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In-vitro anti-inflammatory, cytotoxic and hepatoprotective activities of *Laurus nobilis* L. (lauraceae) wood extract and its constitutive phenolics

Nesrine M Hegazi, Sahar A Hussein, Amani N Hashim, Nahla A Ayoub and Heba M Hassanein National Research Center, Egypt

The possible anti-inflammatory, cytotoxic and hepatoprotective activities of *Laurus nobilis* L. wood extract was *in vitro* evaluated. The anti-inflammatory activity was assessed by measuring nitric oxide (NO) production by the inflammagen lipopolysacchride. The extract was evaluated for its cytotoxic activity on six different human cancer cell lines together with the normal non-malignant melanocytes cell line (HFB4) using the SRB assay. The hepatoprotective activity against paracetamol toxicity was determined using primary cultured rat hepatocytes. The extract showed moderate anti-inflammatory activity as shown in the amount of nitric oxide produced with a level of 4.3 μ M/ml (67% inhibition), in comparison to the potent anti-inflammatory drug dexamethasone (95% inhibition). The extract was found to have moderate cytotoxic activity against the tumor cell lines used at the applied concentrations with IC₅₀ ranging from 15. -47.6 µg/ml compared to the potent cytotoxic drug doxorubicin. The wood extract showed hepatoprotective activity against paracetamol toxic effect at concentration of 20 mg/ml. The constitutive phenolics of *L. nobilis* L. wood were studied and led to the separation and identification of 12 compounds, all isolated for the first time from *L. nobilis* L. wood and were identified using chemical, conventional and advanced spectral techniques.

nesrinehegazi@yahoo.com