

## Use of Putative Antimalarial Herbal Medicines among Communities in Trans-Mara, Kuria and Suba Districts of Kenya

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### Abstract

Malaria is a major health problem in the tropics and subtropics with profound medical, social and economic consequences. Herbal medicines are traditionally used for the management and treatment of the disease by various communities in Kenya. Sources and community knowledge of the herbs are not adequately documented. The aim of the study was to collect and document ethno-botanical information regarding anti-malarial herbs among local communities in Trans-Mara, Kuria and Suba districts of Kenya. Cluster sampling technique was used to sample putative anti-malarial herbal plants in the districts, and their taxonomy identified using taxonomic keys. Plant parts subsequently and separately harvested from fields and scientifically identified in the herbarium. Semi-structured questionnaires and interviews were then administered to selected herbalists and local community (n = 150/district) regarding preparation and potential application of the herbs in the treatment of malaria in respective study regions. And data on gender, age and marital status of the respondents were obtained. Eighteen (18) anti-malarial herbal plant species were collected and identified. More females (74%) than males (63%) potentially use the herbs for antimalarial applications. Marital status significantly influenced  $\chi^2 (1) = 21.648$ ,  $p < 0.001$  potential antimalarial use of the herbs, with more married than unmarried respondents using the herbs. Similarly, age significantly (F (1,144) = 32.002,  $p < 0.001$ ) potential anti-malarial herbs mostly applied with mature and experienced members of the community, which might be related to their societal responsibilities and/or previous experiences. Use of herbs to treat/manage malaria in the three districts were correlating. In vivo and in vitro validation of the antimalarial potential in the herbs will shed light on the medical implications of the herbs on the community which in turn will inform alternative local interventions against malaria

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