



In Vivo Antimalarial Activity Evaluation of Crude Extract and Solvent Fractions of *Cordia Africana* (Lam.) (Boraginaceae) Leaves in *Plasmodium berghei*

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Abstract:

Malaria is a life threatening infectious disease caused by unicellular eukaryotic protozoan parasites belonging to the genus *Plasmodium*, which is a member of the Apicomplexophylum. The disease remains a major worldwide public health problem leading to death of millions of people. In vivo antimalarial effects of various doses of *Cordia Africana* extract and solvent fractions were determined using the four-day suppressive test (both crude and fractions), as well as curative and chemo-prophylactic tests (crude extract). Acute toxicity test of the plant extract revealed that the medium lethal dose is higher than 2000 mg/kg. The crude extract of the plant exhibited a significant parasitemia suppression in the four-day suppressive (51.19%), curative (57.14%), and prophylactic (46.48%) tests at 600 mg/kg. The n-butanol fraction exhibited the highest chemosuppression (55.62%) at 400 mg/kg followed by the chloroform fraction (45.04%) at the same dose. The results of this study indicated that both the crude leaf extract and fractions of *Cordia africana* possess the antimalarial effect which supports the traditional claim of the plant. These findings thus help the scientific community to further investigate on the plant.

Biography:

Dawit Zewdu Wondafrash is pharmacist by profession and works as lecturer and researcher in Ayder comprehensive specialized hospital, Mekelle University, Ethiopia.

Recent Publications:

1. Dawit Zewdu Wondafrash, et al; Global, Regional, and National Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life-Years for 29 Cancer Groups, 1990 to 2017, 2019



2. Dawit Zewdu Wondafrash, et al; Global, regional, and national burden of stroke, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016, 2019
3. Dawit Zewdu Wondafrash, et al; Global, regional, and national incidence, prevalence, and mortality of HIV, 1980–2017, and forecasts to 2030, for 195 countries and territories: a systematic analysis for the ..., 2019
4. Dawit Zewdu Wondafrash, et al; Mapping 123 million neonatal, infant and child deaths between 2000 and 2017, 2019
5. Dawit Zewdu Wondafrash, et al; The global, regional, and national burden of cirrhosis by cause in 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017, 2020

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