

The Effect of Ration with Antibiotics (Virginiamycin) and Temulawak (Curcuma Xanthorrhiza Roxb.) to Broiler Performances

L. Adriani¹, E Sujana², A Mushawwir³, A Maradona³

^{1,3}Laboratorium Fisiologi Ternak dan Biokimia Fakultas Peternakan Universitas Padjadjaran
email: andi_mh@unpad.ac.id

²Laboratorium Produksi Ternak Unggas Fakultas Peternakan Universitas Padjadjaran

ABSTRACT

The purpose of this research is to learn about the effect of Virginiamycin and Temulawak addition to performance. The research used 100 broiler chickens from Cobb CP 707 strain. The research used Completely Randomized Design (RAL-Rancangan Acak Lengkap) with four treatments. R0: Control; R1: ration with 15 ppm Virginiamycin; R2: ration with 9% Temulawak; R3: ration with 15 ppm Virginiamycin and 9% Temulawak. Duncan's Multiple Range Test is used to indicate the difference between treatments. Variable being observed is performance and income over feed cost. The results of the research showed that temulawak and virginiamycin addition does not provide significant difference on final body weight and carcass weight.

Key words: Virginiamycin, temulawak, carcass and final body weight, broilers

INTRODUCTION

The preventive deceases and enhancement of growth, feed intake and feed efficiency are importance factor. Most antibiotic is a feed additive requires alternative ways to stabilize the health and growth performance as antibiotic as a feed additive Virginiamycin as antibiotic used to growth promoter. Antibiotic is feed additive

Used virginiamycin in true composition, effected to restraining pathogen bacteria population in intestinal and decreasing negative effect of normal flora population that over in the gastrointestinal.

Combinations of vitamin and amino acid which is be able do together to prevent micro nutrient deficiency, increasing growing and not caused if used at all times. Despitefully of antibiotic, utilizing herbal be also a choice as feed additive.

Utilizing herbal contribute to increasing appetite and also growing. Herbal used occasionally is *Curcuma xanthorrhiza* (temulawak). Temulawak as far back is medicine concoction matter. Contents of temulawak consist of *curcumin*, colagoga, atsiri oil (volatile oil).

Curcumin is substance that protected of oxidation on erythrocyte and hemoglobin by 55Hnitrite compounds. *Curcumin* can be increasing hepatohlobin and haemopexin

protein synthesis in the liver, so lead which is bonding with haemoglobin be able to destruction in the liver. Kolagoga is substance that to increasing role of gall and decreasing body fat, so we get low fat meat and high meat composition.

Volatile oil also called essential oils, that formed at reticulum endoplasmic in the plan cells and providable by distillation. Volatile oil not effected on microorganism population, but positive effected on digestion enzymes. Now, volatile oils getting popular in the agriculture and animal livestock sector, because this oils used as digestion and metabolism promoters, and not giving rise to resistance in animal.

Based on description above, there is need to do research The Effect of Ration with Antibiotics (Virginiamycin) and Temulawak (*Curcuma xanthorrhiza roxb.*) to Broiler Performance.

MATERIALS AND METHODS

The experiment was carried out in the Experimental poultry unit of the Faculty of Animal Husbandry, Padjadaran University. One hundred, day old chick, Cobb broiler were chosen. The research used Completely Randomized Design (CRD). They were consisting four different treatments, with four replications in one treatment. Chicken were fed *ad libitum* with four ratios. The compositions of the ration were: