

## Acute Toxicity Studies of Total Alkaloids of Seeds of *Datura stramonium* in Female Rats: Effect on Liver and Kidney

**Authors :** Bouzidi Abdelouahab, Ghadjati Nadhra, Bettihi Sara, Mahdeb Nadia, Daamouche Z. El Youm

**Abstract :** The effects of acute administration of TOTAL alkaloids, the main active principle of *Datura stramonium*, with toxic properties, were studied in female Albino-Wistar rats. After acute intraperitoneal administration of dose 120 mg kg<sup>-1</sup> ( $\approx$ 1/3 DL50) of total alkaloids to the seeds of *D. stramonium*, there were no remarkable changes in general appearance and no deaths occurred in any experimental group. After 5 days a significant reduction was observed in total alkaloids of seeds. The Red Blood Cells (RBC), Hematocrit (HCT) and Hemoglobin (HGB) show significant changes in the treated groups. There were no statistical differences in Glutamic-pyruvic Transaminase (GPT), Alkaline Phosphatase (ALP), urea, glucose and total protein observed between groups. After 24 h Glutamic-Oxaloacetic Transaminase (GOT) and creatinine were significantly higher in the treated male rats than the control group histological examination of liver showed no histopathological changes.

**Keywords :** *datura stramonium*, rat, liver, kidney, alkaloids, toxicity

**Conference Title :** ICPPNP 2014 : International Conference on Pharmacognosy, Phytochemistry and Natural Products

**Conference Location :** Istanbul, Türkiye

**Conference Dates :** November 28-29, 2014