

Vasodilator and hypotensive effects of pure compounds and hydroalcoholic extract of *Xenophyllum poposum* (Phil) V.A Funk (Compositae) on rats

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© 2018 Background: *Xenophyllum poposum* is an endemic species of the Andes Cordillera, popularly known as Popusa. Popusa is widely used by mountain communities as a folk medicine to treat altitude sickness and hypertension. Purpose: The aim of this study is to evaluate the hypotensive effects and vascular reactivity of Popusa extracts and its pure isolated compounds. Methods: Hydroalcoholic extract of *Xenophyllum poposum* (HAE X. poposum; 40 mg/kg dose) were administered to rats by gavage and mean arterial pressures were recorded. Organ bath studies were conducted in endothelium-intact and denuded rings, and the vascular reactivity of the HAE X. poposum extract and its isolated compounds were compared and analysed. Cytosolic Ca²⁺ was measured in vascular smooth muscle cell line A7r5 using Fura2-AM. Results: HAE X. poposum significantly reduced the mean arterial blood pressure and heart rate in normotensive rats chronically treated with the extract, as well as mice acutely treated with th