EFFECT OF BOVINE SERUM ALBUMIN ON DILUTED WITH BTS BOAR SEMEN QUALITY

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Summary. The aim of the present investigation was to study the effect on semen quality caused by the addition of bovine serum albumin (BSA) to boars semen extender BTS and to determine the optimal dose of the BSA. In preliminary investigation it was found that the spermatozoa dies in 12 to 24 hours after addition of 0.6g or 0.8g BSA to insemination dose. For our investigation the BSA amounts per insemination dose were chosen as follows: 0.1g (2 Gr), 0.2g (3 Gr), 0.4g (4 Gr), 0.5 (5 Gr) and control - 1 Gr (BTS diluted semen without BSA). Various factors and their interactions influencing diluted semen quality were analysed to determine their effect on the sperm motility, vigor rate, agglutination rate and a number of viable/nondamaged spermatozoa per ejaculation. The analysis revealed that addition of BSA and sperm storage time was significant for sperm motility, vigor rate and a number of viable/nondamaged spermatozoa per ejaculation dose significantly decreased the agglutination rate of spermatozoa and did not significantly affect sperm motility, vigor rate and a number of viable/nondamaged spermatozoa per ejaculation.

Keywords: boar, semen, semen-diluents, BTS, bovine serum albumin, motility, live/dead sperm