



Biochemical studies on the effect of medicinal plant *Annona Cherimola* species in cholesterol induced rats

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Annonas are economically important in many countries of Africa and Asia as well as in South, North and Central America. In general, the annonas are shrubs or small trees, with height from 5.0 to 7.5 m; they are erect or somewhat spreading and possess grey-brown bark, often rough and corrugated. They also serve as sources of medicinal and industrial products. Annona fruits provide good carbohydrate nutrition, acting as excellent sources of energy. They are important sources of minerals, such as calcium, phosphorus and potassium. These are important in biological functions, such as helping to protect bones and teeth, providing strong muscles and improving general health. Annona plant parts used in folk medicine contain chemical compounds such as tannins, alkaloids and flavonoids found in the roots, leaves, bark, fruits and seeds. Acetogenins, for instance, are present in the seeds, roots, bark, stems and fruits of most annona trees, and appear to have great potential in anti-cancer treatments and as anti cholesterol. Cherimoya roots have aporphine alkaloids, which have a relaxant effect.

Cholesterol is known to involve oxidative stress and changes in lipid metabolism. Cholesterol induced by triton WR 1339 injection at a dose of 0.20 mg/kg. Animals of treated groups were given the dose of 0.50 mg/kg of the extract. An improvement of antioxidant enzymes was associated with improved body weight control and healthier lipid profiles and therefore may play an important role in the anti obesity and hypolipidemic effects. Many secondary plant metabolites have been shown to possess antioxidant activities, improving the effects of oxidative stress due to cholesterol. Our study has analysed that the antioxidant effect of oral administration of methanol extract of *Annona cherimola* leaf on antioxidant enzymes and lipid peroxidation in blood-Triton WR 1339 induced rat.

Biography

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