INTISARI

Sambung nyawa (*Gynura procumbens.* (Lour) Merr) memiliki banyak manfaat bagi keberlangsungan hidup manusia khususnya dalam bidang pengobatan. Secara empiris, daun sambung nyawa digunakan untuk mengatasi kencing manis, kolesterol, darah tinggi, demam, radang tenggorokan, dan beragam penyakit lain dalam masyarakat. Ekstrak etanolik daun sambung nyawa mampu meningkatkan proliferasi sel B secara *in vitro* serta meningkatkan nilai indeks fagositosis makrofag secara *in vivo.*

Pada penelitian ini, dilakukan evaluasi potensi aktivitas imunomodulator fraksi larut etil asetat (FLEA) dan fraksi tak larut etil asetat (FTLEA) dari ekstrak etanolik daun sambung nyawa. Penelitian menggunakan parameter nilai kapasitas dan nilai indeks fagositosis makrofag. Sel makrofag diisolasi dari rongga peritoneum tikus. Konsentrasi FLEA, FTLEA, dan ekstrak etanolik daun sambung nyawa yang digunakan adalah 5 µg/mL, 10 µg/mL, 20 µg/mL, 40 µg/mL, 80 µg/mL, dan 160 µg/mL. Makrofag yang memfagositosis dan lateks yang terfagositosis diamati menggunakan *inverted microscope,* kemudian dihitung jumlah makrofag yang memfagositosis lateks dan jumlah lateks yang difagositosis makrofag sehingga diperoleh nilai kapasitas dan nilai indeks fagositosis makrofag. Hasil yang diperoleh akan dianalisis secara statistika menggunakan taraf kepercayaan 95%.

Hasil penelitian menunjukkan bahwa FLEA dan FTLEA terbukti berpengaruh terhadap peningkatan aktivitas makrofag dibanding kontrol dan ekstrak etanolik daun sambung nyawa. Aktivitas fagositosis makrofag tertinggi dihasilkan oleh pemberian FTLEA dengan konsentrasi 10 µg/mL.

Kata Kunci: Daun sambung nyawa, makrofag, imunomodulator, fraksi larut dan tidak larut etil asetat

ABSTRACT

Sambung nyawa (*Gynura procumbens.* (Lour) Merr) have many benefit for human survival, especially in the medicine field. Empirically, Sambung nyawa leaf can be use to treat diabetic, high cholesterol, high blood presure, fever, sore throat, and various other sickness in the society. Ethanolic extract of Sambung nyawa leaf can increase the proliferation of B cells in vitro and increase the value of macrophage phagocytosis index in vivo.

In this study, the evaluation has been done on potential immunomodulatory activity of ethyl acetate soluble fraction (FLEA) and ethyl acetate insoluble fraction (FTLEA) from ethanolic ethanolic extract of life. The study used the macrophage phagocytosis capacity value parameter and macrophage phagocytosis index value. Macrophage cells was isolated from mouse peritoneal cavities. The concentrations of FLEA, FTLEA, and the ethanolic extract of Sambung nyawa that used was 5 µg / mL, 10 µg / mL, 20 µg / mL, 40 µg / mL, 80 µg / mL, and 160 µg / mL. The phagocytic macophage and phagocytotic latex were observed using an inverted microscope, then the amount of macrophages that pgahocyted the latex and the amount of latex that phagocytosis by macrophage were calculated to obtain the value of macrophage phagocytosis capacity value and macrophage phagocytosis index value. The results that was obtained will be analyzed statistically using 95% confidence level.

The results showed that FLEA and FTLEA were proved to had an effect on the increase of macrophage activity compared to the control and ethanolic extract of sambung nyawa. The highest activity of macrophage phagocytosis was produced by the administration of FTLEA with concentration of 10 µg / mL.

Keywords: Sambung nyawa leaf, macrophage, immunomodulatory, the soluble fraction and the insoluble fraction of ethyl acetate