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جامعة سعد دحلب البليدة 1

Université Saad Dahlab BLIDA 1

Faculté des Sciences de la Nature et da la Vie

EXPENSIMED

Attestation de Participation

La présidente du *2ème Symposium National de Biologie Pharmacotoxicologie & Bioproduits des Plantes Aromatiques et Médicinales (2SNBPT-PAM-2025), tenu le 28-29 Mai 2025 au niveau de l'Université de Blida -1*, atteste que :

Pr BOUDJELAL Amel (Université de Msila) a participé activement au Symposium et a présenté une Communication Orale Intitulée : « **Pharmacotoxicological Investigation of Arisarum vulgare Tubers: Chemical Characterization and Anticancer Activity** »

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Département de Biologie Université Blida 1 — 2 SNBPT PAM 2025 — Faculté SNV

Présidente du comité d'organisation du 2ème SNBPT-PAM-2025

Présidente du 2ème Symposium de Biologie Pharmacotoxicologie & Bioproduits des PAM - 2SNBPT - PAM - 2025

Pr. KHALDOUN Hassina

Le 2ème Symposium National de BIOLOGIE PHARMACOTOXICOLOGIE & BIOPRODUITS DES PAM (Plantes Aromatiques et Médicinales)
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Pharmacotoxicological Investigation of *Arisarum vulgare* Tubers: Chemical Characterization and Anticancer Activity

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Abstract

The pharmacotoxicological exploration of plant-derived bioactive compounds is essential for the scientific validation of traditional remedies and their potential therapeutic use. *Arisarum vulgare*, a medicinal plant widely used in Algerian folk medicine for cancer-related treatments, was investigated for its cytotoxic effects and chemical composition. An aqueous extract of its tubers was subjected to phytochemical screening (LCMS-MS), revealing the presence of key secondary metabolites such as phenolics, flavonoids, and alkaloids.
In vitro cytotoxicity assays were performed using the MTT method on two human cancer cell lines: HT-29 (colorectal cancer) and HepG2 (liver cancer), with 5-Fluorouracil (5-FU) as a reference drug. The extract demonstrated a dose- and time-dependent reduction in cell viability, with IC_{50} values indicating notable antiproliferative activity, particularly after 48 hours of treatment at concentrations between 50–100 µg/mL.
These findings support the pharmacological relevance of *Arisarum vulgare* tubers as a potential source of anticancer agents and highlight the importance of toxicological assessment in the development of safe and effective plant-based therapies. This study contributes to the scientific valorization of a traditional medicinal plant within the framework of pharmacotoxicology.

Keywords: *Arisarum vulgare*, traditional medicine, bioactive compounds, cytotoxicity, MTT assay, cancer therapy,