

RESEARCH ON RAM SPERM FREEZING

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Abstract

The aim of the research was to perfect the ram sperm freezing protocols and develop the dilution medium for cryopreservation. The research was carried out on ram sperm, collected with the help of the artificial vagina. Ejaculates with a mobility of no less than 70% and a concentration of spermatozoa in the ejaculate of 2.5 billion/ml were taken for processing. Dilution medium consisting of sucrose, sodium citrate and egg yolk was used to dilute the semen. As an additional component in the composition of the environment, the preparation MP was introduced in a concentration from 0.1 to 1.0%/v. Post-thaw motility, spermatozoa with rectilinear movements, spermatozoa abnormalities, and spermatozoa with damaged acrosome were assessed. The results of the research demonstrated that the introduction in the dilution medium of the MP preparation in a concentration of 0.5-0.7% as an additional component allowed the mobility to be maintained at the level of 57% and the number of spermatozoa with rectilinear movements of 26-27 % after thawing, or 3.8% higher compared to the control group after thawing, it also allowed to decrease the percentage of spermatozoa with abnormalities by 2.9% and spermatozoa with damaged acrosome by 2%.

Key words: Ram, Sperm, Diluent, Mobility, Concentration, Preparation, Freezing