INTRODUCTION. Studies folk medicine have attracted scientific attention and each time a greater number of research teams engaged in identification and chemical characterization of new active principles to elucidate the pharmacological action of these substances. The Licania rigida Benth (L.rigida Benth) popularly known as oiticica, it’s a large tree, evergreen belonging to Chrysobalanaceae family, distributed in tropical and subtropical regions. It has herbal popularly widespread use by anti-inflammatory effects according to the literature.

OBJECTIVE. The objective was to chemically characterize the extracts obtained from the leaves of L.rigida Benth and evaluate its effect on blood clotting and toxicity in vivo.

MATERIAL AND METHODS. After collection, the leaves were stabilized in an air circulating oven at 40 °C for 24 hours and milled. The extraction was carried out with 50% ethanol, then fractionated with ethyl acetate and the extracts were filtered and lyophilized. The chemical composition was performed by High-Performance Liquid Chromatography (HPLC), Prothrombin time (PT) was used to assess the anticoagulant potential of extracts and toxicological tests were carried out according to Organisation for Economic Co-operation and Development (OECD), supported by the Ethics Committee on Animal Use (ECAU - UFRN) under number 029/2011. Were hematological and biochemical parameters assessed, beyond the drinking water, feed and the animal weight.

RESULTS AND DISCUSSION. This study showed that extracts from the leaves of L.rigida Benth have as major compound one flavonol-3-glycosylated like rutin (bioflavonoid) and these compounds have the ability to completely inhibit the extrinsic pathway of coagulation by the PT assay using a concentration of 100μg / ml. The studied extracts also didn’t cause toxicity in single concentration used (2000mg / kg), not getting statistically significant differences between the control and test for hematological and biochemical parameters used, water consumption, feed and animal weight.

CONCLUSIONS. Based on data, the studied extract has a satisfactory anticoagulant capability with low toxicity in vivo.

KEY WORDS. L.rigida Benth, Coagulation, and Toxicity.

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