

PENGARUH SUPLEMENTASI EKSTRAK CAIRAN EMPEDU SAPI PADA RANSUM BROILER *FINISHER* BERKADAR MINYAK TINGGI TERHADAP KECERNAAN LEMAK, PROFIL DARAH, PERTUMBUHAN, KARAKTERISTIK KARKAS, DAN KUALITAS DAGING AYAM BROILER

INTISARI

Noor Rizky Irmasari Hasibuan
22/510981/PPT/01269

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ekstrak empedu sapi dalam pakan ayam broiler dengan kandungan minyak tinggi terhadap pencernaan nutrisi, profil lemak darah, pertumbuhan, karakteristik karkas, dan kualitas daging pada ayam broiler. Pelaksanaan penelitian ini yaitu ekstraksi cairan empedu sapi, dilanjutkan pemeliharaan pada 240 ekor broiler dengan delapan perlakuan yaitu pakan basal dengan *Crude Palm Oil* (CPO) 3%, pakan dengan kandungan CPO 8%, pakan dengan kandungan CPO 8% yang ditambah dengan 200 mg, 400 mg, dan 600 mg asam empedu komersial, dan pakan dengan kandungan minyak tinggi (CPO 8%) yang ditambah dengan 200 mg, 400 mg, dan 600 mg ekstrak empedu sapi. Pemeliharaan dilakukan selama 32 hari dan ayam dipelihara di kandang metabolit. Setiap perlakuan terdiri dari enam *flock* dengan masing-masing *flock* terdiri dari lima ekor. Pemberian pakan dan minum dilakukan secara *ad libitum*. Selama pemeliharaan dilakukan pengambilan data pertumbuhan dan pada akhir pemeliharaan dua ekor ayam dari setiap *flock* disembelih untuk diambil darah, karkas, dan daging. Data yang diperoleh dari penelitian dianalisis variansi *One-way ANOVA* dengan uji lanjut kontras ortogonal yang dilengkapi dengan uji DMRT. Hasil penelitian menunjukkan bahwa suplementasi asam empedu dan ekstrak empedu sapi dapat meningkatkan pencernaan lemak broiler 70 – 80%. Suplementasi 600 mg ekstrak empedu sapi dan 200 mg asam empedu komersial cenderung meningkatkan pertumbuhan broiler dengan konsumsi pakan, pertambahan bobot badan, bobot badan akhir, dan konversi pakan berturut-turut yaitu 2726 g; 1904 g; 2021 g; 1,47 dan 2595 g; 1794 g; 1911 g; 1,47. Suplementasi asam empedu komersial dan suplementasi ekstrak empedu sapi menurunkan persentase lemak abdominal dan lemak *gizzard*, persentase lemak abdominal dosis 200, 400, 600 mg asam empedu komersial dan ekstrak empedu sapi berturut-turut yaitu 0,51%; 0,65%; 0,81% dan 0,55%; 0,51%; 0,63%. Selain itu, suplementasi ekstrak empedu sapi dan asam empedu komersial meningkatkan kualitas daging dengan meningkatkan kandungan protein daging serta menurunkan kandungan lemak kasar, dosis 200, 400, 600 mg berturut-turut yaitu 21,6%; 21,4%; 22,2%; 21,8%; 21,8%; 22,6% dan 1,48%; 1,38%; 1,45%; 1,20%; 1,58%; 1,50%. Suplementasi ekstrak empedu 600 mg juga cenderung meningkatkan *income over feed and chick cost* usaha peternakan ayam broiler. Kesimpulan dari penelitian ini adalah suplementasi 200 mg asam empedu komersial dan 600 mg ekstrak empedu sapi dapat meningkatkan pencernaan lemak dan pertumbuhan, menurunkan deposisi lemak dalam tubuh, dan meningkatkan kualitas daging.

Kata kunci: Asam empedu, broiler, ekstrak empedu sapi, minyak tinggi

THE EFFECT OF SUPPLEMENTATION OF BOVINE BILE
EXTRACT IN HIGH-OIL FINISHER BROILER DIETS ON
FAT DIGESTIBILITY, BLOOD PROFILE, GROWTH
PERFORMANCE, CARCASS CHARACTERISTICS,
AND MEAT QUALITY OF BROILERS

ABSTRACT

Noor Rizky Irmasari Hasibuan
22/510981/PPT/01269

This study aimed to determine the effects of supplementing bovine bile extract in high-oil broiler diets on nutrient digestibility, blood lipid profile, growth performance, carcass characteristics, and meat quality of broilers. The research was initiated by extracting bovine bile fluid, followed by the maintenance of 240 broilers with eight treatments: basal diet with 3% *Crude Palm Oil* (CPO), diets containing 8% CPO, diets containing 8% CPO supplemented with 200 mg, 400 mg, and 600 mg of commercial bile acid, and diets with high oil content (8% CPO) supplemented with 200 mg, 400 mg, and 600 mg of bovine bile extract. The maintenance period lasted for 32 days, and the broilers were housed in metabolic cages. Each treatment consisted of six flocks, with each flock containing five birds. Feed and water were provided *ad libitum*. During the maintenance period, growth data were collected, and at the end of the maintenance period, two birds from each flock were slaughtered for blood, carcass, and meat sampling. Data obtained from the study were analyzed using one-way ANOVA with a post-hoc orthogonal contrast test supplemented with DMRT. The results showed that supplementation with bile acid and bovine bile extract could increase broiler fat digestibility by 70 – 80%. Supplementation with 600 mg of bovine bile extract and 200 mg of commercial bile acid tended to improve broiler growth performance, with feed intake, final body weight, and feed conversion ratio being 2726 g; 1904 g; 2021 g; 1.47 and 2595 g; 1794 g; 1911 g; 1.47, respectively. Supplementation with commercial bile acid and bovine bile extract could reduce abdominal fat percentage and gizzard fat percentage, with abdominal fat percentage at doses of 200, 400, and 600 mg of commercial bile acid and bovine bile extract being 0.51%; 0.65%; 0.81% and 0.55%; 0.51%; 0.63%, respectively. In addition, supplementation with bovine bile extract and commercial bile acid improved meat quality by increasing meat protein content and decreasing crude fat content, with doses of 200, 400, and 600 mg being 21.6%; 21.4%; 22.2%; 21.8%; 21.8%; 22.6% and 1.48%; 1.38%; 1.45%; 1.20%; 1.58%; 1.50%, respectively. Supplementation with 600 mg of bile extract also tended to increase the IOFCC of broiler farming. The conclusion that can be drawn from this study is that supplementation with 200 mg of commercial bile acid and 600 mg of bovine bile extract can improve fat digestibility and growth, reduce fat deposition in the body, and improve meat quality.

Keywords: Bile acid, bovine bile extract, broiler, high oil