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جامعة سعد دحلب الابدية 1

Université Saad Dahlab BLIDA<sup>1</sup>

Faculté des Sciences de la Nature et de la Vie



# Attestation de Participation

La présidente du 2<sup>ème</sup> Symposium National de Biologie Pharmacotoxicologie & Bioproduits des Plantes Aromatiques

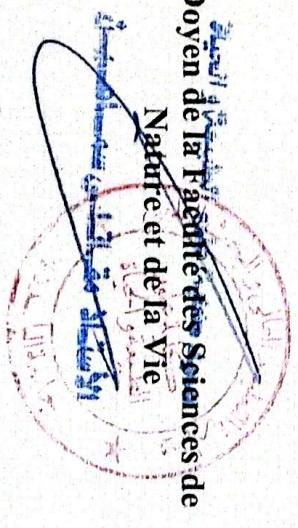
et Médicinales (2SNBPT-PAM-2025), tenu le 28-29 Mai 2025 au niveau de l'Université de Blida -1, atteste que :

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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Présidente du 2<sup>ème</sup> Symposium de Biologie  
Pharmacotoxicologie & Bioproduits des  
Plantes Aromatiques et Médicinales  
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Pr. KHALDOUN Hassina

Le 2<sup>ème</sup> 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<sub>50</sub> 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,