

## LPSURYHV OLYHU çEURVLV RQ H[SHULPHQWDO VFKLWVWF

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**S**chistosomiasis is a chronic disease caused by an intravascular trematode of the genus *Schistosoma*. Praziquantel (PZQ), the only drug recommended by the World Health Organization for the treatment and control of human schistosomiasis, is now facing the threat of drug resistance, indicating the urgent need for new effective compounds to treat this disease. In this work we investigated the immunomodulatory and antiparasitic effects of *Mentha piperita* L. (peppermint) on murine Schistosomiasis *mansoni*. Female Balb/c mice were infected each with *S. mansoni* cercariae and divided into three experimental groups: (I) untreated; (II) treated daily with *M. piperita* L. and (III) treated on 1/42/43 days post-infection with Praziquantel. Another group with uninfected and untreated mice was used as a control. Subsequently, seven weeks post-infection, eggs were counted in the feces and intestine. Worms were recovered by perfusion of the hepatic portal system and counted. Serum levels of IL-10, IL-13, IFN- $\gamma$  were assayed by ELISA. Animals treated with a daily dose of *M. piperita* showed increased sera levels of IL-10, IFN- $\gamma$ , IgG2a and IgE. Besides, *M. piperita* treatment promoted reduction in parasite burden by 35.2% and significant decrease in egg counts in the feces and intestine. Moreover, the treatment appears to involve liver modulation at the onset of granuloma formation, and prevent liver fibrosis.

### Biography

Anibal FF had completed her PhD from University of São Paulo, Brazil in Basic and Applied Immunology. As Principal Investigator, Laboratory of Parasitology and six enzymes and their effects against schistosomiasis *mansoni* and toxocariasis, about the treatment of the infectious diseases, their group studies effects of SODQWV H[WUDFWV DQG WKHLU LVRODWHG IUDFWLRQV LQ RUGHU WR HYDOXDWH WKH DQWL SDUDVLWV have been working on the evaluation of the proteins of the parasite that has been potential to induce immune responses that decrease the parasite burden.

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