

**PROFIL ORGAN PENCERNAAN AYAM BROILER STRAIN Cobb 500
YANG MENDAPATKAN MINYAK BUAH MERAH (*Pandanus
Conoideus L.*) TEREMULSI PADA AIR MINUMNYA**

Panji Samudera
22/498146/PT/09357

INTISARI

Penelitian ini bertujuan untuk mengetahui profil organ pencernaan ayam broiler Strain Cobb 500 yang mendapatkan minyak buah merah (*Pandanus conoideus L.*) teremulsi pada air minumnya. Penelitian ini menggunakan 168 ekor ayam yang dipelihara mulai dari umur 1 hari hingga berumur 35 hari. Penelitian dilakukan menggunakan 4 kelompok perlakuan, dengan masing-masing terdiri dari 6 replikasi, dengan 7 ekor ayam broiler per replikasi. Setiap ayam dalam penelitian ini mendapatkan salah satu dari 4 perlakuan: air minum tanpa penambahan aditif (P1), air minum + 1.5 ml/L emulsi minyak buah merah (P2), air minum + 3 ml/L emulsi minyak buah merah (P3), atau air minum + 4.5 ml/L emulsi minyak buah merah (P4). Data variabel yang diteliti adalah berat 3 segmen usus halus (duodenum, jejunum, dan ileum), berat liver, berat pankreas, dan berat sekum. Seluruh data berat organ pencernaan tersebut di atas diukur dalam dimensi berat relatif terhadap berat hidup. Data respons variabel yang didapatkan dianalisis statistik menggunakan Rancangan Acak Lengkap, berbasis nilai $P < 0,05$. Hasil penelitian menunjukkan bahwa penambahan emulsi minyak buah merah 1.5 hingga 4.5 ml/L tidak mempengaruhi berat relatif usus halus pada ketiga segmen (duodenum, jejunum, dan ileum), berat relatif liver, berat relatif pankreas, dan berat relatif sekum. Dapat disimpulkan bahwa penambahan emulsi minyak buah merah tidak mempengaruhi berat relatif organ pencernaan ayam broiler.

Kata kunci: Ayam broiler, Buah merah, Emulsi minyak, Fitobiotik, Profil organ pencernaan

**DIGESTIVE ORGAN PROFILE OF Cobb 500 BROILER CHICKENS
THAT RECEIVED EMULSIFIED RED FRUIT (*Pandanus
conoideus* L.) OIL IN THE DRINKING WATER**

Panji Samudera
22/498146/PT/09357

ABSTRACT

This study aimed to determine the digestive organ profile of Cobb 500 broiler chickens that received emulsified red fruit (*Pandanus conoideus* L.) oil in the drinking water. This study used 168 birds that were raised from day one to 35 days old. The study was conducted using 4 treatment groups, each treatment consisted of 6 replications, with 7 broiler chickens in each replicate pen. Each bird in this study received one of 4 treatments: drinking water without any additive (P1), drinking water + 1.5 ml/L red fruit oil emulsion (P2), drinking water + 3 ml/L red fruit oil emulsion (P3), or drinking water + 4.5 ml/L red fruit oil emulsion (P4). The variable data studied were the weights of 3 segments of the small intestine (duodenum, jejunum, and ileum), liver weight, pancreas weight, and cecum weight. All digestive organ weight data above were measured in relative weight to live weight. Response data for the variables were analyzed statistically using a Completely Randomized Design, based on a P value of <0.05. The results showed that the addition of 1.5 to 4.5 ml/L of red fruit oil emulsion did not affect relative weight of the small intestine in all three segments (duodenum, jejunum, and ileum), relative weight of liver, relative weight of the pancreas, and relative weight of the cecum. It can be concluded that the addition of red fruit oil emulsion did not affect relative weight of the digestive organs of broiler chickens.

Keywords: Broiler chickens, Digestive organ profile, Oil emulsion, Phytobiotics, Red fruit