



## Antioxidant, Anti-inflammatory and Analgesic Potential of *Cucumis sativus* Seed Extract

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**SUMMARY.** In the present study antioxidant, anti-inflammatory and analgesic potential of the methanolic extract of *Cucumis sativus* seeds was evaluated. Extraction of the seeds was carried out using solvents of increasing polarity. The free radical scavenging activity of all the extracts was measured by DPPH and H<sub>2</sub>O<sub>2</sub> methods. Methanolic extract of the seeds had shown significant antioxidant activity as compared to chloroform and ethyl acetate extract. Hence, methanolic extract of *C. sativus* seeds (MECS) at a dose level of 100, 200 and 300 mg/kg was further evaluated for its *in vivo* anti-inflammatory activity using carageenan induced rat paw edema and analgesic activity by tail flick and tail immersion methods. Results were obtained in a dose dependent manner. MECS (300 mg/kg) had shown significant ( $p < 0.05$ ) anti-inflammatory and analgesic activity as compared to diclofenac sodium and morphine, respectively. From the results it may be concluded that MECS have good antioxidant, anti-inflammatory and analgesic potential.

**KEY WORDS:** Antioxidant, Anti-inflammatory, Analgesic, *Cucumis sativus*, Free radical, Hydrogen peroxide.

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