EFFECT OF DIFERENT DIETARY LIPID SOUCES ON SEMEN QUALITY OF VILLAGE CHICKEN

G. S. D JAYAWARDHANA.

DEPARTMENT OF ANIMAL SCIENCE

FACULTY OF AGRICULTURE

EASTERN UNIVERSITY

SRI LANKA

2015

ABSTRACT

Reproductive performance of the poultry is directly linked with the production performance of the chicken where the management conditions are in the vital role. A sperm quality was determined by volume, concentration, motility and fertility. These parameters was influenced by dietary lipids. Therefore, this study was formulated on poultry to study the impacts of different dietary lipid sources on concentration, motility, viability and the weight gain of poultry. Study was conducted in Central poultry Research station, Located in Karadagolla in the Kandy District. Experiment was carried out using four treatments with different lipid sources sun flower oil, soya oil and coconut oil with five replicates. Processing and evaluation of the collected semen were conducted using ejaculation tubes to measure concentration, viability and motility. Semen parameters was statically analyzed using a one way ANOVA.

During the experimental period there wasn't any significant difference for viability and motility and concentration. At the nature, the average volume of semen per bird had not any significant at first week and third week. In the second week, volume of semen collected from the birds fed with sunflower oil(1.29 ± 0.03), soya oil (1.30 ± 0.06) and coconut oil (1.42 ± 0.05) showed the significant ($P<0.05$) difference and this was comparatively higher than the normal feed. In first week experimental diets had the direct impact on the weight gain of bird. Highest (2.30 ± 0.49) and lowest (0.20 ± 0.20) weight gains were observed in coconut oil and normal feed respectively at the end of four weeks. Birds fed with coconut oil showed the significantly ($P<0.05$) higher in weight gain and semen volume compare to soya oil, sunflower oil and normal feed.

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