

The Post Thawing Quality of Boer Goat Semen after Freezing by Mr. Frosty System Using Commercial Diluter

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Abstract : The success rate of Artificial Insemination (AI) application, particularly in the field at the farmer level is highly dependent on the quality of the sperms one post thawing. The objective of this research was to determine the effect of freezing method (-10C/ minute) using Mr. Frosty system with commercial diluents on the post-thawing quality of Boer goat semen. Method use is experimental design with the completely randomized design (CRD) with 4 treatments of commercial diluter percentage (v/v). Freezing semen was cryopreserved in 2 main final temperatures of -45 oC (Freezer) and -196 oC (liquid nitrogen). Result showed that different commercial diluter is influenced on viability motility and abnormalities of Boer semen. Pre-freezing qualities of viability, motilities and abnormalities was 88.67+4.16 %, 66.33 +1.53 % and 4.67+ 0.57 % respectively. Meanwhile, post-thawing qualities is considered as good as standard qualities at least more than 40 % (51.0+6.5%). The percentage of commercial diluents were influenced highly significant ($P<0.01$). The best diluents ration is 1:4 (v/v) for both final sperms stocked. However freezing sperm conserved in -196 oC is better than -45 oC (i.e. motility 39.3.94 % vs. 51.0 + 6.5 %). It was concluded that Mr. frosty system was considered as the feasible method for freezing semen in the reason for practical purposes.

Keywords : sperm quality, goat, viability, diluteR

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