

## EVALUATION OF ANTIOXIDANT ACTIVITY OF PEPPERS BY THE ABTS AND DPPH METHODS

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Among species of the genus *Capsicum*, *C. chinense* stands out as the most important domesticated species in the Amazon region. Meanwhile, in terms of their chemical composition, peppers are noteworthy for their high levels of bioactive substances such as carotenoids, ascorbic acid and phenolics, levels of these varying according to genotype. These substances are powerful antioxidants, protecting the human body from free radicals. The objective of this study was to evaluate the antioxidant activity of fruits of four pepper genotypes using the methods ABTS and DPPH. Fruits of the pepper genotypes "Amarela", "Chumbinho Baião", "Biquinho" and "Carajás Vermelha" were analysed. According to the results, the peppers "Chumbinho Baião" and "Carajás Vermelha" present the highest levels of antioxidant activity for both methods, with values by the ABTS method of 14.18  $\mu\text{Molar trolox/g}$  and 10.65  $\mu\text{Molar trolox/g}$ , respectively and by the DPPH method of 13417.18 g fruit/g DPPH and 7847.71 g fruit/g DPPH, respectively. Meanwhile, the peppers "Amarela" and "Biquinho" had the lowest values, with ABTS at 6.46  $\mu\text{Molar trolox/g}$  and 6.65  $\mu\text{Molar trolox/g}$  respectively and DPPH of 18904.49 g fruit/g DPPH and 17027.19 g fruit/g DPPH, respectively. We can thus conclude that the determination of antioxidant activity by the two methods used, ABTS and DPPH, gave results in agreement with the antioxidant capacity of the studied genotypes and that peppers may represent important sources of antioxidant compounds in the diet.