

**EFFECT OF PUMPKIN JUICE (*Cucurbita moschata*) ADDITION IN
DILUTER ON SPERM VIABILITY AND MOTILITY OF
SIMMENTAL BULL *POST-THAWING***

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ABSTRACT

The aim of this study was to determine the effect of pumpkin juice (*Cucurbita moschata*) addition in diluter on motility and viability of simmental spermatozoa post-thawing. This study used semen from healthy bull with normal libido. Each sample was divided into five group of treatments; (P0-) diluter only, (P0+) diluter mixed with aquadest, (P1) diluter mixed with pumpkin juice 10%, (P2) diluter mixed with pumpkin juice 20%, and (P3) diluter mixed with pumpkin juice 30%. All of treatments were processed into frozen semen then followed by evaluation of sperm motility and viability post-thawing. Data were analyzed using ANOVA and continued by Duncan test. The results showed that addition of pumpkin juice in diluter can improve sperm motility and viability, there were significant differences ($P < 0.05$) between groups. The mean and deviation results of P3 showed the highest rate in maintaining sperm motility and viability among all of treatments, which were 53.3 ± 5.2 and 61.7 ± 5.2 respectively. It can be concluded that addition of pumpkin juice at concentration of 30% is effective in maintaining sperm motility and viability of simmental bull post-thawing.

Keyword: pumpkin juice, diluter, simmental, motility, viability, post-thawing