

**SUBSTITUTION OF RUMEN CONTENT MEAL WHICH IS FERMENTED AND  
ADDED WITH SPIRULINA SP TOWARDS FEED CONSUMPTION, EGG  
PRODUCTION AND FEED CONVERSION IN  
LAYER CHICKEN**

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**ABSTRACT**

This research was performed to discover the effect of rumen content meal substitution fermented by probiotic and added with *Spirulina Sp.* on feed consumption, egg production and feed conversion of layer chicken. This research used 25 layer chickens *strain Isa Brown* aged 23 weeks old, divided into five groups and five repetitions. The dose of rumen content meal in P1 was 5%, P2 was 10%, and P3 was 15%, and added with 1% spirulina in each of those treatments. This research were conducted for 3 weeks, with a week of adaptation and two weeks of treatments. Data were analyzed by using Analysis of Variance (ANOVA), if analyze result showed significant different, than it will be continued by using Duncan Multiple Range Test. The research result showed that there were no significant result ( $p>0.05$ ) in feed consumption, significant difference ( $p<0.05$ ) in egg production, and there were also insignificant difference ( $p>0.05$ ) in feed conversion. It could be concluded that fermented rumen content meal substitution and added with *Spirulina Sp.* did not cause a negative effect in feed consumption, egg production, and feed conversion in layer chicken.

Keyword : Rumen content, *Spirulina sp*, Layer chicken, Performance of layer chicken.