

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

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Abstract

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 ($IC_{50} < \text{or} = 100 \text{ microg/mL}$). Extracts of four plants, *Ekebergia capensis*, *Stephania abyssinica*, *Ajuga remota* and *Clerodendrum myricoides* gave IC_{50} 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.

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