Title Features of postharvest physiology and quality of Cactaceae fruits from Brazilian northeast

Author S.M. Silva, D.M. Brito Primo, L.B.V. Torres, L.P. Martins, A.B. Lima and F.V.G. Silva

Citation ISHS Acta Horticulturae 811:113-122. 2009.

**Keyword** respiration pattern; maturity index; antioxidant activity; total polyphenols; *Opuntia inamoena*,

Pilosocereus spp.; Selenicereus c. f. setaceus

## **Abstract**

Brazilian Northeast is known by having several cacti species growing naturally on the rocky, sandy, and arid soils, which produce exotic fruits and represent identity, diversity, and beauty for the semi-arid lands. In case of the *Opuntia ficus-indica*, it is widely cultivated and utilized for animal feeding. However, it has not been traditionally used for fresh fruit consumption. On the other hand, crops with additional health-promoting properties, beyond nutritional benefits, such as the fruits of *Cactaceae*, are increasingly gaining interest from both health professionals and consumers. Based on that, cactus pear and other cacti fruits arise as one of the resources with greater potential for efficient use as high quality food for population of Brazilian semi-arid zones and also representing an alternative with economic value. Although extensive research has been carried out on biology and quality of a wide range of native fruits from the Brazilian semi-arid, there is still little information on cactus pear and other Cactaceae fruits ripening and quality, such as *Opuntia inamoena*, *Pilosocereus* spp., *Selenicereus* c. f. setaceus. Data on fruit quality of these regionally available genetic resources cacti fruits will be shown in terms of physiology and postharvest quality. Fruit quality will also be discussed in terms of availability of flavonoids and antioxidant activity.