

Anti-inflammatory activity of Red and White Lotus seeds (*Nelumbo nucifera*) in Albino Rats

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Abstract

The present study was carried out to evaluate the anti-inflammatory activity of red and white lotus seeds in albino rats. The Carrageenin induced paw edema model was used for studying the anti-inflammatory activity. The cyclooxygenase-2 (COX-2) enzyme inhibition assay was carried out in spectrophotometer to identify the specific mode of action. Forty eight adult Sprague-Dawley rats were used in this experiment. They were divided into six groups of eight each and maintained under ideal laboratory conditions. Group I was taken as control and group II treated with the standard drug diclofenac potassium @ 3mg/kg/celecoxib @ 10mg/kg (in case of COX-2 assay) on 7th day of study. The methanolic extract of *Nelumbo nucifera* seeds of red and white varieties @ 400mg/kg and 600mg/kg were fed to group III, IV, V and VI respectively, for 7 days. All groups of lotus seed extracts were revealed anti-inflammatory activity in Carragenin induced inflammation as well as in COX-2 enzyme inhibition assay. While comparing all groups, the higher dose group of white lotus seed extracts, exhibited more pronounced inhibition than other groups.

Keywords: Anti-Inflammatory, Lotus Seeds, COX-2 Assay, Wistar Rat.