

**PENGARUH PENAMBAHAN TEPUNG BIJI BUAH ATUNG
(*Parinarium glaberrimum* Hassk.) DALAM PAKAN
TERHADAP HISTOMORFOLOGI USUS HALUS
DAN BOBOT PANEN AYAM BROILER**

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung biji buah atung (*Parinarium glaberrimum* Hassk.; AT) dalam pakan terhadap histomorfologi usus halus dan bobot panen ayam broiler. Penelitian ini menggunakan 168 *day old chick* broiler strain New Lohmann MB 202 Platinum yang secara acak dikelompokkan ke dalam enam kelompok perlakuan selama 35 hari pemeliharaan. Setiap perlakuan terdiri dari empat ulangan dengan tujuh ekor ayam per kandang ulangan. Perlakuan pakan yang digunakan adalah pakan basal (AT-; kontrol negatif), pakan basal + 50 ppm antibiotik tetrasiklin (AT+; kontrol positif), pakan basal + 0,5% AT (AT0,5), pakan basal + 1,0% AT (AT1), pakan basal + 2,0% AT (AT2), dan pakan basal + 4,0% AT (AT4). Pakan dan air minum diberikan secara *ad libitum*. Parameter yang diamati meliputi tinggi vili, kedalaman kriptas, dan rasio tinggi vili dengan kedalaman kriptas *jejunum* serta bobot panen. Data yang diperoleh dianalisis statistik menggunakan rancangan acak lengkap pola searah berbasis nilai $P < 0,05$. Data dengan perbedaan yang nyata diuji lanjut menggunakan *Duncan's new multiple range test*. Hasil penelitian menunjukkan bahwa penambahan tepung biji buah atung dalam pakan tidak mempengaruhi bobot panen. Namun demikian, penambahan 1 sampai 4% tepung biji buah atung meningkatkan tinggi vili ($P < 0,05$) dan rasio tinggi vili dengan kedalaman kriptas ($P < 0,01$) serta menurunkan kedalaman kriptas ($P < 0,05$) *jejunum*. Dapat disimpulkan bahwa penambahan tepung biji buah atung dalam pakan meningkatkan dimensi sel-sel *absorptif* pada dinding *jejunum* ayam broiler strain New Lohmann MB 202 Platinum.

Kata kunci: Ayam broiler, Bobot panen, Histomorfologi *jejunum*, Tepung biji buah atung

THE EFFECTS OF ATUNG FRUIT SEED MEAL (*Parinarium glaberrimum* Hassk.) DIETARY SUPPLEMENTATIONS ON INTESTINAL HISTOMORPHOLOGY AND FINAL BODY WEIGHT OF BROILER CHICKENS

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ABSTRACT

This study was aimed to investigate the effects of atung fruit seed meal (*Parinarium glaberrimum* Hassk.; AT) dietary supplementations on intestinal histomorphology and final body weight of broiler chickens. This study used 168 day old broiler chicks (New Lohmann MB 202 Platinum) which were randomly divided into six treatment groups throughout a 35-days rearing period. Each treatment had four replicate pens with seven birds per replicate pen. The dietary treatments were: basal diet without any supplementation (AT-; negative control), basal diet + 50 ppm antibiotic tetracycline supplementation (AT+; positive control), basal diet + 0.5% AT (AT0.5), basal diet + 1.0% AT (AT1), basal diet + 2.0% AT (AT2), and basal diet + 4.0% AT (AT4). Feed and drinking water were provided for *ad libitum* consumption. Parameter data collected were villus height, crypt depth, and villus height to crypt depth ratio, and final body weight. The data obtained were analyzed statistically using completely randomized design in one arrangement based on the $P < 0.05$. Data with significant differences were further separated with Duncan's new multiple range test. Results showed that dietary supplementation of atung fruit seed meal did not affect final body weight. However, supplementations of 1 to 4% atung fruit seed meal were increased villus height ($P < 0.05$) and villus height to crypt depth ratio ($P < 0.01$), and reduced crypt depth ($P < 0.05$) on the wall of jejunum. It could be concluded that dietary supplementation of atung fruit seed meal improved the dimensions of absorptive cells on the jejunal wall of broiler chickens strain New Lohmann MB 202 Platinum.

Keywords: Atung fruit seed meal, Broiler chickens, Final body weight, Jejunal histomorphology