

Antianxiety Properties of Ingredient of PHYTOCEE®: *Ocimum sanctum*

OBJECTIVE

To evaluate the antianxiety properties of the ethanol leaf extract of *Ocimum sanctum* (OS)

MATERIALS AND METHODS

Swiss albino mice weighing 20–25g were used. Anxiety experiments viz. light dark test, elevated plus maze test, and holeboard test were performed using standardized protocols. For anxiety experiments, graded doses (50, 100, and 200 mg/kg, p.o.) of *Ocimum sanctum* extract were administered 1h prior to subjecting mice for light dark test. The dose identified as effective in the light dark model was considered as effective anxiolytic dose and used in other models of anxiety. Diazepam (DZP, 1.5 mg/kg, p.o.) was used as the standard anxiolytic drug. Further, the effect of Imipramine (IMP, 60 mg/kg, p.o.) in the light dark model of anxiety was also evaluated. In light dark test, the time spent in illuminated places was recorded for 5min. In elevated plus maze test, the time spent in enclosed and open arms were recorded for 5-min test. In holeboard test, the number of head-dipping was recorded. A head dip was scored if both eyes disappeared into the hole.

RESULTS

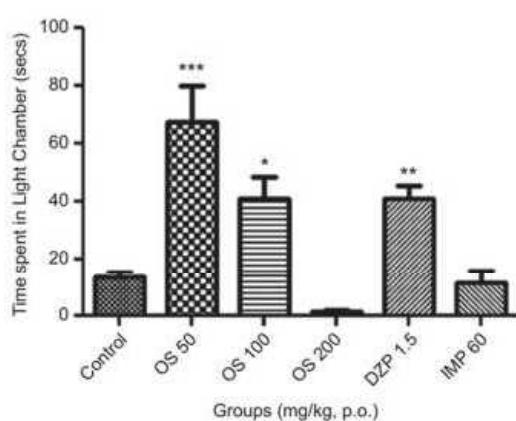


Figure 1 Bar diagram representing the time (in sec) spent in light chamber in light dark test. Results are represented as mean \pm SEM with $n=8$ in each group. * $P<0.05$, ** $P<0.01$, *** $P<0.001$ vs. control group.

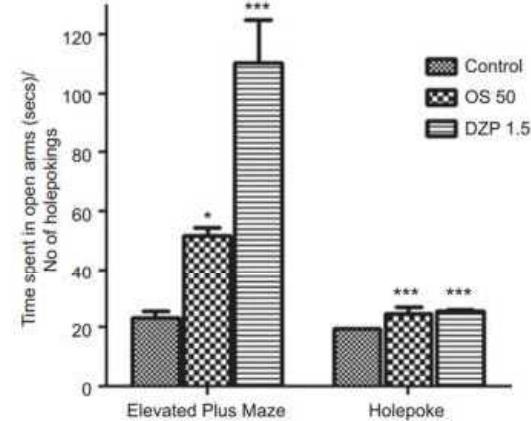


Figure 2 Bar diagram representing the time (in sec) spent in open arms (elevated plus maze)/no. of holepokings (holeboard test). Results are represented as mean \pm SEM with $n=8$ in each group. * $P<0.05$, *** $P<0.001$ vs. control group.

CONCLUSIONS

The study results demonstrated the reduction in the anxiety response at a dose of 50 mg/kg, body weight of *Ocimum sanctum* against light dark, elevated plus maze, and holeboard tests, signifying the antianxiety activity of *Ocimum sanctum*.

OUTCOME

Hence, *Ocimum sanctum* can be a potential therapeutic agent for anxiety related disorders.

Reference:

Chatterjee M, Verma P, Maurya R et al. Evaluation of ethanol leaf extract of *Ocimum sanctum* in experimental models of anxiety and depression. Pharm Biol. 2011;49(5):477-83.