



UNIVERSITY OF ECHAHID HAMMA LAKHDAR, EL-OUED
FACULTY OF EXACT SCIENCES
CHEMISTRY DEPARTMENT



Laboratory of Applied Chemistry and Environment (LCAE) and Laboratory of Valorization and Technology of Sahara Resources (VTRS)

The Second international Seminar on **C**atalysis, **C**hemical **E**ngineering & **G**reen Chemistry

CaCEG-2025

May 21-22, 2025 – El Oued, ALGERIA

CERTIFICATE OF PARTICIPATION

This Certifies That

Boudjelal Amel

Presented a poster communication at the Second international Seminar on **C**atalysis, **C**hemical **E**ngineering & **G**reen Chemistry "**CaCEG-2025**" entitled:

« **Ethnopharmacology of Algerian Medicinal Plants: Bridging Traditional Knowledge and Modern Wound Care** »

Co-author (s): Chetehouna Sara

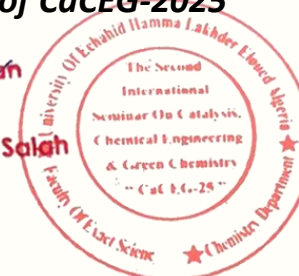
President of the Session

Dr. BEN AMOR M larbi

Chairman of CaCEG-2025

CaCEG - 2025 Chairman

Dr. NEGMOUCHE NACER Salah



ID: P025

Ethnopharmacology of Algerian Medicinal Plants: Bridging Traditional Knowledge and Modern Wound Care

Amel Boudjelal, Chetehouna Sarra

amel.boudjelal@univ-msila.dz

Department of Veterinary, Faculty of Sciences, University of M'sila, Algeria.

Laboratory of Biology: Applications in Health and Environment, University of M'sila, Algeria.

Abstract

Algerian traditional medicine encompasses a diverse range of medicinal plants used for wound healing, yet their therapeutic mechanisms remain largely unverified. This study integrates ethnopharmacological knowledge with modern analytical techniques to explore the wound healing efficacy of ten medicinal plants. Selected based on their traditional use and literature reports, these plants were extracted using methanolic, ethanolic, and aqueous solvents, as well as essential oil distillation and resin collection. The extracts were evaluated in an animal excision wound model, with wound contraction monitored over 20 days. Histological analysis assessed tissue regeneration and re-epithelialization, while LC-ESI-MS/MS and GC-MS profiling identified key bioactive compounds. The findings establish a scientific basis for the wound healing properties of these plants, demonstrating a clear link between their phytochemical composition and therapeutic effects. This study underscores the value of Algerian medicinal plants in bridging traditional remedies with evidence-based modern wound care applications.

Keyword : Wound healing, Medicinal plants, Phytochemical composition, Traditional medicine, Algeria, Excision wound model, Histological analysis, Tissue regeneration, Bioactive compounds