

In Vitro Antiplasmodial Activity of the Ghanaian Medicinal Plants

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Abstract

Introduction: Most rural communities and inmates of crowded refugee camps in Africa rely on herbs for treatment of malaria; as access to efficacious antimalarials against the multi-drug resistant *Plasmodium falciparum* in the African region is a challenge. However, very few of these folklore herbs have been scientifically investigated and proven useful for use.

Method: Nineteen extracts from ten indigenous plant species *Adenia cissampeloides* Planch. ex Hook., *Anthocleista nobilis* G. Don, *Calliandra calothyrsus*, *Elaeias. guineensis* Jacq., *Entandrophragma angolense* (Welw.) CDC, *Mallotus oppositifolia* (Geisel.) Müll. Arg., *Sarcocephalus latifolius* (J.E.Sm) E. A Bruce, *Petersianthus macrocarpus* (P. Beauv.) Liben, *Polyalthia longifolia* var. *pendula* and *Terminalia ivorensis* A. Chev; were evaluated against the multidrug resistant K1 strains of *P. falciparum* by the parasite lactate dehydrogenase (pLDH) assay.

Results: Thirteen extracts (7 alcoholic and 6 alkaloidal extracts) out of a total of 19 showed antiplasmodial activities with $IC_{50} < 50 \mu\text{g/ml}$.

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Biography

Stephen Y. Gbedema holds B.Pharm, M.Pharm and Ph.D degrees from KNUST, Ghana. He is currently a senior lecturer in the Department of Pharmaceutics, KNUST and a visiting lecturer in the School of Pharmacy, University of Ghana and

School of Pharmacy, Madonna University, Elele, Nigeria. His research interest is on anti-infectives from medicinal plants and other natural sources..