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GELATIN PROTECTS RAM SEMEN STORED FOR 72 HOURS AT 5°C

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Highlights – small ruminant

- Acrosome integrity maintenance for up to 72 hours cooled at 5°C.
- Higher motility in the group gelatin 1.5% within 72h compared to the control group.
- Improved cell distribution in the extender due to its increased viscosity.

Abstract

Cooled ram sperm stored for prolonged intervals is not suitable for artificial insemination due to sperm damage. However, the addition of gelatin to rabbit and pig semen protected sperm viability during prolonged storage. The objective was to evaluate effects on sperm quality by adding gelatin to the extender for storage of ram sperm at 5°C. Eight rams were used 5 ejaculates per ram. Each ejaculate was divided and added to two extenders: E1 (whole milk 10%, 0.2 g D-glucose, 50 mg streptomycin and 100 mL of mili Q water); and E2 (E1 plus 1.5% gelatin). Sperm was stored at 5°C and evaluated at 0, 24, 48 and 72 h. During the first 48 h of storage, sperm motility and acrosome integrity were not significantly different between extenders, although at 72 h, sperm in E2 had better motility than sperm in E1 (51.9 ± 6.3 vs 31.1 ± 2.8 %, respectively, $P < 0.05$)

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