

## ABSTRAK

**SRI LESTARI, 2022, UJI AKTIVITAS ANTIDIARE EKSTRAK ETANOLDAN FRAKSI AIR DAUN DELIMA (*Punica granatum L*) PADA MENCIT PUTIH JANTAN (*Mus musculus*) YANG DIINDUKSI *Oleum Ricini*, SKRIPSI, PROGRAM STUDI S1 FARMASI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA. Dibimbing oleh Dr. apt. Gunawan Pamudji Widodo, M.Si. dan apt. Fransiska Leviana, S.Farm., M.Sc.**

Diare ialah suatu penyakit bergejala khas yakni terkait dengan meningkatnya massa feses, fluiditas, serta frekuensi feses. Masyarakat saat ini masih sering menggunakan herbal sebagai alternatif dan terapi diare. Satu di antara sekian banyak herbal yang dapat dimanfaatkan sebagai obat diare ialah daun delima (*Punica granatum L*). Senyawa tanin yang terkandung dalam daun delima dapat mengurangi gerak peristaltik usus sehingga dapat meredakan diare. Penelitian yang terlaksana memiliki tujuan dalam rangka mencari tahu efek antidiare fraksi air serta ekstrak etanol daun delima terhadap mencit yang diinduksi *oleum ricini*.

Desain penelitian yang digunakan dalam penelitian ini yaitu eksperimental dengan menggunakan 30 ekor mencit dan dibagi menjadi 6 kelompok percobaan. Kelompok 1 diberikan Na-CMC 1% sebagai kontrol negatif, kelompok 2 diberi Loperamid HCl sebagai kontrol positif, Kelompok 3 diberi 8 mg/kgBB ekstrak daun delima, kelompok 4 diberi 16 mg/kgBB ekstrak daun delima, kelompok 5 diberi 32 mg/kgBB ekstrak daun delima, serta kelompok 6 diberi 21,09 mg/kgBB fraksi air daun delima yang diberikan secara oral. Dilakukan pengamatan waktu awal diare, frekuensi diare, bobot feses, dan juga lama terjadinya diare yang diamati selama 6 jam.

Hasil penelitian menunjukkan bahwa ekstrak etanol daun delima memiliki aktivitas sebagai antidiare. Dosis efektif dari ekstrak daun delima yaitu dosis 32 mg/kgBB. Fraksi air daun delima dosis 21,09 mg/kgBB juga dapat memberikan aktivitas antidiare.

Kata kunci : Antidiare, Daun delima, *Oleum ricini*, Mencit putih, Loperamid HCL

## ABSTRACT

**SRI LESTARI, 2022, ANTIDIARE ACTIVITY TEST OF ETHANOL EXTRACT AND AQUATIC FRACTION OF POMEGRANATE LEAF (*Punica granatum* L) IN MALE WHITE MICE (*Mus musculus*) INDUCED *Oleum Ricini*, THESIS, BACHELOR OF PHARMACY, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA. Supervised by apt. Dr. Gunawan Pamudji Widodo, M.Si. dan apt. Fransiska Leviana, S.Farm., M.Sc.**

Diarrhea is a disease with typical symptoms, which are associated with increased stool mass, fluidity, and stool frequency. Currently, people still often use herbs as an alternative and diarrhea therapy. One of the many herbs that can be used as a medicine for diarrhea is pomegranate leaves (*Punica granatum* L). The tannin compounds contained in pomegranate leaves can reduce intestinal peristalsis so that it can relieve diarrhea. The research that was carried out had the aim of finding out the antidiarrheal effect of the water fraction and ethanol extract of pomegranate leaves on mice induced by oleum ricini.

The research design used in this study was experimental using 30 mice and divided into 6 experimental groups. Group 1 was given 1% Na-CMC as a negative control, group 2 was given Loperamide HCl as a positive control, group 3 was given 8 mg/kgBW of pomegranate leaf extract, group 4 was given 16 mg/kgBW of pomegranate leaf extract, group 5 was given 32 mg/kgBW Pomegranate leaf extract, as well as group 6 were given 21.09 mg/kgBB water fraction of pomegranate leaves which was administered orally. The initial time of diarrhea was observed, the frequency of diarrhea, the weight of the stool, and also the duration of diarrhea which was observed for 6 hours.

The results showed that the ethanol extract of pomegranate leaves had antidiarrheal activity. The effective dose of pomegranate leaf extract is a dose of 32 mg/kgBB. The water fraction of pomegranate leaves at a dose of 21.09 mg/kgBW can also provide antidiarrheal activity.

**Key words :** Antidiarrhea, Pomegranate leaf, *Oleum ricini*, White mice, Loperamide HCL