

Abstract

This study was conducted to investigate the effect of different levels of eucalyptus (*Eucalyptus globules*) leaf powder on performance, carcass characteristics and immune response of broiler chicks. A total of 240 day old broiler chicks (Ross-308) with 4 treatments and 4 replications (12 birds per replicate) were used. Experimental treatments were a diet with no supplement (control) and treatments of 1, 2, 3 and 4 containing 0.2%, 0.4%, 0.6% and 1 percent of eucalyptus leaf powder, respectively. Results indicated that experimental treatments had no effect on body weight, daily weight gain, daily feed intake and feed conversion ratio ($P > 0.05$). However, all of experimental groups numerically improved Body weight, daily weight gain and feed conversion ratio compared with control group. There were no significant difference between treatments in carcass characteristics and relative weight of immune organs (spleen, bursa of fabricius and thymus) at 42 days of age. Birds received 0.4% eucalyptus leaf powder had highest antibody concentration versus sheep red blood cells (SRBC) and had significant difference than control treatment ($P < 0.05$). but, there were no significant difference between experimental groups with control group regarding SRBC at 27 days of age. At 37 days of age, treatments of 0.4%, 0.6% and 1% of eucalyptus leaf powder, had higher antibody concentration than control group ($P < 0.05$). It could be concluded from the results that usage of eucalyptus leaf powder in diet, caused improvement immune system and numerically improved performance of broiler chicks.

Key words: Eucalyptus, Performance, Immune system, Broiler chicken .



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Effect of different levels of Eucalyptus (Eucalyptus globules) leaf powder on performance, carcass characteristics and immune response of broiler chicks

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