Aloe vera decreases male rat fertility in vivo

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a b s t r a c t

The pharmacological actions of aloe vera, as studied in vitro or in animals, include anti inflammatory and anti-arthritic activity, and antibacterial and hypoglycaemic effects.. Aloe vera contains ۷۵ potentially active constituents: vitamins, enzymes, minerals, sugars, lignin, saponins, salicylic acids, and amino acids. The current work was undertaken to investigate the validity and/or invalidity of the aloe vera on enhancing the reproductive activity in male rat.

Materials and methods: Thirty three adult male rats were divided into three groups. Experimental groups received aloe vera orally for ٦۰ days in two different sublethal doses; ۱۰۰ mg/kg as high dose and ۵۰ mg/kg as low dose, whereas the control group received distilled water.

Results: The administration of the aloe vera result did not show any significant difference in the weight of the seminal vesicle, liver and kidney of the treated groups relative to the control ($p \geq ۰,۰۵$) . On the other hand, the results shown a significant decrease in the body weight of both the low and high dose-receiving groups in comparison to the control group.. The extract of this plant caused a decrease of the following in the two experimental groups, compared to the control group: sperm count, motility and normal morphology, pregnancy rate and diameter of seminiferous

tubules. Also, distortion of morphology of the seminiferous tubules and arrest in spermatogenesis was observed in the experimental groups.

Conclusions: From the present study, we can conclude that aloe vera acts as an anti-fertility agent .

Keywords:aloe vera-Seminiferous tubule--Sertoli cells-Testosterone