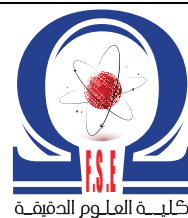




الجمهورية الجزائرية الديمقراطية الشعبية
وزارة التعليم العالي والبحث العلمي
جامعة قسنطينة 1 – الإخوة منتوري
كلية العلوم الدقيقة

PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
Constantine 1 University – Frères Mentouri
Faculty of Exact Sciences



ANNONCE DE SOUTENANCE



Conformément à la décision n° **91/D3C/2026** du **29 Juin 2026** autorisant la soutenance d'une thèse de doctorat, le Vice-doyennat chargé de la post-graduation, de la recherche scientifique et des relations extérieures, a n n o n c e la soutenance publique d'une thèse de doctorat le :

Jeudi 09 Juillet 2026 à 16 HOO

Lieu : Salle de conférences sise au Campus Chaab Erssas.

Filière : CHIMIE

Spécialité : Chimie Pharmaceutique

Doctorante : ZERIMECH Rania

Sur le thème : « Phytochemical and biological investigation of the Algerian species *pardoglossum cheirifolium* (L.) Barbier et Mathez ».

Devant le jury d'examen :

	Nom et prénoms	Grade	Etablissement d'appartenance
Présidente	MEKKIOU Ratiba	Professeure	Université Constantine1, Frères Mentouri
Directeur de thèse	SEGHIRI Ramdane	Professeur	Université Constantine1, Frères Mentouri
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	BOUSSAHA Sara	M.C.A	Ecole Nationale Supérieure de Biotechnologie
	BENMEKHBI Lotfi	Professeur	Université Salah Boubnider Constantine 3 -

A b s t r a c t

Ethnomedical bibliographic research has shown that species of the genus *Pardoglossum* are known for their uses in traditional medicine. *P. cheirifolium*, an Algerian species from the Boraginaceae family, has been rarely studied phytochemically and biologically. This gap prompted us to focus our research on its investigation.

After extraction, separation and purification, the investigation of *P.cheirifolium* extracts led to the isolation in pure and native state of a pyrrolizidine alkaloid it was identified using spectroscopic methods of analysis (1D and 2D) NMR from the n-Butanol extract, the LC-MS analysis of the methanol extract led to the identification of fifteen compounds with two major groups six phenolic compounds and nine pyrrolizidine alkaloids, while the HPLC analysis of the ethyl acetate extract showed the presence of seventeen compounds most of them are phenolic compounds .

The GC-MS analysis of the chloroform extract and the essential oil of *P.cheirifolium* was able to detect 21 compound seventeen hydrocarbons and fatty acids and four terpenes. On the other hand, the biological study of the *P. cheirifolium* species extracts showed that the plant has a remarkable antioxidant (in vitro) and anti-inflammatory (in vitro) activity and also an alpha amylase inhibition capacity.

Our findings were on strong alignment with the ones reported in literature on the genus *Pardoglossum* and validated the richness of the *Padoglossum* genus with both phenolic compounds and pyrrolyzidine alkaloids. Also this study introduces a novelty to the *Pardoglussom* genus by identifying chemical compounds for the first time in this genus, the in vitro anti-inflammatory and alpha amylase inhibition capacity of the *Pardoglussom cheirifolium* species is also being reported for the first time in our study.

This work was the subject of two published articles.