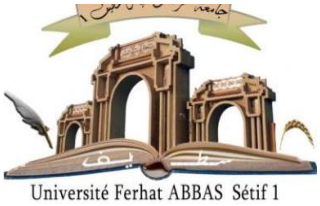
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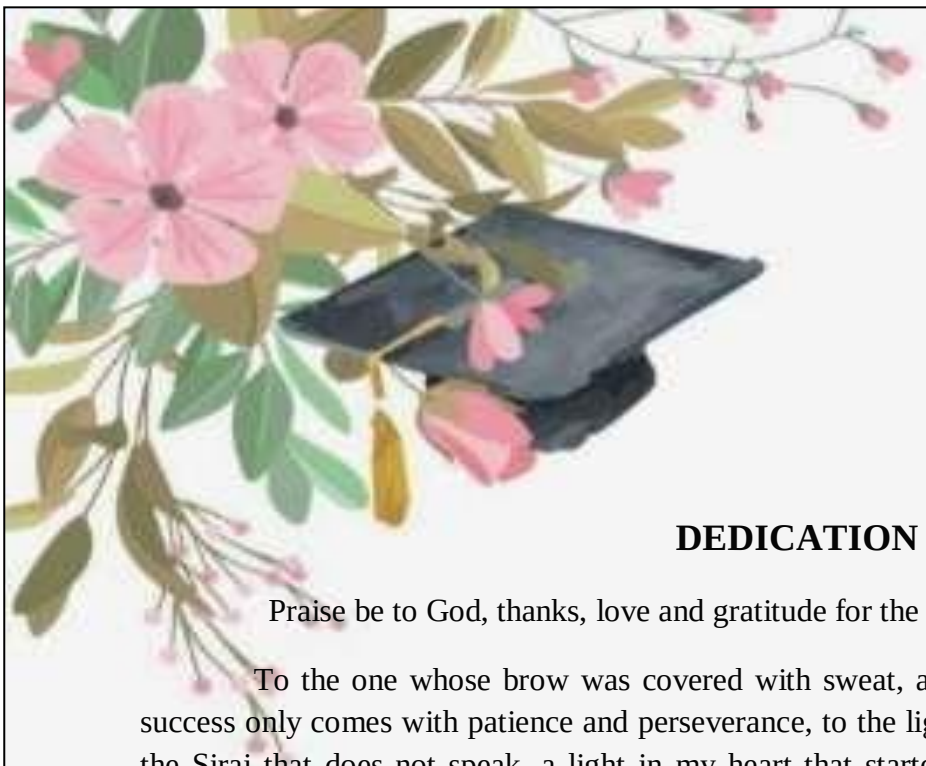
Prof. CHAREF Noureddine

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thank you to all of you





DEDICATION

Praise be to God, thanks, love and gratitude for the beginning and the end

To the one whose brow was covered with sweat, and the one who taught me that success only comes with patience and perseverance, to the light that sparked my path, and to the Siraj that does not speak, a light in my heart that started from what was precious and precious, and from it I drew my strength and my pride, Iranian.

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To the one who placed paradise under her feet and made adversity easy for me with her prayers for humanity. The great one who always wished she could open her eyes to see me on a day like this

Dear mom fatima

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I drink from it until my best days and its purest days are the apple of my eye....

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To all the littleones in my family

To everyone who has been a help and support on this path,

to loyal friends and companions of the years Companions ofadversity and crises, to those who expressed their sincere feelings and advice to me

I dedicate this workto myself ,who worked hard and stayed up for this work

To my colleague **Chahinez** who shares our moments of fatigue and joy throughout the course of this work

Ilheme



DEDICATION

After a study career, I have endured fatigue and joy. Today, I stand on my graduation threshold.

I dedicate my success to those who proudly bear his name, to those who have endeavoured throughout his life to be better than him, to those who supported me without borders and gave me

My dear father for nothing.: Said

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My best brother Abderrezak , his wife Chahrazad and my little brother Abdelaziz

I dedicate this workto myself ,who worked hard and stayed up for this work and

To my colleague **Ilheme** who shares our moments of fatigue and joy throughout the course of this work

Chahinez



Abstracts

الملخص

يحتل العلاج بالنباتات مكانة كبيرة في النظام الصحي . يتم اختيار النباتات المستخدمة حاليا لقيمتها العلاجية. فهي أصل العديد من الأدوية حيث تلعب دورا في تكوين 70% من المنتجات الصيدلانية المسوقة في البلدان الصناعية. كجزء من تثمين النباتات الجزائرية و اكتشاف مضادات الأكسدة الجديدة المضادة للالتهابات من المصادر الطبيعية، نحن مهتمون بهذا العمل في التحقيق في البحوث الدوائية العرقية وفي دراسة تقييم النشاط المضاد للأكسدة والمضاد للالتهابات في المستخلصات من هذه النبتة الطبية من منطقة أولاد عدوان: *Eucalyptus camaldulensisL* فهي شجرة من فصيلة Myrtaceaeموطنها الأصلي أستراليا تم إدخالها إلى الجزائر خلال الاستعمار سنة 1980 .تم تحضير المستخلص من الجزء الهوائي (الأوراق). مردود الاستخراج حوالي 21.06%. أظهرت الدراسة الكيميائية لنباتية لعديدات البوليفينول والفلافونويد والعفص كمية من النبات تحتوي على 62.66±3.80 mg EAG/mg و 18.33±0.15 mg QE /mg و 20.01±6.48mg CE/mgعلى التوالي. تم تقييم نشاط مضادات الأكسدة بواسطة طريقة ازالة الجذور الحرة DPPH حيث ان IC_{50} قدر ب 19.45±0.00µg/ml . و تم اختبار النشاط المضاد للالتهابات في المختبر الناجم عن بياض البيض. كان تأثير المستخلص للجرعات (4، 8، 16 مع/مل) جد معنويا بالنسبة للجرعات الثلاثة (39.99%، 64.99% و94.29 % على التوالي). يمكننا أن نستنتج أن جزيئات نباتنا L *Eucalyptus camaidulensis* لها نشاط مضاد للأكسدة كبير جدًا ومضاد للالتهابات وتثبت التطبيقات العلاجية في الطب التقليدي.

الكلمات المفتاحية: *Eucalyptus camaldulensisL* ، عديدات البوليفينول، الفلافونويدات، العفص،نشاط مضادات الأكسدة، النشاط المضاد للالتهابات.

ABSTRACT

Herbal medicine is a big part of the health system. The plants currently used are tested and selected for their therapeutic values, they are at the origin of many drugs since their active ingredients play a role in the composition of 70% of the pharmaceutical products marketed in the industrialized countries.As part of the valorization of the Algerian flora and the discovery of new anti-inflammatory and antioxidants from natural sources we are interested in this work in investigating an ethnophrmacological investigation and in the study of the evaluation of the antioxidant and anti-inflammatory activity of the extracts of this medicinal plant from the region of Ouled Adouane: *Eucalyptus camaldulensisL* , is a species of the family Myrtaceae, native to Australia, it was introduced in Algeria during the colonization in 1980.The extract was prepared from the aerial part (leaves). The extraction yield is of the order 21.8%. The phytochemical study of the plant quantified polyphenols, favonoids, and tannins shoxed an amount of 62.66±3.80 mg EAG/mg and 18.33±0.15 mg QE /mg and 20.01±6.48mg CE/mg of extract respectively. The antioxidant activity was evaluated by the DPPH free radical scavenging method, the IC_{50} of which was estimated to be 19.45±0.00µg/ml, the anti-inflammatory activity was evaluated in vitro induced by white egg. The effect of the extract (4,8, and 16mg/ml) is highly significant for the three doses (39.99%, 64.99%, and 94.29% respectively). We can conclude that the molecules of our plant *Eucalyptus camaldulensisL* have very significant anti-inflammatory and antioxidant activity, prove therapeutic applications in traditional medicine.

Keywords: *Eucalyptus camaldulensisL* , polyphenols, flavonoid, tannins, antioxidant activity and anti-inflammatory activity.

RESUME

La phytothérapie occupe une grand place dans le système de santé . Les plantes utiliseés sont testées et sélectionées pour leurs valeurs thérapeutique, elles sont à l'origine de nombreux médicaments puisque leurs principe actifs jouent un rôle dans la composition de 70 % des produits pharmaceutiques commercialisés dans les pays industrialisés. Dans le cadre de la valorisation de la flore Algérienne et de la découverte de nouveaux antioxidants et anti-inflammatoire à partir des sources naturelles nous sommes intéressés dans ce travail à enquêter sur une enquête ethnopharmacologique et à l'étude de l'évaluation de l'activité antioxidante et anti-inflammatoire des extraits de cet plante médicinale de la région de ouled adouane : *Eucalyptus camaldulensisL.* c'est une essence de la famille des Myrtaceae , originaire d'Australie , elle a été introduite en Algérie au cours de la colonisation en 1980.L'extrait aqueux de la plante a été préparé à partir de la partie aérienne (feuilles). Le rendement d'extrait est d'ordre 21.06 %. L'étude phytochimique de la plante quantifié des polyphénols, des flavonoides et des tannins a montré une teneur de 62.66±3.80 mg EAG/mg et de 18.33±0.15 mg QE/mg et de 20.1±6.48 mg CE/mg d'extrait respectivement.L'activité antioxidant a été évaluée par la méthode de piégeage de radical libre DPPH dont l'IC_{50} a été estimée à 19.45±0.00µg/ml. L'activité anti-inflammatoire a été évaluée in vitro induit par le blanc d'œuf. L'effet de l'extrait (4, 8 et 16 mg/ml) est hautement significatif pour les trois doses (39.99% , 64.99% et 94.29% respectivement). On peut conclure que les molécules de notre plante *Eucalyptus camaldulensisL* possèdent une activité antioxidante anti-inflammatoire très importante et prouvent des applications thérapeutiques en médecine traditionelle .

Mots clés: *Eucalyptus camaldulensisL,* polyphénols, flavonoides, tannins, activité antioxidante et activité anti-inflammatoire.

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ABBREVIATIONS

ABBREVIATIONS

%	Percentage
ACTH	Adrenocorticotropic hormone
AGE.	Gallic acid equivalent
BHA	Butyl-hydroxy-anisole
BHT	Butyl-hydroxytoluene
CE	Catechine equivalent
CIBD	Chronic inflammatory bowel disease
COPD	Chronic obstructive pulmonary disease
DE	Dried extract
DMSE	Dimethyl selenide
DPPH	1,1-diphenyl-2picrylhydrazyl
E.C	*Eucalyptus camaldulensis*
E.G	*Eucalyptus globules*
GC-MS	Gaz chromatography-mass spectrometry
HSV-1	Herpes simplex virus
IC50	Inhibitory concentration 50
LE.	Leaves extract
MIC	Minimum inhibitory concentration
NSAIDs	Nonsteroidal anti-inflammatory drugs
PAM	Aromatic and medicinal plants
PG	Prostaglandin
ROS	Reactive oxygen species
TC.	Condensed tannins
TFC	Total flavonoïds contents
TPC	Total Phenolic contents
UC	Ulcerative colitis
UV	Ultra violets
WHO	World health organizatio

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