

Protective Effect of Pollen Seeds Against the Immunotoxicity of Ethylene Glycol Monomethyl Ether in Male Wistar Rats

Authors : Hamdi Leila, Retem Chahira, Boukarine Rahma, Arkoub Fatma Zohra, Khelili Kamel

Abstract : For thousands of years, humans have used plants found in nature to treat and cure illnesses. These plants may provide a vital source of new compounds potentially useful in the development of effective therapies to combat a variety of health problems. This study consists of evaluating the protective effect of pollen grains on the immunity of male Wistar rats after exposure to EGME (Ethylene Glycol Monomethyl Ether). Thirty-two adult male rats were divided into four equal groups: control group (T), positive control group (T+), which received 300mg/kg bw of the aqueous extract of pollen grains; group (E): treated with one dose of EGME (500mg/kg bw) diluted in distilled water and group (T++E): treated with the combination of EGME and the aqueous extract of pollen grains. Rats were treated by gavage for 4 weeks. The results indicate that treatment with EGME led to a significant increase in the number of white blood cells, lymphocytes, eosinophils and granulocytes compared to the control groups, positive control and the group treated with EGME combined with the extract watery pollen grains.

Keywords : EGME, Pollen, immunotoxicity, rats

Conference Title : ICADS 2025 : International Conference on Animal and Dairy Sciences

Conference Location : Istanbul, Türkiye

Conference Dates : September 27-28, 2025