

The Influence of Adding Fermented Shrimp Heads in the Diet as an Antioxidant Source on the Color, Mass Motility and Concentration of Spermatozoa in Bangkok Roosters

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ABSTRACT

This study aims to determine the effect of adding shrimp head hydrolysate and commercial astaxanthin in the feed on the quality of Bangkok chicken semen. One of the important components in improving sperm quality in Bangkok chickens is antioxidants. The research method used was an experimental design, before and after using shrimp head hydrolysate and commercial astaxanthin, and for data fulfillment, a completely randomized design (CRD) was employed. This study used six Bangkok chickens aged between 11 to 12 months and weighing between 2 to 3 kg. The treatment was administered 2 days before semen collection, namely P0 = regular feed (A594), P1 = regular feed (A594) + commercial astaxanthin, P2 = regular feed (A594) + shrimp head waste astaxanthin. Semen collection was performed in the morning after the chickens were given 25% of the regular feed. The observed parameters included spermatozoa color, spermatozoa motility, and spermatozoa concentration. The results of this study indicate that the addition of shrimp head hydrolysate and commercial astaxanthin in the feed did not have a significant effect on the color, motility, and concentration of spermatozoa. Nevertheless, overall, the semen obtained from all treatments, both treated and untreated, showed good and normal quality.

Keywords: *Bangkok Roosters, Shrimp Heads, Astaxanthin, Semen Quality*