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Antispermatic, antiandrogenic activities of *Albizia lebbek* (L.) Benth bark extract in male albino rats.

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Source

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Abstract

Methanolic extract of *Albizia lebbek* bark when administered orally at the dose level of 100 mg/rat/day to male rats of proven fertility for 60 days did not cause any significant loss in their body weights but the weights of reproductive organs, i.e. testis, epididymides, seminal vesicle and ventral prostate were decreased in a significant manner when compared to controls. Sperm motility as well as sperm density were reduced significantly which resulted in reduction of male fertility by 100%. Marked decline in the germ cell population was noticed. Population of preleptotene, pachytene, secondary spermatocytes and step-19 spermatid were declined by 60.86%, 65.81%, 71.56% and 66.55%, respectively. Cross-sectional surface area of sertoli cells as well as the cells counts were found to be depleted significantly. Leydig cells nuclear area and number of mature Leydig cells were decreased by 60.03% and 51.56%, respectively. Serum testosterone levels showed significant reduction after *A. lebbek* extract feeding. Oral administration of the extract did not affect red blood cell (RBC) and white blood cell (WBC) count, haemoglobin, haematocrit and glucose in the blood and cholesterol, protein, triglyceride and phospholipid in the serum. In conclusion, *A. lebbek* bark extract administration arrests spermatogenesis in male rats without noticeable side effects.

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