## The Effect of Providing Fermented Shrimp Heads in Rations as a Source of Antioxidants on pH, Odor, and Volume of Bangkok Chicken Sperm

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## ABSTRACT

This study aims to determine the effect of adding shrimp head fermentation on the macroscopic quality of pH, odor and volume of Bangkok chicken spermatozoa. The research materials include six Bangkok chickens, A594 type feed, commercial astaxanthin, shrimp head waste astaxanthin, 70% alcohol, 0.9% PHysiological Nacl solution (sperm diluent), 0.2% eosin solution, distilled water, ice cubes, and disinfectants. The treatments used include: P0 = regular feed (A594), P1 = regular feed (A594) + 0.060 grams of commercial astaxanthin), and P2 regular feed (A594)+ 0.60ppm shrimp waste astaxanthin). The research parameters observed include pH, odor, and volume of Bangkok chicken spermatozoa. Semen collection was carried out in the morning after the chickens were fed 25% regular feed. The pH level test was carried out by dripping semen liquid on pH paper and then observed using a pH indicator scale. Odor testing by smelling the aroma of the semen itself. Volume observation is calculated by looking at the amount of semen that has been collected using an Evendorf tube with a milliliter scale. The study concluded that the addition of commercial astaxanthin and shrimp head waste hydrolysate to the feed did not significantly affect the pH, odor, and volume of Bangkok chicken spermatozoa, but the resulting semen had normal quality.

*Keywords* : Bangkok chicken, astaxanthin, semen quality, shrimp head.