

ANALGESIC AND ANTI-INFLAMMATORY ACTIVITY OF FLOWERS EXTRACT OF *AERVA LANATA*

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The shade dried powder of *Aerva lanata* (Family: Amaranthaceae) was subjected to successive extraction using the solvents (Petroleum ether, Ethyl acetate and Ethanol) in the increasing order of polarity. Thus prepared extracts were subjected to the Preliminary phytochemical analysis. Then the extracts were investigated for analgesic activity and anti-inflammatory activity in the wistar rats using Diclofenac sodium and Indomethacin as standard drug respectively.

The results revealed that all the extracts showed significant analgesic activity by tail immersion method and anti-inflammatory activity by carrageenan induced paw edema method in wistar rats. The ethanol extract at dose 800 mg/kg body weight was found to be more significant compare to other extracts.

INTRODUCTION

Aerva lanata Linn. (family: Amaranthaceae), is an erect or prostrate, many branched under shrub, 30-60 cm in height, found throughout tropical India as common weed in fields and waste places (Prajapati *et al.*, 2006). The flowers are small, sessile bisexual, greenish or hoary-white (Sharma, 1978). Seeds are round and slightly oval brown, smooth or very faintly reticulate (Rao *et al.*, 1994). The whole plant has been used for several centuries in the treatment of lithiasis, lithotriptic, haemetemesis and diabetes (Khare, 2004). The root is diuretic, demulcent, tonic and given to pregnant women (Chatterjee *et al.*, 1997) and leaf extract increases urinary volume and showed antilithic property (Gupta *et al.*, 2005). The flowers are used in gonorrhoea and for removal of kidney stones (Gupta *et al.*, 2004). The seeds are used to relieve headache and also used in rheumatism (Anonymus., 1959). The phytochemical constituents such as steroids, triterpenoids, carbohydrates, flavanoid glycosides, have been reported from the extracts of this plant (The Ayurvedic Pharmacopoeia of India, 2001; Gupta *et al.*, 2005). However the flowers of this plant have not been experimentally tested for its analgesic activity and anti-inflammatory activity. Hence, the present investigation was undertaken to screen the analgesic and anti-inflammatory activity of the various extracts of flowers of *Aerva lanata*.

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