The Effect of Adding Shrimp Head Hydrolysate in the Diet as an Antioxidant Source on the Viability, Mortality, and Abnormalities of Bangkok Chicken Spermatozoa After One Hour of Storage

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ABSTRACT

This study aims to determine the effect of adding shrimp head hydrolysate and commercial astaxanthin to the feed on the semen quality of Bangkok chickens. The components that play a role in improving sperm quality in Bangkok chickens are antioxidants. An experimental research method was used, with data collected before and after using shrimp head hydrolysate and commercial astaxanthin, and analyzed using a completely randomized design (CRD). Six Bangkok chickens, aged between 11 to 12 months with body weights ranging from 2 to 3 kg, were used. Treatments were administered two days before semen collection: P0 = regular feed (A594), P1 = regular feed (A594) + commercial astaxanthin, P2 = regular feed (A594) + shrimp head hydrolysate. Semen was collected in the morning after the chickens were given 25% of the regular feed. The parameters observed were sperm viability, sperm mortality, and sperm abnormalities. The results showed that the addition of shrimp head hydrolysate and commercial astaxanthin to the feed did not affect sperm viability, sperm mortality, or sperm abnormalities. However, overall, the semen obtained was of good and normal quality, regardless of whether the treatments were applied.

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