

**VARIOUS CONCENTRATES OF TEA SEEDS SAPONINE (*Camellia spp*)  
ON VIABILITY SPERM OF FH BULL (FRIESIAN HOLSTEIN)  
BY *IN VITRO***

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**ABSTRACT**

This research due to conclude the sperm viability after given various concentration of tea seeds saponine (*Camellia spp*). The experiment used fresh semen of bull in BBIB Singosari. Before treatment, bull semen were examined by macroscopy and microscopy. Tea seed saponine were squeezed by physiological NaCl. The treatments contained Hank's solution as negative control (P1), tea seed saponine within concentration 0,01% (P2), 0,02% (P3), 0,03% (P4), 0,04% (P5), 0,05% (P6) and nonoxynol-9 as positive control (P7). After given treatments, each of them were examined the motility, life potential and sperm membrane integrity at 0 minute by using microscope. The sperm life potential examinations were carried out by nigrosin-eosin and for sperm membrane integrity used *hypo osmotic swelling* solution. The results of experiment were analyzed by Anova and continued with Duncan's multiple range test if the significant differences were found out. The motility, viability and sperm membrane integrity started to decrease at 0,01% concentration of tea seed saponine. The most effective treatment reducing sperm quality occurred at 0,03% concentration that insignificantly difference with Nonoxynol-9 (positive control).

*Key words* : *Camellia spp*, tea seed saponine, sperm viability, nonoxynol-9

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