

ISOLATION , CHARACTERIZATION AND INTERACTIONS WITH LEISHMANIAS OF A LECTIN FROM THE MARINE SPONGE *Tedania ignis*

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Lectins are proteins of origin non immune which reversibly binding specific carbohydrates inducing cellular agglutination. In invertebrates, lectins are involved in various defense processes. One lectin from the marine sponge *Tedania ignis* was purified and characterized by extraction of soluble proteins in 50mM Borax, pH 7.5. The purification procedure was carried out by crude extract precipitation with ammonium sulfate 30%. The precipitated was resuspended in the same buffer and fractionated with acetone 1.0 volume (F1.0). This proceeding was followed by chromatography on Sepharose 6B and the retained peak was eluted with 50mM Borax, 0.1M EDTA, pH 7.5 buffer. Lectin isolated showed higher agglutinating activity for B type erythrocytes treated with papain. The hemagglutinating activity lectin was dependent of Mn^{2+} cation and was inhibited by galactose and fructose. Lectin showed a molecular mass around 45 kDa by SDS-PAGE and optimum pH of 7.5 and was stable at temperatures up to 40°C for 1 hour. *Leishmania chagasi* promastigotes stained with Coomassie brilliant blue R-250 were agglutinated by F1,0 and in the presence of galactose this interaction was abolished. These results show that this lectin could be implicated in defense procedures and it will can be used as biological tools in studies with this protozoon.

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