Abstract:

A new phenylanthrone, named knipholone cyclooxanthrone and a dimeric anthraquinone, 10-methoxy-10,7'-(chrysophanol anthrone)-chrysophanol were isolated from the roots of Kniphofia foliosa together with the rare naphthalene glycoside, dianellin. The structures were determined by NMR and mass spectroscopic techniques. The compounds showed antiplasmodial activities against the chloroquine-resistant (W2) and chloroquine-sensitive (D6) strains of Plasmodium falciparum with 10-methoxy-10,7'-(chrysophanol anthrone)-chrysophanol being the most active with IC50 values of 1.17 ± 0.12 and 4.07 ± 1.54 µg/ml, respectively.