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Medicinal Potentials of Strobilanthes crispus (L.) and Orthosiphon stamineus Benth. in the Management of Kidney Stones: A Review and Bibliometric Analysis

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Abstract

Introduction: In Malaysia, the consumption of tea made from the leaves of Strobilanthes crispus, Orthosiphon stamineus, and their combination is believed by the local people to alleviate kidney stone disease. Therefore, this review was conducted to validate the traditional claims based on the scientific evidences of kidney stones remedies using S crispus and O stamineus. The scientific progress that has evolved over a period of time will be examined using bibliometric analysis. Methodology: The data for S crispus and O stamineus related to kidney stones were searched using the Scopus database. A total of 59 publications from 2009 to 2022 were retrieved and analysed using visualisation of similarities viewer software based on the keywords, authors, countries, institutions, and journals. The World Flora Online was used to confirm the identity of the plant species. Results: The publications related to O stamineus (50) were found to be higher than S crispus (9). 'Strobilanthes crispus, Orthosiphon stamineus, and diuretic' were identified as the most frequently mentioned keywords. Ahmad, M. and Malaysia were the most productive author and country, respectively. Whereas Université de Metz in France and Universiti Putra Malaysia were identified as the most prominent institutions. A number of isolated compounds, including rosmarinic acid and sinensetin, were identified as diuretic agents. While eupatorine and 3′-hydroxy-5,6,7,4′-tetramethoxyflavone were discovered to prevent the formation of calcium oxalate crystals. Conclusions: This study offers fresh insights into S crispus and O stamineus plants as a herbal combination for future studies in the treatment of kidney stones. © 2023 Elsevier GmbH

Author Keywords

Antiurolithiatic; Bibliometric analysis; Kidney stones; O stamineus; S crispus

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