

ABSTRAK

UJI EFEKTIVITAS *ECHINACEA PURPUREA (RADIX)* SEBAGAI IMUNOMODULATOR TERHADAP TITER ANTIBODI AI (*AVIAN INFLUENZA*) DAN ND (*NEWCASTLE DISEASE*) PADA BROILER JANTAN

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Penelitian ini bertujuan untuk mengetahui efektivitas *E. purpurea* sebagai imunomodulator terhadap titer antibodi AI dan ND pada broiler jantan, dan dilaksanakan pada Desember 2018–Januari 2019 di Laboratorium Lapang Terpadu, Fakultas Pertanian, Universitas Lampung. Analisis titer antibodi dilakukan di Laboratorium Virologi Balai Veteriner Lampung. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan empat perlakuan dan tiga ulangan yaitu air minum tanpa *E. purpurea* (P0), air minum dengan 3 mg/kg BB/hari *E. purpurea* (P1), air minum dengan 6 mg/kg BB/hari *E. purpurea* (P2), dan air minum dengan 9 mg/kg BB/hari *E. purpurea* (P3). *E. purpurea (Radix)* efektif dalam meningkatkan titer antibodi *Avian Influenza* dan tidak efektif dalam meningkatkan titer antibodi *Newcastle Disease* pada broiler jantan. Pemberian *E. purpurea* dengan dosis 6 mg/kg BB/hari dapat meningkatkan titer antibodi *Avian Influenza* pada broiler jantan.

Kata kunci: *E. purpurea*, Imunomodulator, Titer antibodi, *Avian Influenza*, *Newcastle Disease*, Broiler jantan

ABSTRACT

EFFECTIVENESS TEST OF *ECHINACEA PURPUREA (RADIX)* AS AN IMMUNOMODULATOR AGAINST AVIAN INFLUENZA (AI) AND NEWCASTLE DISEASE (ND) ANTIBODY TITER OF MALE BROILER

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These study intended to know the effectiveness of *E. purpurea* as an immunomodulator against AI and ND antibody titer in male broilers, and conducted in December 2018 until January 2019 at Lapang Terpadu Laboratory, Faculty of Agriculture, University of Lampung. Antibody titer analysis was done in Virology Laboratory of Balai Veteriner Lampung. These research used Completely Randomized Design (CRD) with four treatments and three repetitions, drinks without *E. purpurea* (P0), drinks with 3 mg/kg BW/day *E. purpurea* (P1), drinks with 6 mg/kg BW/day *E. purpurea* (P2), and drinks with 9 mg/kg BW/day *E. purpurea* (P3). Antibody titer of AI analyzed by the Haemagglutination Inhibition (HI) method of 60 samples showed results that were not significantly different (P > 0.05). *E. purpurea (Radix)* is effective to increase AI antibody titer and is not effective to increase ND antibody titer in male broiler. *E. purpurea (Radix)* at a dose of 6 mg/kg BW/day can increase AI antibody titer in male broiler.

Keywords: *E. purpurea*, Immunomodulator, Antibody titer, Avian Influenza, Newcastle Disease, Male broiler