

Karsidete Teeranitayatarn 2011: Effect of Nuclear-COS (Chitooligosaccharide) Addition in Semen Extender on Boar Semen Quality. Master of Science (Agricultural Research and Development), Major Field: Agricultural Research and Development, Interdisciplinary Graduate Program. Thesis Advisor: Associate Professor Srisuwan Chomchai, M.S. 65 pages.

The experiment was conducted to investigate the effect of Nuclear-COS (Chitooligosaccharide) addition in semen extender on boar semen quality. Three Duroc boars average 2 years of age were allocated into 3 treatment groups, group 1 NSRTC4 extender (control group), group 2 NSRTC4 extender+ 2% of Nuclear-COS 1, group 3 NSRTC4 extender + 2% of Nuclear-COS 2. The final semen dilution contained $3,000 \times 10^6$ spermatozoa in the dose of 80 ml. in each treatment group. The diluted semen were examined the quality on the 1st, 3rd, 5th, 7th and 10th days after dilution. The results found that there were highly significant differences ($P < 0.01$) in pH and progressive movement of diluted semen between control and treatment groups while osmotic pressure and curve line movement had significant differences ($P < 0.05$). At various time of storage pH osmotic pressure motile sperm live sperm progressive movement VCL VSL VAP of diluted semen had highly significant differences ($P < 0.01$) while curve line movement had significant differences ($P < 0.05$).

Student's signature

Thesis Advisor's signature

____ / ____ / ____