EVALUATION OF SPIRULINA PLATENSIS AS A FEED SUPPLEMENT FOR JAPANESE QUAIL: NUTRITIONAL EFFECTS ON GROWTH PERFORMANCE, EGG PRODUCTION, EGG QUALITY, BLOOD METABOLITES, SPERM-EGG PENETRATION AND FERTILITY

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Abstract:

This study aimed to evaluate the nutritional impacts of Spirulina platensis supplementation in the feed and drinking water of the Japanese quail during the growing and laying periods. One-hundred-twenty Japanese quails (14 days old) were housed in twelve battery cages, which were randomly corresponded to three treatments: a basal mash diet (BMD) (control group), a BMD plus 1% Spirulina platensis, and a BMD plus 0.25% of Spirulina platensis in the drinking water. The growth performance was evaluated between the 2nd and 6th week of age, then the egg production parameters and fertility rates were investigated during the following seven weeks. The Spirulina powder used in this study had 95.40% dry matter, 54.70% crude protein, 2.58% ether extract, and 1.58% crude fiber. During the growing period, the results showed that the birds provided with Spirulina powder at 1% in the feed (T1) and at 0.25% in the drinking water (T2) had higher (P

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