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**Original Research Article**

**Pharmacognostic Evaluation of the Bark of *Acacia suma***

**Roxb (Fabaceae)**

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***Abstract***

***Purpose:*** *To undertake the pharmacognostic evaluation of Acacia suma Roxb bark for the purpose of*

*identification and differentiation from related species.*

***Methods:*** *The macroscopic and microscopic features of the bark were studied, including the use of*

*powder microscopy with the aid of suitable tools and reagents. Physicochemical parameters such as*

*ash values, extractive values and loss on drying were also determined. The bark powder was*

*successively extracted with different solvents followed by preliminary phytochemical screening of the*

*extracts.*

***Results:*** *Macro- and microscopic studies revealed an outer hard and woody exfoliating old bark*

*consisting of dead elements of secondary bast alternating with tangential strips of compressed cork*

*tissue. The outer layer consists of cork cell with lenticels, followed by phellum, phellogen and pheloderm*

*layers. Concentric rings of secondary phloem tissue alternating with regularly arranged polygonal stone*

*cells and radially traversed medullary rays were present. Preliminary phytochemical screening showed*

*the presence of alkaloids, carbohydrates, proteins, tannins and phenolic compounds, gums and*

*mucilages, steroids and triterpenoids, saponins and flavonoids in the bark.*

***Conclusion:*** *The findings of this study will facilitate pharmacognostic standardization of the plant*

*material and aid in the preparation of a herbal monograph for the species.*

***Keywords:*** *Acacia suma var. Acacia polyacantha, Bark, Pharmacognostic evaluation, Standardization,*

*Phytochemical, Pharmacopoeia*

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