

131. Ex vivo snake venom detoxifying action of the aerial part extract of *Tacazzea Apiculata* Olive (*Periplocaceae*)

Abdulkadir, M.¹, Ruba, S. Y.², Sani, Y.M.¹, Sule, M.I.¹, Magaji, M.G.³, Ibrahim, A.¹

¹Department of Pharmaceutical and Medicinal Chemistry, Ahmadu Bello University, Zaria

²Department of Chemistry, Sule Lamido University, Kafin Hausa

³Department of Pharmacology and Therapeutics, Ahmadu Bello University, Zaria

Corresponding author: safwanyakubu.ruba@slu.edu.ng,

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Abstract

Tacazzea apiculata (Olive) is a woody climber indigenous to tropical Africa used ethno medicinally for treatment of pain, inflammation, snakebite among others. This study therefore was aimed at screening phytochemical constituent(s) and to evaluate the snake venom detoxification action of the aerial part extract of *T. apiculata* in mice. Pulverized aerial part of *T. apiculata* was extracted with methanol using maceration method to yield the crude methanol extract (ME). The preliminary phytochemical screening was conducted in accordance with procedures as described by African Pharmacopoeia. The LD₅₀ of ME was conducted using Lorkes' method. The LD₉₉ was carried out using the methods of Theakston and Reid. Venom detoxification effect was investigated at the doses of 80, 170, and 260 mg/kg extract, 0.2ml of LD₉₉ was reconstituted with doses of extract and incubated, and 0.2ml of incubated mixture was then injected into each animal in the treatment group. The number of deaths was recorded within 24h. The Preliminary phytochemical screening of ME *T. apiculata* revealed the presence of secondary metabolites. The LD₅₀ of ME and the LD₉₉ of the venom were estimated to be 894mg/kg and 4.6mg/kg, respectively. Antivenin studies suggest that ME possess significant activity against venom ex-vivo; maximum protections were observed at the doses of (80mg/kg), (170mg/kg) with 100%, 83.3% survival, respectively. ME *T. apiculata* demonstrated significant ex vivo antivenin activity in mice and lends credence to traditional use of the plant in the management of snakebite.

Keywords: *Tacazzea*, ex-vivo, snake-venom, detoxifying, LD₉₉, phytochemical