

SUBSTITUTION FERMENTED TAPIOCA BY-PRODUCT AND TOFU BY-PRODUCT ON FEED INTAKE, EGGS PRODUCTION AND FEED CONVERSION OF QUAIL (*Coturnix coturnix japonica*)

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ABSTRACT

The purpose of this research was to determine the substitution of fermented tapioca by-product and tofu by-product by *Rhizopus oligosporus* and added fishmeal to commercial feed influence on feed intake, eggs production and feed conversion of quail. This experimental were used 100 quail (*Coturnix coturnix japonica*). The quail randomized into 5 treatments with 4 replicates. The treatments P0 (100% commercial feed), P1 (5% substitution), P2 (10% substitution), and P3 (15% substitution). The results showed that substitution of fermented tapioca by-product and tofu by-product by *Rhizopus oligosporus* and added fishmeal to commercial feed has no significant difference ($p > 0.05$) in the feed intake and egg production until the treatment P3 with 15% substitution but there was significant difference ($p < 0.05$) in the feed conversion on P3 (15% substitution) influenced by the treatment. These results concluded that fermented of tapioca by-product and tofu by-product by *Rhizopus oligosporus* and added fishmeal substitution in commercial feed does not significantly affect on the feed intake, but significantly affect the substitution at P3 with levels of 15% on the egg production and feed conversion.

Key words: quail, tapioca by-product, tofu by-product, *Rhizopus oligosporus*, feed conversion.