

## Effect of Garlic Extract on Growth Performance and Immune System of Broiler

**Authors :** Merry Muspita Dyah Utami

**Abstract :** The positive effect of garlic extract have been reported by many studies. It has antibiotal potential, antibacterial, antiviral, antiparasitic, antifungal, and growth promoting. Supplementary garlic for broilers could mediate in getting the bioactive compounds in garlic. The avian bursa must be essential for antibody-mediated immunity. The size of bursa of fabricius must be some sort of endocrine or lymphoid gland associated with growth and sexual development. The research was conducted to evaluate the effects of garlic extract on growth performance and immune system of broiler. Seventy-two day old chick were equally divided into four group, three replication and six chicks each. Group I was control without garlic extract, then garlic extraxt was administrated to the experimental group II, III and IV (2, 4, 6% in ration). The experiment was conducted for three weeks period from day old chick to 21 days. Body weight of broiler were determined at day 1 and 21, feed intake was determined at the same period, feed conversion ratio was calculated accordingly. At 21 day age, four birds per replicate were slaughtered , bursa was collected, weight and calculated as a percentage of live body weight. Mortality was recorded as it occurred and was used to ajust the total number of broiler to determine the total feed intake and feed conversion rasio. Data were expressed as the mean was compare by one way analysis of variance (Anova) follow by Duncan Test, which used to identify differences between groups. A value of  $P < 0.05$  was accepted as signficance. The body weight, feed conversion rasio, and the weight of bursa of fabricius showed a significant differences, but feed consumption and the percentage of bursa of live body weight were not significantly different ( $P > 0.05$ ) influenced by dietary treatments. The results of this research, garlic extract has a potential role as natural growth promoter and immunomodulatory system in broiler.

**Keywords :** garlic extract, growth, immunity, broiler

**Conference Title :** ICAFAS 2015 : International Conference on Agricultural, Food and Animal Sciences

**Conference Location :** Zurich, Switzerland

**Conference Dates :** July 29-30, 2015