Potential of Red Fruit (*Pandanus conoideus*) as Observed from Estrous Cycle and Caspase 9 Expression on Mice (*Mus musculus*) Exposed by Testosterone Propionate

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ABSTRACT

This research aims to demonstrate the potency of red fruit (*Pandanus conoideus*) on mice (*Mus musculus*) exposed by testosterone propionate as observed from estrous cycle and caspase 9 expression. This research uses a laboratory experimental method with completely randomized design. As many as 20 fertile mice were exposed by testosterone propionate 100mg/kgBW/day via sc for 14 days. 20 mice have been exposed by testosterone propionate were divided into 4 groups. P0 as control group without administration of red fruit, P1 treatment group given administration of 100mg/kgBW/day via peroral for 14 days, P2 treatment group given administration of 200/kgBW/day via peroral for 14 days and P3 treatment group given administration of 300/kgBW/day via peroral for 14 days. Swab vagina were collected in the day 5, 10 and 15 administration of red fruit.

The result of estrous cycle in swab vagina day 5 administration of red fruit showed no significant differences between groups. Swab vagina day 10 and 15 administration of red fruit were significantly difference between groups. The result of the caspase 9 expression readings showed that P0 were significantly difference than treatment groups, P1 were significantly difference than others treatment groups and between P2 and P3 showed no significant difference. Result of this research indicate that red fruit (*Pandanus conoideus*) had potency to fixed estrous cycle and decreased expression of caspase 9 in mice (*Mus musculus*) exposed by testosterone propionate.

Keywords: Red fruit (*Pandanus conoideus*), testosterone propionate, estrous cycle, caspase 9