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## Anti-inflammatory and associated analgesic activities of HPLC standardized alcoholic extract of known ayurvedic plant *Schleichera oleosa*

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### ABSTRACT

*Ethnopharmacological relevance:* *Schleichera oleosa* (Lour.) Oken. commonly known as 'Koshamra' in Ayurveda is a tropical tree readily found in Asia and is used to treat pain and rheumatism, as traditional medicine in different parts of India. However, scientific evidences to justify these claims are lacking. Considering the traditional use of *S.oleosa* and the lack of information about its pharmacological properties, we investigated the anti-inflammatory and analgesic effect of the alcoholic extract of *S.oleosa* (SE) against different animal models in rodents.

*Materials and methods:* The anti-inflammatory activity was evaluated against carrageenan induced paw edema and TPA (12-O-tetradecanoylphorbol-13-acetate) induced ear edema. To assess the mechanism of anti-inflammatory action the extract was tested against different phlogistic agents like histamine, serotonin, bradykinin and, prostaglandin E<sub>2</sub>. The analgesic activity was assessed against formalin induced pain.

*Results:* The ethanolic extract of *S. oleosa* bark, did not exhibited any signs of toxicity up to a dose of 2000 mg/kg. The extract significantly inhibited increase in paw edema and ear edema. A percent reduction of 60.84% was found against carrageenan induced paw edema by 400 mg/kg dose of SE. The extract was effective against edema induced by serotonin, histamine and PGE<sub>2</sub>.

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