**Evaluation of aphrodisiac activity and toxicity profile of *Panax ginseng*-based polyherbal formulation on mice model**

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**Abstract**

**Background:** Sexual dysfunction is one of the prominent problems of many adult male all over the world. Allopathic medicines for the management of aphrodisiac problem have many limitations to use and also with serious adverse-effects including cardiovascular problems.

**Objectives:** The study was designed to investigate the aphrodisiac potential of *Panax ginseng*-Based Polyherbal Formulation (PBPF) on Swiss albino mice model.

**Methodology:** The different concentrations of PBPF (doses 300, 600, 900 and 1200 mg/kg) and vehicle (control) were administered orally to mice (n = 4 animals per group) for 30 days. Mating behavior parameters in male mice was monitored in first week and third four week of treatment pairing with receptive females. After termination of PBPF treatment, the mating performance was evaluated.

**Results:** The PBPF showed a significant increase in mating behavior as well as mating performance as compared to the vehicle control. The highest aphrodisiac activity was exhibited by PBPF at the dose of 1200 mg/kg. The LD50 of PBPF was higher than 5000 mg/kg which was evident from the toxicity study. The heart rate and rhythm of the treated mice were also found to be good even better than that of the control group.

**Conclusion:** Out study thus demonstrate the potential aphrodisiac activity of a novel polyherbal formulation based on Panax-ginseng (PBPF) with a wide range of safety profile. Further studies for clinical trials in humans are required for the use of the formulation (PBPF) in clinical purpose.