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

Denny Wahyu Dian Saputra

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