

Evaluation of the In Vivo Anti-Helminthic Activity, of *Bridelia Micrantha*, *Chenopodium Ambrosoides* and *Ocimum Americanum* Extracts Against *Schistosoma Mansoni* Infection in Mice.

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ABSTRACT

Schistosomiasis is a chronic debilitating global disease affecting approximately 600 million people in 74 developing countries, with 800 million, mostly children at risk. Chemotherapy is the only immediate recourse to minimize the prevalence and incidence of this disease worldwide. Presently, Praziquantel is the only drug of choice for the treatment of all forms of schistosomiasis, however it shows low efficacy against schistosomula and juvenile stages. This dependence on a single drug with the likely potential for development of resistance to Praziquantel has justified the search for new alternative chemotherapies. Medicinal plants are potential candidates as sources of new drug prototypes. This study provides findings on the schistosomicidal activity of *Bridelia micrantha*, *Chenopodium ambrosoides* and *Ocimum americanum* plant extracts against *Schistosoma mansoni* infection in mice. Seven week old BALB/c mice were infected with approximately 250 cercariae and treated on the third and fourth week post infection with five crude extracts from the 3 plants for respective efficacy studies. Praziquantel treated group and infected control group served as controls. Perfusion was performed for all groups on the sixth week after infection for worm recovery. Worm recovery analysis confirmed that the three extracts have antischistosomal properties. Furthermore, pathology showed resolving granulomas and immune profiling results confirmed the extracts had immunomodulatory activity which could potentially be important in inhibiting infection.

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