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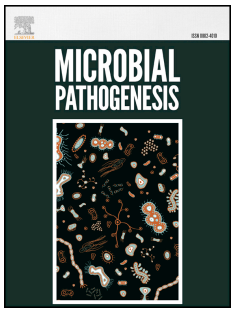

Efficacy of soluble glycoprotein fraction from *Allium sativum* purified by size exclusion chromatography on murine *schistosomiasis mansoni*

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EFFICACY OF SOLUBLE GLYCOPROTEIN FRACTION FROM *ALLIUM SATIVUM* PURIFIED BY SIZE EXCLUSION CHROMATOGRAPHY ON MURINE *SCHISTOSOMIASIS MANSONI*

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Abstract: In this work, the efficiency of crude MeOH extracts and soluble glycoprotein fraction of *Allium sativum* purified by size-exclusion chromatography (SEC) on parasitological, histopathological and some biochemical parameters in *Schistosoma mansoni* infected mice were investigated. Animals were infected by tail immersion with 100 cercariae /each mouse and divided into five groups in addition to the normal control. The results revealed a significant decrease in mean worm burden in all treated mice especially in the group treated with soluble glycoprotein fraction of *A. sativum as* compared to infected non-treated control with the disappearance of female worms. Administration of the studied extracts revealed remarkable amelioration in the levels of all the measured parameters in *S. mansoni* infected mice. In addition, treatment of mice with crude *A. sativum MeOH* extract and soluble glycoprotein fraction of *A. sativum* decreased significantly the activities of studied enzymes as compared to the infected untreated group. The highest degrees of enhancement in pathological changes was observed in the treated one with soluble glycoprotein fraction of *A. sativum* compared to the infected group represented by small sized, late fibro-cellular granuloma, the decrease in cellular constituents and degenerative changes in eggs. In conclusion, *A. sativum* treatment had effective schistosomicidal activities, through reduction of worm burden and tissue eggs, especially when it was given in purified glycoprotein fraction. Moreover, the soluble glycoprotein fraction of *A. sativum* largely modulates both the size and the number of granulomas