

Psychotropic Activity of *Sphaeranthus indicus* Linn. In Experimental Animals

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ABSTRACT

Sphaeranthus indicus Linn. (Asteraceae) is a branched herb with purple color flowers, distributed in wet places. The present study evaluated the neuropharmacological effects of the hydroalcoholic extract of *S. indicus* (SIE) in rats and mice. Effect of SIE (100, 200 and 500 mg/kg, p.o.) on spontaneous motor activity, pentobarbital-induced sleeping time, motor coordination, exploratory behaviour and apomorphine-induced stereotypy were investigated in mice. SIE (100, 200 and 500 mg/kg, p.o.) induced catalepsy and effect of SIE on haloperidol induced catalepsy were studied in rats. The SIE showed significant reduction of spontaneous motor activity, exploratory behaviour and prolonged pentobarbital sleeping time in the mice. Neuroleptic potential of SIE was observed by the results in which SIE antagonized apomorphine-induced stereotypy in mice, produced catalepsy and potentiated haloperidol-induced catalepsy in rats. Further, SIE had no effect on motor-coordination as determined by the rota rod test. These results provide evidence that the hydroalcoholic extract of *Sphaeranthus indicus* may contain psychoactive substances that are sedative in nature with possible neuroleptic properties.

KEYWORDS

Apomorphine-induced stereotypic behaviour . Exploratory activity . Haloperidol-induced catalepsy . Pentobarbital sleep . *Sphaeranthus indicus* Linn . Spontaneous motor activity

REFERENCES