

## CAROTENOID COMPOSITION OF UMBU-CAJÁ FRUITS FROM BAHIA

Caroline L. Perez<sup>1</sup>, Ana C. Felipe<sup>1</sup>, Mieko Kimura<sup>1</sup>, Natália S. Janzantti<sup>1</sup>, Luciana A. Oliveira<sup>2</sup>, Eliseth S. Viana<sup>2</sup>. <sup>1</sup>UNESP - São Paulo State University, São José do Rio Preto, São Paulo, Brazil, <sup>2</sup>EMBRAPA – Cassava and tropical fruits, Cruz das Almas, Bahia, Brazil.

Umbu-cajá (*Spondias spp.*) is a tropical fruit, native from Brazilian northeastern region, consumed fresh or prepared as ice cream, jelly and juice by the population from small cities. To use your industrial potential, the center of cassava and tropical fruits research of Embrapa initiated the domestication process and selection of promising plants aiming the development of adequate varieties to commercial plantations. Besides the common characteristics such as productivity and resistance of the plants, size, soluble solids and acidity content of the fruits, the concentration of bioactive compounds also has been considerate in the selection processes. Thus, the objective of this work was to determinate the mainly carotenoids of umbu-cajá fruits from Bahia. In the first harvest, fruits from 8 different plants were collected during the harvest period and the carotenoid composition was determined by HPLC using a C<sub>18</sub> 3 µm column and mobile phase constituted by acetonitrile:methanol:ethyl acetate, concave gradient elution 95:0:5 to 60:20:20 in 25 min, flow rate 0.7 mL/min. All varieties presented lutein as the mainly carotenoid (51 to 212 µg/100g), followed by β-cryptoxanthin (37 to 164 µg/100g) and β-carotene (14 to 79 µg/100g). Data were confirmed in the next year, evaluating three lots of the three most promising varieties (Aurora, Princesa, and Suprema) collected during different time during the harvest season. Aurora variety presented the highest content of lutein (202 a 257 µg/100g) and β-cryptoxanthin (77 to 95 µg/100g) while the highest concentration of β-carotene was found in the Princesa variety (48 to 65 µg/100g).