

Evaluation of the antioxidant activity of 31 Amazonian species

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The Amazon has an interesting reserve of phytotherapeutic resources and ancestral form have been used by the natives of this region in the cure of various diseases, and reported in several ethnobotanical studies. The objective of this work is to evaluate the antioxidant capacity and the content of phenols and total alkaloids in the methanolic extracts of the leaves of 31 plant species collected in 2015 in the town of Tamshiyacu, - Loreto Region – Peru. The percentage of free radical inhibition of DPPH were calculated, in order to select all three with high activity. From these, the total concentration of phenolic compounds and alkaloids were analyzed by UV / Vis spectrophotometry. The extracts were subjected to fractionation in a chromatographic column and the fractions with similar molecules, grouped using thin layer chromatography. The final fractions were analyzed by GC-MS to identify the molecules present in them. About the results, the species that showed

the best activity at concentrations lower than 5.0 mg / ml, were *Virola sebifera*, *Caryocar glabrum* and *Tapirira guianensis*. The concentration of total phenolic compounds was 18580.9, 15180.7 and 11568.7 mg / 100g for *V. sebifera*, *C. glabrum* and *T. guianensis*, and total alkaloids were 36.6, 0.0 and 74.0 mg / 100g for these same species. The main secondary metabolites present are 3,5-di-tert-butyl-4-hydroxyanisole and normetadhol and caryophyllene in *V. sebifera*, diisooctyl dicarboxylate, 1,2-benzene and 3,5-bis (1,1-dimethyl ethyl-phenol in *C. glabrum* and diisooctylphthalate, α -panasinseno, and vitamin E in *T. guianensis*. Of the 31 species under study, three were found with high antioxidant activity and in which they emphasized their high concentration of phenolic compounds, inferring in a certain sense, that these substances are the cause of this activity.

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