Physicochemical characterization and evaluation of the antioxidant activity of essential oil from *Myrcia amazonica* DC. (Myrtaceae) from the region of Santarem, Pará, Brazil

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In the Amazon region there is a big variety of aromatic and medicinal plants that present a high economic potential, but there are few that have been explored commercially. The physicochemical and pharmacological study obtained from vegetal species can drive us to the finding of substances of interest for men. In this research, a physicochemical study and antioxidant activity of essential oil from leaves of native *Myrcia amazonica* DC. were conducted. Essential oil was obtained by hydrodistillation (HD) (1). The essential oil chemical composition and the volatile compounds found in the flowers were identified by GC-MS. The antioxidant activity was calculated by the $ABTS^{+\cdot}$ and the ORAC methods (2). There were found majority compounds of interest in the composition of the essential oil from *M. amazonica* like germacrene D (10.1-16.6 %), germacrene B (10-11.1 %) and 1-epi-cubenol (14.7-20.2 %). The yield of the essential oils varied between 0.65 to 0.96 % for fresh and dry leaves respectively. This difference in essential oil yield from was not revelant. The highest value for the antioxidant activity of essential oil was recorded with the ORAC (1310 ± 11 µmol Trolox/g substance), compared to the $ABTS^{+\cdot}$ (290 ± 7 µmol Trolox/g substance) method.

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