

## Material Science 2020: Anti-inflammatory effect of *Euphorbia dendroides* L -

**F.A. Al-Shammaki, A.A. Auzi, F. M. Sherif- Libya**

F.A. Al-Shammaki, A.A. Auzi, F. M. Sherif

Department of Pharmacology and Department of Pharmacognosy

Faculty of Pharmacy, Tripoli University, Tripoli, Libya

E-mail: [Fmosherif@yahoo.com](mailto:Fmosherif@yahoo.com)

### Abstract

*Euphorbia dendroides* L. (Euphoraceae) is a tree-like semi-succulent spurge growing as a wild plant in Libya. In the present study, the anti-inflammatory activity of ethanolic extracts of *Euphorbia dendroides* L. in a dose of 400 mg/kg p.o. was investigated in mice by means of carrageenan-induced paw oedema method. The pedal oedema was measured by means of a micrometer; using 0.025 ml of 1% carrageenan solution was injected subcutaneously into one hind paw of each mouse, compared with aspirin in a dose of 100mg/kg orally to serve as a reference compound. The results showed that the ethanolic extract exhibited a highly significant inhibition in oedema ( $p < 0.01$ ) in the group treated with *E. dendroides* L. and the control. In order to confirm the anti-inflammatory effect of the plant extract, using aspirin as a reference compound. Percentage of inhibition of the oedema was 84% for *Euphorbia dendroides* L., and 86% for aspirin and this confirms that the expected mechanism of *Euphorbia dendroides* L. anti-inflammatory effect is probably through decreased in the prostaglandin's level. Key words: Ethanolic extract of *E. dendroides* L., Anti-inflammatory, Carrageenan test.

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