

ANTIFERTILITY EFFECTS OF THREE SPECIES OF *ADIANTUM* FERNS DECOCTION IN MALE ALBINO RATS

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ABSTRACT

The effects of decoction of three species of *Adiantum* ferns i.e. *Adiantum capillus-veneris*, *Adiantum incisum* and *Adiantum lunulatum* at dose level of 100, 250 and 500 mg/kg b.w. were investigated in male albino rats treated for 60 days. Reversibility studies were also carried to elucidate if any induced effects were transient. The body weight or the weight of reproductive organs were not affected, indicating that the extract did not promote weight gain through obesity or water retention. Biochemical parameters i.e. protein, scialic acid, cholesterol, acid phosphatase, Alkaline phosphatase, MDA, SGOT, SGPT, Blood sugar, Blood urea, WBC, RBC, haemoglobin, haematocrit etc. levels were within the normal range when compared with normal groups. These result suggested antifertility effects of the decoction of the ferns.

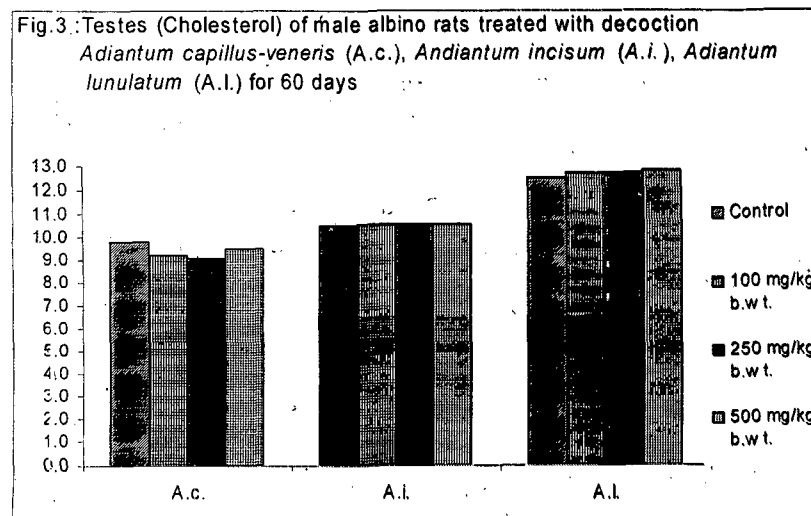
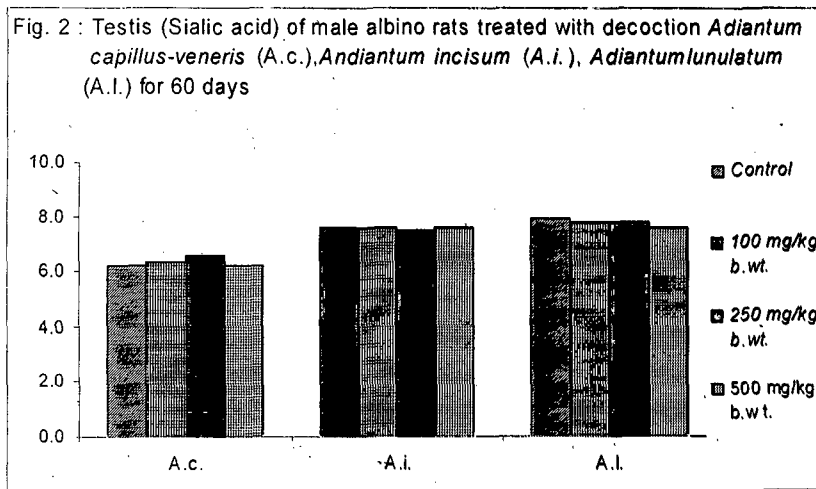
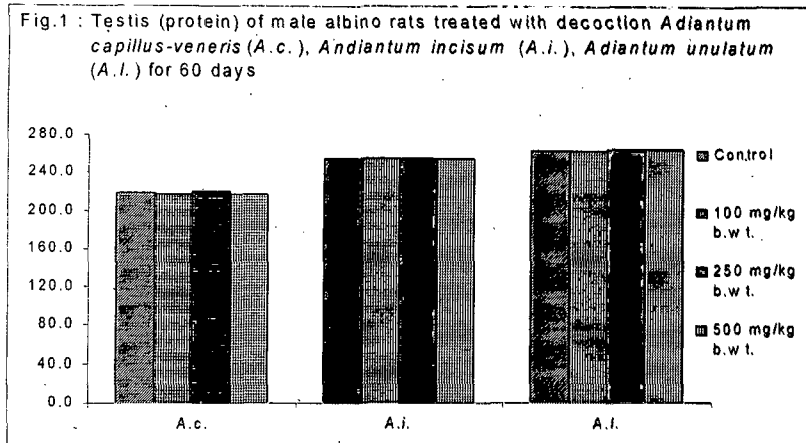
Keywords:- Antifertility effects, *Adiantum* decoction, spermatogenesis.

INTRODUCTION

Plant products have attracted the attention of many scientists as a primary source of naturally occurring fertility regulating agents. A large number of plants have been tested in different animal models throughout the world as possible fertility regulating agents. A very few plants have been studied for their possible male anti-fertility efficacy. Therefore, there existed tremendous scope for research in the area of male fertility regulation to develop a cheaper and safer herbal oral contraceptive 'pill'. This will not only lead to the development of a male 'pill' but also relieve the females of the burden of choosing and using a method of birth control. In the present work three *Adiantum* species have been selected for exploring their possible male antifertility activity using male albino rats.

MATERIALS AND METHODS

Animal Model: The studies were conducted on Swiss male albino rats. Fertility assessment studies were undertaken in Swiss albino female rats. They were



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