



## A Study of the psychotropic effect of *Hedysarum alpinum* L. and *Garcinia mangostana* L. extracts

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### Abstract

The present research featured extracts of *Hedysarum alpinum* L. and *Garcinia mangostana* L. The extract of *Hedysarum alpinum* L. proved to have a more pronounced effect on the dopamine-induced changes in animal behavior in an active avoidance conditioning model as compared with such popular antipsychotic drug as haloperidol. The antipsychotic effect was evaluated based on active avoidance conditioning model in a two-compartment shuttle chamber. The anti-anxiety effect was evaluated in terms of passive avoidance conditioning. The side depressive effect of the extracts was evaluated based on the behavior of the animals during the Open Field test. The test animals treated with *Hedysarum alpinum* L. extract demonstrated no significant change in the orientation and investigative behavior. The animals in the control group were given haloperidol, which appeared to have a distinctive inhibitory effect. The test animals in the passive avoidance conditioning model demonstrated a lower level of cognitive impairment under the influence of the pericarp extract of *Garcinia mangostana* L. This result can be associated with its positive effect on the emotional status, which plays an important role in memory trace formation. Phenazepam, on the contrary, had a negative effect on the formation and reproducibility of conditioned reflexes of aversive factor avoidance. The test group treated with *Garcinia mangostana* L. extract also showed no significant change in the orientation and investigative behavior compared to the control group. Therefore, the extract of *Hedysarum alpinum* L. proved antipsychotic while causing no depressing effect. Thus, the extract of *Garcinia mangostana* L. possessed anti-anxiety activity and produced no depressing effect.

### Biography

Fedorova Yu. S. has completed her PhD at the age of 30 and currently working as an associate professor at Kemerovo State Medical University, Kemerovo, Russia. She has over 100 publications that have been cited over 150 times, and she has 7 patents for inventions, her publication H-index is 6.

### Publications

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