Essential Oil from *Eucalyptus benthamii* Maiden et Cambage Reduces Nitric Oxide Production in Lipopolysaccharide-induced Murine Peritoneal Macrophages

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**SUMMARY.** Few studies are concerned about the essential oil extracted from leaves of *Eucalyptus benthamii* Maiden et Cambage that shows high content of α-pinene. The goal of this paper was to investigate the *in vitro* effect of the essential oil of *E. benthamii* and α-pinene on lipopolysaccharide (LPS)-induced nitric oxide (NO) production in mouse peritoneal macrophages. Macrophages were harvested by washing with phosphate buffered saline and cultured with 10 μg/mL LPS. Three concentrations (5, 10, and 20 μg/mL) of the essential oil of *E. benthamii* and α-pinene were investigated. Nitrite levels were measured based on the Griess reaction, an indirect assay for NO production. The essential oil of *E. benthamii* significantly suppressed NO production in murine peritoneal macrophages at 10 and 20 μg/mL. In contrast, α-pinene did not inhibit NO production.

**KEY WORDS:** α-pinene, Essential oil, *Eucalyptus benthamii*, Myrtaceae, Nitric oxide production.

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