## RESEARCH ON THE EFFICIENCY OF ARTIFICIAL INSEMINATION WITH FROZEN SEMEN OF MERINO PALAS SHEEP DURING THE BREEDING SEASON

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## Abstract

Artificial insemination is the most important reproductive biotechnology that helps to increase the genetic value of animals on a farm. It enables the rapid and massive diffusion of desired traits by using the semen of selected males with high productive potential. Correlating types of timing and oestrus induction in sheep with long-term semen preservation (cryopreservation) is the best way to increase productivity and ensure the dissemination of genetic progress. The aim of the present research was to identify the most effective treatment option for the application of artificial insemination in Merino Palas sheep, with frozen semen, in the normal breeding season. By using prostaglandins (Roflavol) for synchronizing females and identifying the optimal moment for performing artificial insemination, a calving rate of 32.14% was obtained with a prolificacy of 111.11%, and by applying the hormonal treatment Chronogest- Folligon to induce and synchronize oestrus with fixed point artificial insemination, the calving rate was 53.33% and the prolificacy was 131.25%. By artificial inseminating the ewes detected in natural oestrus with test rams' frozen semen, a calving rate of 31.67% and prolificacy of 110.53% was obtained.

Key words: ewes, oestrus synchronization, artificial insemination