

**THE EFFECT OF WATERMELON'S RIND (*Citrullus lanatus*)
ON THE MOTILITY AND VIABILITY OF RAT'S SPERM
(*Rattus norvegicus*) EXPOSED TO HEAT**

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ABSTRACT

High temperatures lead to oxidative stress which can decrease the quality of spermatozoa. Watermelon's rind have an ability for antioxidants effect that can reduce sperm's damages that results by role explanation of free radicals. This study aimed to determine the effect of extract of watermelon's rind on the motility and viability of sperm on male rat exposed to heat. This experiments use rat as animals experiment with five treatments and four repetitions. Five treatments are: P0: without exposed to 40°C of temperature and without treatment by extract watermelon's rind, P1: was exposed to 40°C of temperature and without treatment by extract watermelon's rind, P2: was exposed to 40°C of temperature and treatments by extract watermelon's rind dosage 20 mg/rat/day, P3: was exposed to 40°C of temperature and treatments by extract watermelon's rind dosage 40 mg/rat/day, and P4: was exposed to 40°C of temperature and treatments by extract watermelon's rind dosage 80 mg/rat/day. The treatment was done for 52 days. The results, P4 have the best effect that can be increase the motility and viability of rat's sperm (*Rattus norvegicus*) exposed to heat.

Key words : Antioxidant, exposure to heat, watermelon's rind, motility of sperm, viability of sperm.