

EVALUATION OF ANALGESIC AND CNS DEPRESSANT ACTIVITIES OF FLOWER EXTRACTS OF *Spilanthes calva* D.C.

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The present study investigates the evaluation of analgesic and CNS depressant activities of methanol, ethyl acetate and pet-ether extracts of *Spilanthes calva* D.C. flower using acetic acid-induced writhing method and neuropharmacological experimental methods (phenobarbital-induced sleeping time and locomotor activity) respectively in mice. The results clearly revealed that methanolic extract exhibited significant analgesic as well as CNS depressant activities at the tested dose level, whereas, ethyl acetate and pet-ether extracts were found to possess comparatively less activity as compared to the standard drugs, aspirin and chlorpromazine respectively.

INTRODUCTION

Spilanthes calva D.C. (*Asteraceae*) is an important medicinal herb widely distributed throughout the Indian in moist places of the plains and lower hill regions. The Flowers of the *Spilanthes Calva* mature as long-peduncled, solitary or in terminal panicles. Flower heads are ovoid in shape and pale yellow or white in colour. *S. calva* has been reported in folk medicines in the treatment of inflammation, toothache, rheumatism, paralysis of the tongue, skin diseases and dysentery etc. The plant when boiled in water is used to treat dysentery. The decoction is also given as a diuretic and lithotriptic; and used as a bath for relieving rheumatism; and as a lotion for scabies and psoriasis. The pungent flower heads are chewed to relieve toothache and affections of the gums and throat, and paralysis of the tongue (<http://www.indianetzone.com>; Kawaree *et al.*, 2008).

Pharmacological investigations have demonstrated that *S. calva* possess diuretic activity, antioxidant activity, antimycotic activity, local anaesthetic activity and antimicrobial activity (Begum *et al.*, 2008). In the present investigation, the analgesic and CNS depressant (phenobarbital-induced sleeping and locomotor activity) activities of pet-ether, ethyl acetate, methanol extracts of *Spilanthes calva* D.C. flower were evaluated in different experimental models.

MATERIAL AND METHODS

Collection of plant material

The *Spilanthes calva* D.C. flowers were collected from the Indranagar village of Agartala,

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