



PP-17:

**BIOACTIVE COMPOUNDS AND ANTIOXIDANTE ACTIVITY OF
BRAZILIAN CHERRY (EUGENIA UNIFLORA L.) ON DIFFERENT
MATURATION STAGES**

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ABSTRACT

Searching for life quality and longevity, the consumers are looking for health foods such as fruits and vegetables and it is easier to find it when produced locally such as native fruits. Brazilian cherry tree belongs to the Mirtaceae family and it is a native plant from South America. Its leaves are used on traditional medicine to treat several diseases but there is no available information about the functional properties of its fruits. The Aim of this study was to determine the total content of phenolics, anthocyanins, carotenoids and antioxidant activity in Brazilian cherry harvested at different maturation stages. Samples from the Brazilian cherry selection 41 were harvested at Embrapa Clima Temperado's field and transported to the Food Science and Technology lab. The maturation stages were defined by visual color of the fruits (green; green-yellow; orange; orange-yellow; red and intense-red). Total phenolics, anthocyanins, carotenoids and antioxidant activity were determined. The highest phenolic content was found in the green and green-yellow maturation stages. The highest anthocyanin and carotenoid content was found in the intense-red maturation stage. The highest antioxidant content was found among the green and orange maturation stages. The phenolic content found in Brazilian cherry is greater than that found in blueberry and blackberry. The carotenoid content is higher to that found in some Brazilian cultivated carrots. There is a good correlation between the total phenolic content and the antioxidant activity in Brazilian cherry. In conclusion, to *in natura* consumption, it is recommended to harvest the Brazilian cherries in the intense-red maturation stage due to the highest levels of anthocyanins and carotenoids; however, for other uses such as cosmetics development, harvest at green stage is recommended due to the highest phenolic content and antioxidant activity.