

Pengaruh Pemberian Ekstrak Air Daun Bangunbangun (*Coleus amboinicus* Lour) Sebagai Imunostimulan Terhadap Imunitas Humoral, Berat Limpa Dan Berat Badan Tikus Putih (*Rattus norvegicus* Linn) Dengan Paparan Antigen BCG (*Bacillus Calmette Guerin*)

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian ekstrak air daun bangunbangun (*Coleus amboinicus* Lour) terhadap titer antibodi, berat limpa dan berat badan pada tikus putih (*Rattus norvegicus* Linn) dengan paparan antigen BCG (*Bacillus Calmette Guerin*). Penelitian eksperimental menggunakan rancangan acak lengkap. 24 ekor tikus putih jantan berumur 2 bulan dengan berat badan antara 150 – 230 g. digunakan dalam penelitian ini. Tikus dibagi ke dalam 6 kelompok yaitu kelompok kontrol diberi dengan aquadest (A₀), 19 g/kg BB EAB+ BCG (A₁), 31.5 g /kg BB EAB+ BCG (A₂), 19 g/kg BB EAB (A₃), 31.5 g /kg BB EAB (A₄) dan aquadest + BCG (A₅). EAB secara oral setiap hari selama 30 hari, sedangkan BCG secara intramuscular sebanyak 0,1 ml pada hari ke-14 dan hari ke-21 perlakuan. Pada hari ke 31 darah tikus diambil dengan cara dekapitasi leher dan serum dipisahkan untuk analisis titer antibodi secara hemaglutinasi. untuk memperoleh organ limpa, tikus dibedah, limpa diangkat, dipisahkan lalu diletakkan diatas kertas tisu, kemudian ditimbang menggunakan timbangan analitik. Data berat badan diperoleh dari penimbangan hari 31. Data yang diperoleh ditabulasi dan dianalisis dengan ANAVA dan dilanjut dengan uji BNT. Hasil penelitian menunjukkan bahwa ekstrak air daun bangunbangun meningkatkan titer antibodi dengan sangat signifikan, sedangkan berat limpa dan berat badan tidak berbeda nyata dengan kontrol.

Kata Kunci : Daun bangunbangun, Tikus Putih, Titer Antibodi, Limpa, BCG (*Bacillus Calmette Guerin*)

**The Effect of Aqueous Extract of Bangunbangun (*Coleus amboinicus* Lour)
Leaf As Immunostimulant On Humoral Immunity, Spleen And Body
Weight to the Rats (*Rattus norvegicus* Linn.) Exposed
BCG (*Bacillus Calmette Guerin*)**

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ABSTRACT

The present study was designed to evaluate the effect of extract of leaves bangunbangun (*Coleus amboinicus* Lour) on the antibody titer, weight of spleen and white rats body (*Rattus norvegicus* Linn) through antigen BCG (*Bacillus Calmette Guerin*). This experimental study was using a completely randomized design. 24 white male rats were 2 months years old with weight between 150-230 g, were used in this study. Rats were divided into 6 groups: control group fed with distilled water (A0), 19 g / kg EAB + BCG (A1), 31.5 g / kg BW EAB + BCG (A2), 19 g / kg EAB (A3), 31.5 g / kg EAB (A4) and distilled water + BCG (A5). EAB orally was given every day for 30 days, while BCG intramuscularly 0.1 ml on 14th day and 21st day of treatment. On the 31st day, rat blood collected by neck decapitation and the serum separated for analyzing antibody titers in hemagglutination. In getting the spleen, rat was dissected, the spleen was removed, separated and placed on tissue paper, then measuring using analytical balance. Weight data obtained from measuring on the 31st day. Data that was obtained was tabulated and analyzed by ANOVA and continued with LSD. The results study showed that extract of leaves bangun-bangun increased the antibody significantly, while the weight of spleen and body was not significantly different from the control.

Key Words : Leaves bangunbangun, White Rat, Antibody Titer Humoral, Spleen ,
BCG (*Bacillus Calmette Guerin*)