

Protective Effect of Pitao (*Pitavia punctata* (R. & P.) Molina) Polyphenols against the Red Blood Cells Lipoperoxidation and the in Vitro LDL Oxidation

Castro R.I.

Forero-Doria O.

Soto-Cerda L.

Peña-Neira A.

Guzmán L.

The oxidative stress is characterized by an imbalance between the oxidizing agents and antioxidants; meanwhile, the consumption of antioxidants has been considered as an important tool in the prevention of oxidative stress and its consequences. *Pitavia punctata* (R. & P.) Molina is an endemic arboreal species from the Chilean Coast Range, in which a large amount of flavonoids has been described. This work focused on characterizing and evaluating, in human erythrocytes, the antioxidant capacity and membrane protection of *P. punctata* extracts and the in vitro protection of the oxidation of the Low Density Lipoprotein (LDL). The phytochemical screening revealed the presence of Quercetin derivatives and flavonoids, such as (-)-Epicatechin, Kaempferol, and derivatives. The methanolic extract presented an important antioxidant activity, protecting the membrane integrity of the red blood cells against the oxidative damage caused by Hypochlorous acid and inhibiting the oxidation of the LDL lipoprotein. © 2018 Ricardo I. Castro et al.