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Pseudocedrela kotschyi: a review of ethnomedicinal uses, pharmacology and phytochemistry
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Abstract
Context: Pseudocedrela kotschyi (Schweinf) Harms (Meliaceae) is an important medicinal plant found in tropical and subtropical countries of Africa. Traditionally, P. kotschyi is used in the treatment of various diseases including diabetes, malaria, abdominal pain and diarrhoea. Objective: To provide an overview of traditional medicinal claims, pharmacological properties, and phytochemical principles of P. kotschyi as a basis for its clinical applications and further research and development of new drugs. Methods: Through interpreting already published scientific manuscripts retrieved from different scientific search engines, namely, Medline, PubMed, EMBASE, Science Direct and Google scholar databases, an up-to-date review on the medicinal potentials of P. kotschyi from inception until September, 2020 was compiled. 'Pseudocedrela kotschyi', 'traditional uses', 'pharmacological properties' and 'chemical constituents' were used as search words. Results: At present, more than 30 chemical constituents have been isolated and identified from the root and stem bark of P. kotschyi, among which limonoids and triterpenes are the main active constituents. Based on prior research, P. kotschyi has been reported to possess anti-inflammatory, analgesic, antipyretic, anthelminthic, antimalaria, anti-leishmaniasis, anti-trypanosomiasis, hepatoprotective, antioxidant, antidiabetic, antidiarrheal, antimicrobial, and anticancer effects. Conclusions: P. kotschyi is reported to be effective in treating a variety of diseases. Current phytochemical and pharmacological studies mainly focus on antimalaria, anti-leishmaniasis, anti-trypanosomiasis and anticancer potential of the root and stem bark of P. kotschyi. Although experimental data support the beneficial medicinal properties of this plant, there is still a paucity of information on its toxicity profile. Nonetheless, this review provides the basis for future research work. © 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

Author Keywords
bioactive compounds; kostchyienones; kotschyins; limonoid orthoacetates; pseudrelones; scientific claims; toxicity; Traditional uses

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