



**PENGARUH PENAMBAHAN EKSTRAK DAUN ASAM JAWA
(*Tamarindus indica L.*) DALAM AIR MINUM TERHADAP
PROFIL ORGAN DALAM AYAM BROILER**

Fadella Rosyidta
19/439370/PT/08005

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ekstrak daun asam jawa dalam air minum terhadap profil organ dalam ayam broiler. Penelitian ini menggunakan 80 ekor anak ayam broiler strain New Lohmann MB-202 *unsexed* yang dipelihara pada kandang sistem terbuka selama 35 hari. Setiap ayam dalam penelitian ini mendapatkan pakan basal yang sama, namun dengan salah satu dari perlakuan: air minum tanpa suplementasi aditif (F1; kontrol negatif), air minum + 100 ppm antibiotik *oxytetracycline* (F2; kontrol positif), air minum + 250 mg/l ekstrak daun asam jawa (F3), atau air minum + 500 mg/l ekstrak daun asam jawa (F4). Setiap kelompok perlakuan direplikasi 4 kali, masing-masing menggunakan 5 ekor ayam di setiap kandang replikasi. Variabel data yang diamati meliputi bobot hidup, bobot absolut relatif serta panjang absolut dan relatif bagian usus halus, dan bobot hati ayam broiler. Seluruh data dianalisis statistik menggunakan Rancangan Acak Lengkap Pola Searah berbasis nilai probabilitas kurang dari 0,05. Data dengan perbedaan nyata diuji lanjut menggunakan Duncan's new Multiple Range Test. Data hasil penelitian menunjukkan bahwa penambahan ekstrak daun asam jawa dalam air minum tidak mempengaruhi bobot hidup, panjang usus halus, bobot usus halus, dan bobot hati. Akan tetapi, penambahan 250 dan 500 mg/l ekstrak daun asam jawa meningkatkan panjang absolut ($P<0,01$), panjang relatif ($P<0,01$) ileum, serta bobot relatif ($P<0,05$) ileum. Dapat disimpulkan bahwa penambahan ekstrak daun asam jawa menstimulasi pertumbuhan segmen usus halus ayam broiler.

Kata kunci: Asam jawa, Ayam broiler, Ekstrak daun, Profil organ dalam



UNIVERSITAS
GADJAH MADA

PENGARUH PENAMBAHAN EKSTRAK DAUN ASAM JAWA (*Tamarindus indica L.*) DALAM AIR MINUM TERHADAP PROFIL ORGAN DALAM AYAM BROILER

Fadella Rosyidta, Ir. Nanung Danar Dono, S.Pt., M.P., Ph.D., IPM., ASEAN Eng.

Universitas Gadjah Mada, 2023 | Diunduh dari <http://etd.repository.ugm.ac.id/>

**THE EFFECT OF DRINKING WATER ADDITION WITH TAMARIND
(*Tamarindus indica L.*) LEAVES EXTRACT ON INTERNAL
ORGANS PROFILE IN BROILER CHICKENS**

Fadella Rosyidta
19/439370/PT/08005

ABSTRACT

Aim of this study was to observe the effect of drinking water addition with tamarind (*Tamarindus indica L.*) leaves extract on profile of internal organs of broiler chickens. This study was conducted using 80 unsexed New Lohmann MB-202 broiler chickens that were reared for 35 days in opened poultry house. Each bird in this study received a same basal diet, but with one of the following treatments: drinking water without any addition (F1; negative control), drinking water + 100 ppm antibiotic oxytetracycline (F2; positive control), drinking water + 250 mg/l tamarind leaf extract (F3), drinking water + 500 mg/l tamarind leaf extract (F4). Each treatment in this study was given 4 replications with 5 birds in each replicate cage. The variables observed in this study were: final weight, relative and absolute weight as well as relative and absolute of small intestinal segments (duodenum, jejunum, ileum), and liver weight. All data were analyzed statistically using Completely Randomized Design with one way arrangement, based on the value of $P<0.05$. Data with significant difference were further tested using Duncan's new Multiple Range Test. Result showed that drinking water addition with tamarind leaves extract did not affect live weight, small intestinal length and weight, as well as liver weight. However, addition of 250 and 500 mg/l tamarind leaf extract increased absolute length ($P<0.01$) and relative length ($P<0.01$) of ileal section as well as relative weight ($P<0.05$) of the ileum. It can be concluded that addition of tamarind leaves extract in drinking water stimulated the growth and development of small intestinal segment of broiler chickens.

Keywords: Broiler chicken, Internal organ profile, Leaf extract, Tamarind leaf