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***In vitro* and *In vivo* anti-malarial activity of extracts from *Terminalia mantaly* (combretacées)**

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The emergence of resistance of malaria parasite to available drugs highlight the urgent need to develop new efficient, safe and affordable drugs. In Cameroon, medicinal plants such as *T. mantaly* are used in traditional medicine for the treatment of malaria and have been playing an important role in the fight against malaria especially in rural community. However, their efficacy are still to be validated. This work aimed to investigate the *in vitro* and *in vivo* antimalarial potency of extracts from *Terminalia mantaly*. Extracts from stem barks, leaves and roots of *T. mantaly* were macerated in water and methanol. The susceptibility of red blood cells to the extracts was using the MTT assay. The antiplasmodial activity was performed on the W2 strain of *Plasmodium falciparum*. Prior to the curative test, acute toxicity of the promising aqueous stem bark extract was assessed in mice at a dose of 2,000 mg/kg/bw. Mice infected with *P. berghei* MRA 406 strain were treated with the promising extract at doses of 100, 200, 400mg/kg. Their parasitemia were monitored as well as their hematological, biochemical and histological parameters. Extracts did not shown any cytotoxicity on erythrocytes at up to 1mg/mL. Out of the six extracts tested, two presented *in vitro* antiplasmodial activity with IC₅₀ of 0.809 and 2.203 µg/ml respectively. The acute toxicity assay of the aqueous extract from stem bark revealed 50% lethal dose (LD₅₀) higher than 2000mg/kg per body weight. The curative test showed an effective dose that reduce 50% of parasitemia (ED₅₀) of 69.50mg/kg with no significant effect on biochemical, hematological and histological parameters. The results from this investigation support the traditional usage of *T. mantaly* and suggest that stem bark of *T. mantaly* could be potential source of compounds with anti-malaria activity. However, further investigations are needed to characterize active principles.

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