INTISARI

AFANDI, M., 2016 AKTIVITAS ANTI-INFLAMASI EKSTRAK ETANOL DAUN PEPAYA (*Carica papaya* L.) PADA TIKUS PUTIH JANTAN GALUR WISTAR YANG DIINDUKSI KARAGENAN, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Inflamasi merupakan respon terhadap kerusakan jaringan akibat berbagai rangsangan yang merugikan baik rangsangan kimia maupun mekanis, infeksi serta benda asing seperti bakteri dan virus. Daun pepaya mengandung, saponin, flavonoid. Penelitian ini bertujuan untuk mengetahui efek anti-inflamasi ekstrak etanol daun pepaya pada tikus putih jantan galur wistar yang diinduksi karagenin dan mengetahui pengaruh dosis ekstrak daun pepaya terhadap efek anti-inflamasi.

Daun pepaya (*Carica papaya* L.) diekstraksi dengan metode maserasi menggunakan pelarut etanol 96%. Pengujian efek anti-inflamasi dilakukan pada 25 tikus dengan metode udem buatan pada telapak kaki tikus yang diinduksi dengan karagenin 1%. Hewan uji dibagi menjadi 5 kelompok, kelompok 1 sampai kelompok 5 (CMC-Na 1%, ekstrak daun pepaya 70 mg/200 g BB, 210 mg/200 g BB, 420 mg/200 g BB, dan Na-diklofenak) Pengukuran dilakukan setelah satu jam penyuntikan karagenan 1% pada telapak kaki tikus secara intraplantar. Volume udem diukur selama 5 jam dihitung nilai AUC dan % daya anti-inflamasi.

Hasil penelitian ekstrak daun pepaya memiliki aktivitas anti-inflamasi pada tikus jantan galur wistar. Dosis ekstrak etanol daun pepaya 70 mg/200 g BB, 210 mg/200 g BB, 420 mg/200 g BB, mempunyai % daya anti-inflamasi sebesar 21,68%, 38,61%, 49,50%. Dosis ekstrak etanol daun pepaya mempunyai aktivitas anti-inflamasi tidak berbeda terhadap natrium diklofenak. Dosis ekstrak etanol daun pepaya 420 mg/200 g BB mempunyai aktivitas anti-inflamasi paling efektif.

Kata kunci : anti-inflamasi, ekstrak daun pepaya, karagenin.

ABSTRACT

AFANDI, M, 2016. ANTI-INFLAMMATORY ACTIVITY OF PAPAYA (*Carica papaya L)* LEAF ETHANOL EXTRACT IN CARRAGENAN INDUCED ON WISTAR WHITE MALE RAT, UNDERGRADUATE THESIS, SETIA BUDI UNIVERSITY, SURAKARTA.

Inflammatory is a response toward damaged tissue due to several harm stimulations either chemicals or mechanics, and infection from bacteria or virus. *Carica papaya* leaf contais saponin and flavonoid. This research aimed at determining the anti-inflammatory effect of papaya ethanolic extract on Wister male rat that has been induced carrageenan and determining the doses variations of papaya leaf extract on the effect of anti-inflammation.

Papaya (*Carica papaya* L.)was extracted by maceration method using ethanol 96%. The anti-inflammatory effect testing was done using 25 rats with edema method on bottom part of foot that has been induced by carrageenan 1%. The animal model was divided by five groups one. Na CMC 1%, papaya leaf ethanolic extract of 70, 210, 420 mg/kg BW, and diclofenac sodium for group 1,2,3,4, and 5, respectively. The measurement was conducted after one hour of 1% of carrageenan induction on bottom part of foot intraplantarly. The results were measured during five hours and calculated AUC value and percentage of anti-inflammatory activity.

The result showed that papaya leaf ethanolic extract had anti-inflammatory activity on Wistar male rats. The doses of papaya leaf ethanolic extract of 70, 210, 420 mg/200 g BW had anti-inflammatory activity of 21,68%, 38,61%, and 49,03%, respectively. The doses of papaya leaf ethanolic extract of anti-inflammation activity closed to diclofenac sodium. The papaya dose of 420 mg/200 g BW had the most effective anti-inflamatory.

Keywords: anti-inflammation, papaya leaf ethanolic extract, carrageenan