

ABSTRAK

AULIA MEYRA TRISTANIA SARI. 2024. UJI EFEKTIVITAS ANTIDIARE EKSTRAK ETANOL DAUN BAYAM DURI (*Amaranthus spinosus* L.) TERHADAP TIKUS PUTIH JANTAN DENGAN METODE TRANSIT INTESTINAL, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA. Dibimbing oleh Dr. apt. Opstaria Saptarini, M.Si. dan apt. Yane Dila Keswara, M.Sc.

Daun bayam duri mengandung metabolit sekunder diantaranya tanin, flavonoid, alkaloid, saponin, dan steroid/terpenoid yang berpotensi sebagai antidiare. Diare adalah kondisi dimana frekuensi defekasi melebihi normal dengan konsistensi yang encer. Tujuan penelitian ini adalah mengetahui efek dan dosis efektif ekstrak etanol daun bayam duri sebagai antidiare terhadap tikus putih jantan yang diinduksi *oleum ricini* dengan metode transit intestinal.

Penelitian ini diawali dengan determinasi tanaman dan dilanjutkan dengan pembuatan serbuk, lalu diekstraksi dengan metode maserasi menggunakan pelarut etanol 96%. Uji efektivitas antidiare menggunakan metode transit intestinal dan diinduksi dengan *oleum ricini* secara oral. Sebagai perlakuan digunakan kontrol positif (loperamid HCL), kontrol negatif (CMC-Na 1%) dan ekstrak etanol daun bayam duri dosis 200; 300; 600 (mg/200g bb tikus). Parameter yang diamati yaitu rasio jarak tempuh marker (norit) terhadap panjang usus keseluruhan, semakin kecil rasio maka semakin baik efek antidiare yang dihasilkan. Hasil dianalisa secara statistik menggunakan uji normalitas dan homogenitas dilanjutkan metode *One Way Anova* dan Uji Post Hoc Tukey.

Hasil uji menunjukkan bahwa dosis 300 dan 600 (mg/200g bb tikus) tidak berbeda signifikan dengan kelompok kontrol positif. Ekstrak etanol daun bayam duri dapat memberikan efek antidiare pada tikus putih jantan. Dosis 300 mg/200 g bb tikus merupakan dosis efektif yang dapat menurunkan nilai rasio jarak usus sebesar 41,74%.

Kata kunci : antidiare, daun bayam duri, transit intestinal.

ABSTRACT

AULIA MEYRA TRISTANIA SARI. 2024. ANTIDIARRHEA EFFECTIVENESS TEST OF ETHANOL EXTRACT OF SPINACH LEAVES (*Amaranthus spinosus* L.) AGAINST MALE WHITE RATS USING INTESTINAL TRANSIT METHOD, THESIS, BACHELOR OF PHARMACY, FACULTY OF PHARMACY, UNIVERSITAS SETIA BUDI, SURAKARTA. Supervised by Dr. apt. Opstaria Saptarini, M.Si. and apt. Yane Dila Keswara, M.Sc.

Spinach leaves contain secondary metabolites including tannins, flavonoids, alkaloids, saponins, and steroids/triterpenoids which have potential as antidiarrheals. Diarrhea is a condition where the frequency of defecation is more than normal with a watery consistency. The purpose of this study was to determine the effect and effective dose of spinach leaves extract as an antidiarrhea agent against male white rats induced by *oleum ricini* by the intestinal transit method.

This research began with plant determination and continued with powder making, then extracted using the maceration method using 96% ethanol solvent. The antidiarrheal effectiveness test used the intestinal transit method and was induced with *oleum ricini* orally. As treatments, positive control (Loperamide HCL), negative control (CMC-Na 1%) and ethanol extract of spinach leaves at a dose of 200 were used; 300; 600 (mg/200g rat body weight). The parameter observed was the ratio of the distance traveled by the marker (norit) to the total length of the intestine. The smaller the ratio, the better the antidiarrheal effect produced. The results were analyzed statistically using normality and homogeneity tests followed by the One Way Anova method and Tukey's Post Hoc Test.

The test results showed that doses of 300 and 600 (mg/200g rat body weight) were not significantly different from the positive control group. Ethanol extract of thorn spinach leaves can provide antidiarrheal effects in male white rats. A dose of 300 mg/200 g body weight for mice is an effective dose that can reduce the intestinal distance ratio value by 41,74%.

Key words : antidiarrhea, spinach leaves, intestinal transit.