

THE EFFECT OF ADDING PROPOLIS AS ANTIMICROBIAL IN EGG YOLK CITRATE DILUTER ON VIABILITY AND MOTILITY OF THE SHEEP'S SPERMATOZOA

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ABSTRACT

This research was aimed to find the effect of adding propolis in egg yolk citrate diluter on viability and motility of the sheep's spermatozoa. This research used five samples of semen from a two years male sheep. Each sample was divided into seven groups treatment; they were 1) control without adding propolis, *penicillin*, and *streptomycin*, 2) control with adding *penicillin* and *streptomycin*, 3) treatment of 1000×10^{-6} ml propolis in diluter, 4) treatment of 500×10^{-6} ml propolis in diluter, 5) treatment of 100×10^{-6} ml propolis in diluter, 6) treatment of 50×10^{-6} ml propolis in diluter, and 7) treatment of 10×10^{-6} ml propolis in diluter. Each group treatment was rested down about 30 minutes in room temperature then followed by spermatozoa viability and motility checking. Data taken was analyzed using ANOVA test followed by Tukey test. The result of research showed that adding propolis in egg yolk citrate diluter could maintain viability and motility of the sheep's spermatozoa while adding *penicillin* and *streptomycin* antibiotics didn't give any negative effects when they were administered at measurable dosage and condition.

Key words: Propolis, egg yolk citrate, viability, motility, spermatozoa.