**Abstract**

The ethanolic extract of Phyllanthus niruri and Mimosa pudica leaves was investigated for antimalarial activity against Plasmodium berghei infections in mice. The median lethal dose was determined to ascertain the safety of the extract in mice. The antimalarial activities during early and established infections were evaluated. Phytochemical screening was also investigated to elucidate the possible mechanism of the antimalarial properties. The extract of P.niruri and M.pudica leaf demonstrated significant antiplasmodial activity in all the three models of the antimalarial evaluations. Phytochemical screening revealed the presence of some vital antiplasmodial constituents such as terpenoids ,flavonoids and alkaloids. The leaf extract of P.niruri and M.pudica thus possesses antimalarial activity, which explains the rational usage of this plant in traditional