



Antidiarrheal and Bronchodilatory Activities of Olive Extract

Arif-ullah KHAN^{1,2} & Anwarul-Hassan GILANI^{1*}

¹ Department of Biological and Biomedical Sciences,

Aga Khan University Medical College, Karachi-74800, Pakistan

² Institute of Pharmaceutical Sciences, Kohat University of Science and Technology,
Kohat-26000, Pakistan

SUMMARY. This study describes the antidiarrheal and airways-relaxant effects of the olive or *Olea europaea* crude extract (Oe.Cr). Oe.Cr which tested positive for the presence of flavonoids and saponins, inhibited the castor oil-induced diarrhea in mice at the dose range of 100-300 mg/kg. When tested against carbachol (CCh)-mediated bronchoconstriction in rats under anesthesia, Oe.Cr dose-dependently (30-300 mg/kg) suppressed the CCh (1 μ mol/kg)-induced increase in the inspiratory pressure. In isolated guinea-pig trachea, Oe.Cr caused relaxation of both CCh (1 μ M) and high K⁺ (80 mM)-induced contractions, like that caused by verapamil, suggestive of Ca⁺⁺ channel blockade. These results indicate that olive exhibit antidiarrheal, bronchodilatory and tracheo-relaxant activities.

KEY WORDS: Antidiarrheal, Bronchodilatory, *Olea europaea*, olive.

* Author to whom correspondence should be addressed: E-mail: anwar.gilani@aku.edu