

SUPLEMENTASI TEPUNG DAUN *Chromolaena odorata* TERFERMENTASI  
TERHADAP PRODUKTIVITAS, KARKAS DAN NON-KARKAS, MORFOLOGI  
ORGAN PENCERNAAN DAN HISTOMORFOLOGI JEJUNUM AYAM BROILER

INTISARI

Yanuaris Sonlay  
23/513568/PPT/01279

Ayam broiler yang menghasilkan protein tinggi harus mengonsumsi pakan yang berkualitas. Tetapi harga pakan mahal dan dilarangnya penggunaan antibiotik kimiawi dalam meningkatkan produktivitas ayam broiler. Maka tujuan penelitian ini yakni untuk mengevaluasi pengaruh suplementasi tepung daun *Chromolaena odorata* terfermentasi terhadap produktivitas, bobot karkas dan non-karkas, bobot dan panjang morfologi organ pencernaan serta histomorfologi jejunum ayam broiler. Sebanyak 192 ekor ayam broiler strain *Indian River* dipelihara dari umur 11 sampai 35 hari dalam empat perlakuan dan enam ulangan dengan delapan ekor per ulangan. Ayam broiler diberi pakan perlakuan sebanyak 0%, 1%, 2% dan 3% untuk mengukur produktivitas yang berkaitan dengan konsumsi dan konversi pakan, penambahan bobot badan, mortalitas dan indeks performa. Sebanyak 24 ekor ayam broiler diambil secara acak dan disembelih untuk diukur bobot karkas dan non-karkas, bobot dan panjang morfologi organ pencernaan serta histomorfologi jejunumnya. Data yang diperoleh dianalisis secara statistik dan dilakukan uji Duncan bila terdapat perbedaan yang nyata. Suplementasi tepung daun *Chromolaena odorata* terfermentasi hingga 2% menurunkan konsumsi ( $P<0,05$ ) dan konversi pakan ( $P<0,01$ ), meningkatkan indeks performa ( $P<0,01$ ) tetapi tidak berpengaruh terhadap bobot karkas dan non-karkas; lebih dari 2% menurunkan bobot dan panjang morfologi organ pencernaan ( $P<0,05$ ); mulai 2% menurunkan panjang vili, lebar vili, luas vili dan ratio antara panjang vili dan kedalaman krypta, meningkatkan kedalaman krypta ( $P<0,01$ ). Kesimpulannya yakni suplementasi tepung daun *Chromolaena odorata* terfermentasi sebanyak 1% digunakan dalam ransum broiler sebagai pakan suplemen yang dapat meningkatkan produktivitas dan histomorfologi jejunum ayam broiler tanpa mempengaruhi berat karkas, berat dan panjang morfologi organ pencernaan ayam broiler.

Kata kunci: Daun *Chromolaena odorata*, fermentasi, produktivitas broiler, karkas, morfologi organ, histomorfologi jejunum

SUPPLEMENTATION OF FERMENTED *CHROMOLAENA ODORATA* LEAF MEAL ON PRODUCTIVITY, CARCASS AND NON-CARCASS, DIGESTIVE ORGAN MORPHOLOGY AND JEJUNUM HISTOMORPHOLOGY OF BROILER CHICKENS

**ABSTRACT**

Yanuaris Sonlay  
23/513568/PPT/01279

Broiler Chickens that produce the high protein that is favored by consumers must consume feed quality. But feed prices are expensive and the use of chemical antibiotics is prohibited in increasing broiler productivity. So the purpose of this study is to evaluate the effect of supplementation of fermented *Chromolaena odorata* leaf meal on productivity, carcass and non-carcass weight, digestive organ morphology weight and length as well as jejunum histomorphology of broiler chickens. A total of 192 Indian River strain broilers were reared from 11 to 35 days of age in four treatments and six replicates with eight birds per replicate. The broilers were fed the treatments at 0%, 1%, 2% and 3% to measure productivity related to feed consumption and conversion, body weight gain, mortality and performance index. A total of 24 broilers were taken randomly and slaughtered to measure carcass and non-carcass weight, weight and length of digestive organ morphology and jejunum histomorphology. The data obtained were analyzed statistically and Duncan's test was conducted if there were significant differences. Supplementation of fermented *Chromolaena odorata* leaf meal up to 2% level decreased feed consumption ( $P<0,05$ ) and feed conversion ( $P<0,01$ ), improving performance index ( $P<0,01$ ), but had no effect on carcass and non carcass weight; over 2% decreased organ morphology weight and length ( $P<0,05$ ); starting at 2% decreased villus length, villus width, villus area and the ratio between villus length and crypta depth, but increased crypta depth ( $P<0,01$ ). The conclusion is that supplementation of *Chromolaena odorata* leaf meal as much as 1% can be used in broiler rations as a feed supplement can increase productivity, jejunum histomorphology of broiler chickens without affecting the weight of carcass and the weight and length of digestive organ morphology of broiler chickens.

Keywords: *Chromolaena odorata* leaf meal, fermentation, broiler productivity, carcass, organ morphology, jejunum histomorphology



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**Suplementasi Tepung Daun Chromolaena odorata Terfermentasi terhadap Produktivitas, Karkas dan Non-karkas, Morfologi Organ Pencernaan dan Histomorfologi Jejunum Ayam Broiler**  
Yanuaris Sonlay, Prof. Dr. Ir. Ali Agus, DAA., DEA., IPU., ASEAN Eng.; Ir. Muhlisin, S.Pt., M.Agr., Ph.D., IPP  
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