TOXICOLOGICAL STUDIES WITH THE CAESALPINEA PULCHERRIMA SEED ENDOSPERMIC GALACTOMANNAN

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The use of polysaccharides as carrier for drug delivery for site-specific release, by oral adminsitration is largely used. Microencapsulation, at the same time that protects the drug during the passage through the gastrointestinal tract, may liberate the drug in a site that although weakly vascularised contains polysaccharide-degrading bacterial colonies. In the present paper, the toxicological properties of the Caesalpinea pulcherrima seed galactomannans was evaluated, looking forward for its use as drug carrier. The galactomannan, obtained by water extraction of heat (20 min boiling water) treated seed endosperm, alcohol precipitation and freeze drying was administered (daily) by gastric tubing, during three months, to 10 wealthy adult Wistar rats (5 males + 5 females), in saline suspensions (50 mg/100g body weight, 1 ml). After 90 days, the animal behaved similar to the controls, when the body weight, blood biochemistry (glucose, total cholesterol, total protein, bilirubin, pyruvic and oxalacetic transaminases levels), and histopathology of essential organs were evaluated.

Key words: Caesalpinea pulcherima, oral toxicity Supported by: CAPES/CNPq, UFC, UNIFOR