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Studies on medicinal plants of Ivory Coast: Investigation of *Sida acuta* for *in vitro* antiplasmodial activities and identification of an active constituent

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Abstract

Sida acuta Burm. (Malvaceae) originating from Ivory Coast was selected after an ethnobotanical survey: traditional healers of malaria commonly used this plant for the treatment. Extracts were tested on two strains of *Plasmodium falciparum*: FcM29-Cameroon (chloroquine-resistant strain) and a Nigerian chloroquine-sensitive strain. Extracts were obtained by preparing decoction in water of the powdered plant, the technique used by most of the traditional healers. An ethanol extract was then made and tested. The IC₅₀ values obtained for these extracts ranged from 3.9 to 5.4 µg/ml. Purification of this active fraction led to the identification of cryptolepine as the active antiplasmodial constituent of the plant.

Keywords:

Sida acuta; cryptolepine; antiplasmodial activity