

## **In vivo effect of essential oil of *Mentha x villosa* and its active compound against *Schistosoma mansoni* (Sambon, 1907)**

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Schistosomiasis treatment is dependent on a single drug, praziquantel (PZQ). The development of resistance of PZQ has drawn the attention of many researchers to alternative drugs. One viable and promising treatment is the study of medicinal plants as a new approach to the experimental treatment for Schistosomiasis. The present work aimed to evaluate in vivo antischistosomal activity of effect of *Mentha x villosa* Oil Essential (Mv-EO) and rotundifolone (ROT) against *Schistosoma mansoni*. Thirty-day-old female *Swiss webster* mice (*Mus musculus*) weighing 50 grams were used. Mice were infected with 80 cercariae of *S. mansoni* (BH strain) and orally administered Mv-EO (50, 100 and 200 mg/Kg) and ROT (35.9, 70.9 and 141.9 mg/Kg) at 45-days post infection for 5 consecutive days. All mice were euthanized 60 days after infection. Praziquantel was the positive control in the experiment. Results: Doses of 200 mg/kg (Mv-EO) and ROT (141.9 mg/Kg) resulted in a significant reduction in fluke burden (72.44% and 74.48%, respectively). There was also marked reduction in liver, intestinal and faecal and changed oogram pattern, compared to infected untreated mice. Considering the results obtained, further biological studies are required in order to elucidate the mechanism of schistosomicidal action on against adult *S. mansoni*.