



***Illicium verum* Extracts Anti-Gastro Ulcerogenic Potential on Experimentally Rat Models**

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Abstract: Background: The traditional herbal, medicinal plants, drugs are used in treating many diseases. The herbal treatment commonly used in treating most type of ulcers. Different extracts of *Illicium verum* were investigated for their anti-gastro ulcerogenic effect on rats.

Aims: Evaluation of *Illicium verum* extracts as anti-ulcerogenic agent in rat model.

Methods: plant essential oil and extracts (petroleum ether and aqueous alcoholic), were performed and then LD₅₀ values were determined (2500 mg/ kg b.wt. for aqueous alcoholic extract and 1250 mg/ kg for petroleum ether extract). Rats were classified into three main groups; negative control administered distilled water, positive controls administered different extracts as well as ulcerogenic sub-group and the last main group is treated animals.

Results: in an *in-vitro* study, aqueous alcoholic extract exhibited the highest antioxidant properties and the lowest effect was recorded for petroleum ether extract. In an *in-vivo* experiment, aqueous alcoholic extract possessed potent anti-ulcerogenic effect as compared to famotin, reference drug. It enhanced the production of reduced glutathione and induced the glutathione reductase activity, superoxide dismutase activity and catalase activity determined in gastric mucosa with marked reduction in lipid peroxides productions in the two ulcerogenic models.

Key words: *Illicium verum*, essential oils, antiulcer, (Alcohol & Aspirin) ulcer, antioxidants.

Faten M. Ibrahim *et al* /International Journal of PharmTech Research, 2016,9(5),pp 65-80.
