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Ferhat Abbas University, Setif 1
Faculty of Natural and Life Sciences

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Memoir

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Survey on the Anti-Urolithiatic Activity of Medicinal Plants in Setif Province

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Before the jury:

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بسم الله
الرحمان الرحيم

﴿وَآخِرُ دَعْوَاهُمْ أَنِ الْحَمْدُ
لِلَّهِ رَبِّ الْعَالَمِينَ﴾

صدق الله العظيم

سورة يونس - الآية 10

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Dedication

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And with all love, I dedicate the fruit of my success and graduation

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(El Khier, Akram, Ismail)

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-Aicha.

Dedication

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Abstract

Urolithiasis, or kidney stones, is a painful condition with potential complications. Given the limitations of conventional treatments, many populations turn to traditional medicine, particularly medicinal plants, known for their effectiveness and accessibility. This study aimed to investigate the ethnobotanical survey of plant used in the treatment of urolithiasis in Setif province of Algeria. Data were gathered through questionnaires administered to 150 individuals, including herbalists, traditional healers, and the general public. The survey documented 23 plant species from 15 families, with Lamiaceae and Apiaceae being the most represented (17% each), followed by Caryophyllaceae and Poaceae (9% each). Seeds and aerial plant parts were the most commonly utilized, primarily prepared as herbal teas and extracts. These results highlight the richness of traditional knowledge and pave the way for further pharmacological investigations to scientifically validate the effectiveness of these plants in anti-urolithiatic treatments.

Key words: Kidney stones, Ethnobotany, Medicinal plants, Traditional medicine, Setif Province, Antiurolithiatic activity.

Résumé :

L'urolithiase, ou calculs rénaux, est une affection douloureuse avec des complications potentielles. Compte tenu des limites des traitements conventionnels, de nombreuses populations se tournent vers la médecine traditionnelle, en particulier les plantes médicinales, reconnues pour leur efficacité et leur accessibilité. Cette étude visait à examiner l'enquête ethnobotanique des plantes utilisées dans le traitement de l'urolithiase dans la région de Sétif en Algérie. Les données ont été recueillies au moyen de questionnaires administrés à 150 personnes, dont des herboristes, des guérisseurs et le grand public. L'enquête a recensé 23 espèces végétales appartenant à 15 familles, les Lamiacées et les Apiacées étant les plus représentées (17% chacune), suivies des Caryophyllacées et des Poacées (9% chacune). Les graines et les parties aériennes des plantes étaient les plus couramment utilisées, principalement préparées sous forme d'infusions et d'extraits. Ces résultats soulignent la richesse des connaissances traditionnelles et ouvrent la voie à d'autres investigations pharmacologiques pour valider scientifiquement l'efficacité de ces plantes dans les traitements anti-urolithiatiques.

Mots-clés : Calculs rénaux, Ethnobotanique, Plantes médicinales, Médecine traditionnelle, Wilaya de Sétif, Activité anti-urolithiatique.

ملخص: