A stem bark extract from *Khaya grandifoliola* (*Meliaceae*) C DC. stimulates the chemotactic and phagocytic activity of rat peritoneal macrophages exposed to CCl4

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Khaya grandifoliola is a plant species used in traditional medicine in Cameroon for the treatment of many diseases. This study determines the capacity of chloroform/methanol (CH2Cl2/CH3OH) (1:1v/v) extract of stem bark of the plant to boost the chemotactic and phagocytic activities of rats macrophages in response to challenge with *Saccharomyces cerevisiae*. *In vitro* study showed that *Khaya grandifoliola* extract (KGE) caused a non-dependent concentration increase in NO production, reduced NBT dye by 75% and enhanced the activity of lysosomal enzyme by 47% at 1 µg/ml. The results of the *in vivo* study shows that after seven consecutive days of CCL4 exposure, the dose 100 mg/kg of body weight, KGE significantly ($p< 0.05$) increased the activity of NADH oxidase (1.3 folds), lysosomal enzyme (2 folds); production of H2O2 (2 folds) and NO (7 folds) compared to control group. We conclude that KGE stimulates the phagocytic activity of macrophages both *in vitro* and *in vivo* making it a candidate substance for strengthening the immune system.

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