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Qualitative Phytochemical Screening of *Cassia italica* Leaf Extracts

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ABSTRACT
Objective: Cassia italica (Sene) is widely used in African traditional medicine for the treatment of various ailments, including constipation, digestive disorders, and inflammation. This study aimed to qualitatively evaluate the presence of major phytochemical groups in leaf extracts of *Cassia italica* using standard screening methods.
Methodology and Results: Successive extractions were performed by maceration using solvents of increasing polarity: hexane, dichloromethane, and ethanol.
The results showed that extraction yields increased with solvent polarity, suggesting a predominance of polar compounds. Phytochemical screening revealed the presence of several classes of secondary metabolites, including flavonoids, polyphenols, alkaloids, tannins, anthraquinones, saponins, sterols, terpenes, and cardiotonic glycosides. The dichloromethane extract exhibited the highest diversity of compounds, while the ethanolic extract was rich in polar constituents and the hexane extract in lipophilic compounds.
*Conclusion and Aplication of resultats:*These findings highlight the importance of sequential extraction using solvents of increasing polarity for efficient phytochemical fractionation. Overall, *Cassia italica* leaves are a rich source of bioactive secondary metabolites.
Keywords: *Cassia italica*; phytochemical screening; secondary metabolites; medicinal plants.