market the papaya '**Rubi INCAPER 511**', a cultivar of the 'Formosa' group of open pollination, which will allow producers to obtain their own seeds. In several evaluations, this cultivar presented productivity and fruit quality similar to the major genotype of papaya grown in the state of Espirito Santo, the imported hybrid 'Tainung 01', showing fruit with dark green peel coloration, orange-red flesh, weight average of 1.47 kg, sweet pulp and soluble solids of 10.2 ° Brix.

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