



L'INSTITUT SUPÉRIEUR DES
PROFESSIONS INFIRMIÈRES ET
TECHNIQUES DE SANTÉ
-ISPITS-TAZA

ORGANISE

En mode hybride (présentiel et virtuel)

LA 4^{ème} JOURNÉE SCIENTIFIQUE

SOUS LE THÈME

**SANTÉ, ENVIRONNEMENT & ÉDUCATION
POUR UN DÉVELOPPEMENT DURABLE
-SEE2D-**

APPEL A COMMUNICATION



SANTÉ

- Soins infirmiers et techniques de santé.
- Sciences biologiques et santé.
- Biomédecine, intelligence artificielle et analyse des données.



ENVIRONNEMENT

- Eau: innovation et technologie.
- Valorisation des ressources naturelles.
- Changement climatique et énergie renouvelable.



ÉDUCATION

- Éducation pour la santé.
- Pédagogie, docimologie et didactique.
- Modélisation et simulation.

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 **ISPITS, TAZA**

 **13 décembre 2024**

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LA PARTICIPATION PAR COMMUNICATIONS EST GRATUITE (Places limitées)

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Royaume du Maroc
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المملكة المغربية
وزارة الصحة والحماية الاجتماعية
ROYAUME DU MAROC
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INSTITUT SUPERIEUR DE PROFESSION INFIRMIÈRES ET TECHNIQUES DE
SANTÉ TAZA

ATTESTATION

CETTE ATTESTATION EST DÉLIVRÉE

À

FAIZA EL HAJLI

pour sa participation par **communication affichée à la 4ème journée scientifique** de l'Institut Supérieur des Professions Infirmières et Technique de santé de Taza, organisée sous le thème "**Santé, Environnement et Education pour un Développement Durable**" le **13 Décembre 2024 à Taza**, intitulée:

ADMET prediction, GC-MS analysis and biological properties of essential oils extracted from some species of medicinal plants from Taza region (Morocco)

Faiza El Hajli, Fouzia Elaissaoui, Issam Ghabbour, Mustafa Cherrate, Nabil Ghabbour, Khalil Hammani, Ghizlane Echchgadda, Said Chakir

Signature

DIRECTEUR D'ISPITS-TAZA



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ADMET prediction, GC-MS analysis and biological properties of essential oils extracted from some species of medicinal plants from Taza region (Morocco).

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Abstract

Various biological functions of *Artemisia herba alba* Asso and *Origanum compactum* Benth. Essential oils were investigated in this study. The chemical composition of the EOs was analysed by gas chromatography coupled with mass spectrometry (GC-MS) and the antioxidant activity was evaluated by DPPH analysis. In addition, the antimicrobial activity of the EOs was evaluated by the agar well diffusion method. This study aims to add value to the plants studied by confirming their other biological properties through molecular docking, which gives a general idea of how a molecule attacks the receptor of a bacterial or fungal strain. GC-MS analysis showed that EOs are rich in active compounds, 35 compounds were identified in the essential oil of *Artemisia herba alba* Asso, representing 99.7% of the total. According to this study, the dominant compounds in the studied essential oil are camphor (46.57%), endo-borneol (5.65%), eucalyptol (5.64%) and thymol (3.85%). *Artemisia herba alba* Asso and *Origanum compactum* Benth. were also found to have significant antioxidant and antibacterial activities in the biological evaluation. Interestingly, the pharmacokinetic effects associated with molecular docking and ADMET (absorption, distribution, metabolism, excretion and toxicity) were evaluated to support the in vitro results. This study allows the development of natural and effective agents that are very safe for public health by revealing the dominant properties of essential oils, especially their antioxidant and antibacterial potential. In light of these results, EOs could be used as a natural source for the development of novel and effective antimicrobial and antioxidant agents.

Keywords: ADMET prediction, biological properties, essential oils, chemical composition.

References

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Artemisia herba alba for the treatment of inflammatory bowel disease-associated arthritis. Journal of Toxicology and Environmental Health, Part A, 87(20), 836-854.

Communications affichées

CA1 : BRIJOUEL Fatima, Fouzia Elaissaoui, Issam Ghabbour, Mustafa Cherrate, Nabil Ghabbour, Khalil Hammami, Ghizlane Echchgadda, Said Chakir, 'Evaluation de l'approche pédagogique « jigsaw » ou « classe puzzle » en formation initiale en soins infirmiers de l'ISPITS de Fès'

CA2 : Abdou Achraf, Benchama Zakariaa, Said Rammalib, Maaghlood Fatima ezzahraa, Elmakssoudi Abdelhakima, Jamaledine Jamala, Abdelaziz Elamrania and Dakir Mohameda. 'Fatty acid composition and antimicrobial activity of fennel seeds '

CA3: CHERRIET SOUFLANE, 'Summary Sheet for Participation in the Scientific Day 'Health-Environment-Education for Sustainable Development'

CA4: Meryem ASRI, Redouane OUAFL, Soumya ELABED, Wifak BAHAFID ,Saad IBNSOUDA KORAICHI, Naïma EL GHACHTOULI, 'Optimization of the treatment of chromium using microbial biofilm on wood waste in batch and open systems'

CA5: Abdelmounir El bachiri, Abdelmounir El bachiri, Intissar Haddiya, 'QUALITY IMPROVEMENT IN HEMODIALYSIS: A SYSTEMATIC REVIEW'

CA6 : Noureddine Chaachouay, Noureddine Chaachouay, 'Perceptions et stratégies d'adaptation des agriculteurs de Zemmour au changement climatique'

CA7 : Faiza El Hajli, Fouzia Elaissaoui, Issam Ghabbour, Mustafa Cherrate, Nabil Ghabbour, Khalil Hammami, Ghizlane Echchgadda, Said Chakir, 'ADMET prediction, GC-MS analysis and biological properties of essential oils extracted from some species of medicinal plants from Taza region (Morocco).

CA8 : ALLAOUI Abdelilah, MANSOUREDDINE Abdelhakim, 'La communication interne et la promotion du développement durable dans le secteur éducatif : rôles et défis'

CA9 : Halima Abakri, Hassan Bouka, 'Les Hautes Orientations de sa majesté le roi Mohammed VI concernant la problématique de l'eau.'