Anti-plasmodial agents from a Cameroonian medicinal plant

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This work reports the isolation, structure determination and pharmacological evaluation of constituents isolated from Peperomia vulcanica (Piperaceae). This plant was chosen because it is added to anti-fever preparations by traditional medical practitioners. Repeated column chromatography of the plant extracts afforded thirteen compounds, eight compounds from the hexane extract and five from the methylene chloride extract, three of which have been completely identified as shown compounds. Phytochemical investigation of the crude hexane and methylene chloride extracts resulted in the isolation of thirteen compounds, seven were active, one of which, 5 Demethyltangeretin, was tested for in vitro activity against Plasmodium falciparium for the first time. Others were identified as stigmasterol and matairesirol dimethyl ether. The structures of the compounds were determined by modern spectroscopic techniques (1H-NMR, 13C-NMR) and physical characteristics as well by comparison of their spectroscopic data with literature values. In vitro activity assessment against Plasmodium falciparium was performed using micro titer plates.

Biography

Perez Bawoh is currently a BSc Medical Laboratory Technology student at St. Francis Higher Institute of Nursing and Midwifery/Laboratory Technician at Holy Trinity Hospital, Ekona, Cameroon. Presently he is working on bacteria found in medicinal plants in Cameroon. He has worked for nearly two years in this domain and he is very ambitious to gain more expertise in this field.

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