

Biochemical and Pharmacological Properties of Aqueous Extract of Brazilian Boldus
(*Plectranthus barbatus* Andr.)

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Several studies have been directed to the discovery of new drugs. The popular medicine is knowledge-based theories and experiences indigenous to different cultures, used in maintaining the health of the population. Its origin is from India, *Plectranthus barbatus* is popularly known as Brazilian Boldus. The leaves of the plant underwent a process of extraction with hot water and then precipitated with ethanol, centrifuged and lyophilized. Anti-inflammatory activity it was evaluated through with peritonitis induced by 3% sodium tioglicolate in Swiss Mouse. The level of NO were measured in the peritoneal liquid. The extract was tested in the concentrations of 25, 50 and 100 mg/Kg. The anticoagulant activity was evaluated through of prothrombin time (PT) and activated partial tromboplastin time (aPTT) in human plasma citrated. The extract was tested was tested in increasing concentrations of 5µg/µL to 200µg/µL. The number of cells recruited to in the inflammation, demonstrated that this extract decreased the PMN in 65.5, 71.1 and 72.4%, for 25, 50 and 100 mg/Kg, respectively. The NO was decrease 58, 42.7 and 27.8%, for 25, 50 and 100 mg/Kg, respectively. The PT test demonstrated an anticoagulant activity for 120 s, in concentrations above 50 µg/µL. The aPTT test didn't demonstrate anticoagulant activity in all the concentrations tested. Statistical analyses were made by the ANOVA method (p<0,001). We showed that the extract have anti-inflammatory activity, possibly inhibiting COX, key enzyme of the inflammatory process and have effect on the extrinsic pathway of the blood coagulation.

Key Words: Anticoagulant Activity, Antiinflammatory Activity, *Plectranthus barbatus*.
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