



5th INTERNATIONAL CONFERENCE ON FOOD, AGRICULTURE AND ANIMAL SCIENCES
23-26 NOVEMBER 2023,
ANTALYA/TURKEY



CERTIFICATE

of PARTICIPATION

Abdallah KHERBACHE

We would like to thank you for your contributions as a participant with poster presentation entitled

«Antihemolytic Activity of Ethyl Acetate and Butanolic Extracts of Helichrysum stoechas (L.) Moench.»

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Prof. Dr. FATİH DADAŞOĞLU
Chair of ICFAAS 2023



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ABSTRACT

ORAL PRESENTATIONS**Antihemolytic Activity of Ethyl Acetate and Butanolic Extracts of *Helichrysum stoechas* (L.) Moench**Abdallah KHERBACHE^{1,2,**} Abderrahmane SENATOR^{1,3} Saliha LAOUICHA¹ Hamama BOURICHE¹¹Laboratory of Applied Biochemistry, Faculty of Natural and Life Sciences, University Ferhat Abbas, Setif 1, Algeria.²Department of Microbiology and Biochemistry, Faculty of Sciences, University of M'sila, PO Box 166 Ichebilia, 28000 M'sila, Algeria.³Faculty of Natural and Life Sciences, University of Batna 2, Algeria^{**}Corresponding author email: abdallah.kherbach@univ-msila.dz

ABSTRACT: Oxidative stress is involved in apoptosis and cellular aging but also hemolytic anemia. The latter is an indicator of free radical damage to the red blood cell membrane, which antioxidants can help prevent. This study aimed to examine the antihemolytic activities of ethyl acetate and butanolic extracts from the aerial part of *Helichrysum stoechas* (L.) Moench against AAPH-induced hemolysis. The antihemolytic activity of the two extracts showed that pretreatment of human erythrocytes with various doses significantly reduced AAPH-induced hemolysis in a dose-dependent manner. The recorded HT₅₀ value reached 185.58 ± 7.45 min and 138.50 ± 1.57 min for ethyl acetate and butanolic extracts at a concentration of 40 µg/ml, versus 52.30 ± 0.31 min for the control. These values are better than those obtained with Trolox (115.47 ± 0.41 min), used as a reference. Our results demonstrate that *Helichrysum stoechas* (L.) Moench attenuates AAPH-induced hemolysis and can be used to prevent and treat hemolytic anemias.

Keywords: *Helichrysum stoechas*, Hemolysis, AAPH, Phenolic compound, Antioxidant