

ABSTRACT

PROTECTIVE EFFECT OF WHITE DRAGON FRUIT (*Hylocereus undatus*) JUICE TO MOTILITY AND QUANTITY OF SPERMATOZOA OF ADULT MALE WHITE RATS (*Rattus norvegicus*) STRAIN *Sprague dawley* INDUCED BY CYPROTERONE ACETATE

By

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Infertility is failure of a couple to get pregnant at least 12 months regular coitus without contraception. Infertility in men can be prevented by consuming fruits with antioxidant, like white dragon fruit. One of the strongest drugs which can induce infertility in men is cyproterone acetate. The purpose of this investigation was knowing the protective effect of white dragon fruit (*Hylocereus undatus*) juice to motility and quantity of spermatozoa of adult male white rats (*Rattus norvegicus*) strain *Sprague dawley* induced by cyproterone acetate.

The investigation is an experimental research done in September until November for 31 days of treatment using 24 adult male white rats that were divided into 4 groups, namely Control, P1 (dragon fruit for 24 days), P2 (cyproterone acetate for 7 days), and P3 (dragon fruit for 24 days then cyproterone acetate for 7 days).

The results showed that percentage of sperm motility in K: $57,99 \pm 8,36\%$; P1: $90,33 \pm 10,88\%$; P2: $57,33 \pm 31,32\%$; P3: $77,00 \pm 11,44\%$ (P1 is the highest), and sperm quantity in K: $44,40 \pm 10,04$ million/ml; P1: $70,80 \pm 25,95$ million/ml; P2: $48,58 \pm 23,58$ million/ml; P3: $29,40 \pm 18,96$ million/ml. The conclusion of this investigation is white dragon fruits can protect the motility but not the quantity of spermatozoa of adult male white rats which are induced by cyproterone acetate.

Key words: cyproterone acetate, sperm motility, sperm quantity, white dragon fruit (*Hylocereus undatus*).