

EFFECT OF PEEL WATER FRACTION OF *Citrus nobilis Lour* TO MICE SPERMATOZOA PLASM MEMBRANE INTERGRITY

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ABSTRACT

The objective of this research were to know the effect of peel water fraction of *Citrus nobilis Lour* to the intergrity of the mice sperm plasma membrane by using the *Hypo-Osmotic Swelling Test* (HOST). Twenty four male mices age 6 months and have body weight 30 grams was divided into four groups control group (P0) 6 mices treated with Aquadest, treatment group 1 (P1) 6 mices treated with water fraction dosage 40 mg/kgBB, treatment group 2 (P2) 6 mices treated with water fraction dosage 60 mg/kgBB, treatment group 3 (P3) 6 mices treated with water fraction dosage 80 mg/kgBB. Each group got the treatment during 1 time of spermatogenesis cycle that is 35 days. The result of the research showed that the percentage of the sperm plasma membrane wholeness from the highest after test by Hypo-osmotic Swelling Test (HOST) were P0, P1, P2, and the lowest was P3. In conclusion, the effect of the peel water fraction of *Citrus nobilis Lour* can decrease the intergrity of the mice (*Mus musculus*) sperm palsma membrane.

Keywords: Spermatozoa, Integritiy membrane, *Citrus nobilis Lour*