EFFECT OF HOLSTEIN FRIESIAN CROSS BRED COW URINE ON BIOCHEMICAL PROFILE OF RATS IN SUB ACUTE SAFETY STUDY

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ABSTRACT
An acute and subacute oral toxicity study of Holstein Friesian cross bred cow urine was conducted to determine the median lethal dose for both male and female rats separately. Five groups of male rats and five groups of female rats, each consisting of six rats were used for estimating LD50 value. The study was conducted as per the OECD guidelines. In the acute toxicity study in male and female rats there was no mortality even at the highest dose tested (5 ml/kg body weight) indicating that cow urine was practically non-toxic. In the repeated dose 28 day subacute oral toxicity study the serum samples were analyzed on day 0, 14 and 28 for different biochemical parameters such as AST, ALT, ALP, BUN, Creatinine, Bilirubin and STP concentration.

There were significant (P<0.01) changes in biochemical values as well as concentration of various biochemical parameters, but the significant values were under normal ranges. Study concludes that Holstein Friesian cross bred cow urine has no effect on biochemical parameters in rats.

KEY WORDS : cow urine, biochemical, acute, subacute toxicity, rats