

CRYOPRESERVATION OF BOAR SPERM

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At present, it is recognized that the most effective method of reproduction of farm animals is their artificial insemination. That is why in recent years, especially after the development of the methods of conserving the semen in different species of animals, a series of scientific works have been published in this field. An essential scientific contribution in solving the problems of reproduction and artificial insemination in farm animals were also many scientists in the field. As a result, different medium for diluting sperm, conservation technologies and equipment for inoculation of preserved semen were developed.

In pigs, due to the biological specificity of boar sperm, the artificial insemination of sows with sperm preserved by refrigeration and freezing, there are still some controversial and still unresolved issues on a global and national level. Among them, we should mention the low level of the fecundity percentage of the sperm preserved by refrigeration or freezing, the variability of the physiological indices of the male sperm depending on the factors of the environment, age and the technologies of growth and exploitation.

The biological material used is sperm collected from boars. Harvesting was carried out by the manual method. Sperm with a mobility of not less than 75% and a concentration of 0.2 billion/ml were taken for processing. The CL preparation was introduced into the composition of the LGJ medium in a concentration of 0.6%. The packaging was carried out in the form of pastes (granules) of 0.2 ml in liquid nitrogen (-196 degrees). Sperm mobility was determined immediately after collection, after dilution, after refrigeration and after resuscitation, using the CEROS computerized program. Sperm viability was determined after resuscitation at a temperature of +37 degrees with intervals over every hour until the minimum percentage of mobile spermatozoa was obtained. Cryopreservation of pig sperm is still rarely used in the artificial insemination industry due to the low percentage of fecundity after resuscitation. The research carried out for the purpose of freezing the sperm of the male was meant to meet several goals, namely to establish the efficiency of the freezing by using several media intended for the dilution and freezing of the seminal material. The results of the research demonstrated that the mobility of spermatozoa after resuscitation was 41.0%, spermatozoa with progressive movements 21.3% and the viability after 4 hours of storage of spermatozoa at + 37 degrees C of 8.0+4.2, spermatozoa with progressive movements of 2.0+1.0 compared to the control group 25.5+1.7, 10.0+1.0, consecutively when the sperm was diluted with GHTS medium.

Keywords: boar, concentration, diluent, environment, freezing volume, mobility, preservation, refrigeration, spermatozoa.