The Asian Journal of Animal Science (December, 2010), Vol. 5 Issue 2 : 126-130 | *RESEARCH ARTICLE*

Effect of Alkaloids of *Achyranthes aspera* Linn. on fertility in male albino rats (*Rattus norvegicus)*

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ABSTRACT

Achyranthes aspera Linn. (Amaranthaceae), is an abundant indigenous medicinal herb found throughout India. Traditionally it is being used to treat variety of disorders in India and different parts of the world. Based on the literature available, it was confirmed that the crude extracts of the plant show potential antifertility effect on laboratory animals. Saponins alkaloids and flavonoids are the principal phytochemical constituents of the plant. The main objective of present study was to evaluate the effect of total alkaloids from *A. aspera* Linn. on fertility in male albino rats (*Rattus norvegicus*). A total of 24 proven fertile male albino rats were equally divided into four groups. The three treatment groups (T_1, T_2 and T_3) were orally administered with total alkaloids of *A. aspera* about 50, 100, 150mg/kg body weight/day, respectively for 30 consecutive days. Normal saline was orally given to control group rats for the same period. On day 31 all the animals were sacrificed and the reproductive organs were removed and their weights were recorded. Sperm and morphological studies were done to observe the effect of total alkaloids on fertility. Weights of testes and accessory glands and sperm counts were significantly decreased in all the treated animals on dose dependant manner in comparison with control group animals. Hematological and serum parameters were studied to see toxic side effects, if any, in treated animals. These haematological and serum parameters showed no significant changes in treated animals at the tested dose levels. Hence, it is concluded that the total alkaloidal fraction of *A. aspera* L. shows antifertility effect on male albino rats on dose dependent manner without any toxic side effects at the tested dose levels.

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