

Effects of different extenders and removal of seminal plasma on goat semen quality during storage at 4°C ⁽¹⁾

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Abstract

The purposes of this study were to evaluate the effects of extender and centrifugation and removal of seminal plasma on semen quality. The ejaculates were pooled and divided into two aliquots, the semen plasma of one aliquot was remained intact and diluted with for skimmed-milk based (SKM-NW) or egg yolk based extender (YTF-NW) and for the other aliquot the semen plasma was removed and then diluted with skimmed-milk based (SKM-W) or egg yolk based extender (YTF-W), respectively. In experiment 1, results showed that there were no differences in sperm motility, progressively motility and acrosome integrity among the SKM-NW and YTF-NW stored at 4°C and then incubated at 37°C after 0, 2, 4 and 6 h. However, there were significant ($p < 0.05$) difference on the sperm motility, progressively motility and acrosome integrity between the SKM-W and YTF-W stored at 4°C and then incubated at 37°C for 4 and 6 h ($P < 0.05$). In experiment 2, results showed that there were no differences in sperm motility, progressive motility and acrosome integrity between the SKM-NW and YTF-NW stored during 0, 1, 2 and 3 day at 4°C. However, the SKM-W treatment had lower ($P < 0.05$) sperm motility, progressive motility and acrosome integrity than that of the YTF-W during storage at 4°C for 3 days. In conclusion, SKM-W was not suitable for the storage of goat semen at 4°C.

Key words: Goat semen, Extenders, Refrigeration.

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