

## INVESTIGATION OF ANTIOXIDANT ACTIVITY OF

*Stachytarpheta cayennensis* (Rich.) Vahl

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Oxidative stress is frequently associated with physiological functions and numerous diseases. The purpose of this work was to evaluate the antioxidant capacity of *Stachytarpheta cayennensis*. Topical application of the macerated leaves and roots is recommended in ethnomedical usages to treat sore skin wounds and other diseases. We report here the study of the antioxidant activity of the crude ethanolic extract and the ethyl acetate/chloroformic extracts from roots of *S. cayennensis* by the DPPH scavenging test and the in vivo assay with *Saccharomyces cerevisiae*. All extracts showed a DPPH activity higher than that obtained from *Ginkgo biloba*. During the in vivo experiments, first exponential cells were submitted to 0.1 mg/ml of extract for 1 hour at 28°C following they were exposed to severe concentrations of H<sub>2</sub>O<sub>2</sub> or menadione, for 1 hour and then plated. All extracts were able to increase tolerance against menadione. However, only the chloroformic extract was capable to protect cells against the toxicity of H<sub>2</sub>O<sub>2</sub>. The protection against menadione conferred by the ethanolic and acetate extracts was correlated with a decrease in the levels of lipid peroxidation, thus making it possible to consider these extracts as potential sources of antioxidant agents.