Anti-plasmodial activity of some Kenyan medicinal plant extracts singly and in combination with chloroquine.

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Sixty organic and aqueous extracts of eleven plants used for the control of malaria by local communities in Kisii District, Kenya were screened for in vitro anti-plasmodial activity. The plants selection was based on existing ethnobotanical information and interviews with local communities. The extracts were tested against chloroquine sensitive and resistant laboratory adapted strains of Plasmodium falciparum. The study revealed that 63.6% of the plants were active (IC50 < or = 100 microg/mL). Extracts of four plants, Ekebergia capensis, Stephania abyssinica, Ajuga remota and Clerodendrum myricoides gave IC50 values below 30 microg/mL against both chloroquine sensitive and resistant P. falciparum strains. Combination of extracts of E. capensis and C. myricoides with chloroquine against the multi-drug resistant P. falciparum isolate (V1/S) revealed synergistic effect. The plants which showed activity may be useful as sources for novel anti-plasmodial compounds.