

ABSTRAK

Fitri Azura Br. Lubis, NIM. 4193220001 (2019). Identifikasi Metabolit Sekunder dan Uji Toksisitas Ekstrak Etanol Daun Andulpak (*Homalanthus populneus* (Geiseler) Pax)

Penelitian ini bertujuan untuk mengetahui senyawa metabolit sekunder dan mengetahui nilai *Lethal Concentration 50* (LC₅₀) ekstrak etanol daun andulpak (*Homalanthus populneus* (Geiseler) Pax). Identifikasi senyawa metabolit sekunder menggunakan GC-MS. Data hasil GC-MS berupa kromatogram, *retention time* (rt), % area, dan nama senyawa. Selanjutnya, nama senyawa di copy ke software *Pubchem* dan *way2drug* untuk mengetahui klasifikasi dan manfaat senyawa. Uji toksisitas dengan metode *Brine Shrimp Lethality Test* (BSLT) menggunakan hewan uji *Artemia* sp. Sebanyak 10 ekor larva *Artemia* sp. digunakan untuk masing-masing konsentrasi yang berbeda yaitu 5 ppm, 10 ppm, 15 ppm, 20 ppm, 25 ppm, 30 ppm, 35 ppm, 40 ppm, serta kontrol positif dan kontrol negatif sebanyak 3 kali pengulangan. Diamati selama 24 jam, setelah 24 jam data dianalisis menggunakan analisis probit melalui SPSS 25. Hasil menunjukkan terdapat 56 senyawa metabolit sekunder yang teridentifikasi dengan 4 senyawa sebagai kelimpahan terbesar yang terkandung didalam ekstrak etanol daun andulpak yaitu *Palmitic acid*, *Phytol*, *Methyl beta-D-glucopyranoside*, *beta-Sitosterol*, *.alpha.-Tocopherol*, dan *Linolenic acid*. Sedangkan nilai LC₅₀ ekstrak etanol daun andulpak (*Homalanthus populneus* (Geiseler) Pax) sebesar 10,740 ppm.

Kata kunci: Ekstrak Etanol Daun Andulpak (*Homalanthus populneus* (Geiseler) Pax), BSLT, *Lethal Concentration 50* (LC₅₀), GC-MS.



ABSTRACT

Fitri Azura Br. Lubis, NIM.4193220001 (2019), Secondary Metabolites Identification and Toxicity Test of Andulpak Leaf Ethanol Extract (*Homalanthus populneus* (Geiseler) Pax)

This research aims to determine secondary metabolite compounds and determine the Lethal Concentration 50 (LC50) value of the ethanol extract of andulpak (*Homalanthus populneus* (Geiseler) Pax) leaves. Identification of secondary metabolite compounds using GC-MS. GC-MS results data in the form of chromatogram, retention time (rt), % area, and compound name. Next, the name of the compound is copied into Pubchem and way2drug software to find out the classification and benefits of the compound. Toxicity test using the Brine Shrimp Lethality Test (BSLT) method using *Artemia* sp. A total of 10 *Artemia* sp larvae. used for each different concentration, namely 5 ppm, 10 ppm, 15 ppm, 20 ppm, 25 ppm, 30 ppm, 35 ppm, 40 ppm, as well as positive control and negative control for 3 repetitions. Observed for 24 hours, after 24 hours the data was analyzed using probit analysis via SPSS 25. The results showed that there were 56 secondary metabolite compounds identified with 4 compounds being the largest in abundance contained in the ethanol extract of andulpak leaves, namely Palmitic acid, Phytol, Methyl beta-D-glucopyranoside, beta-Sitosterol, .alpha.-Tocopherol, and Linolenic acid. Meanwhile, the LC50 value of the ethanol extract of andulpak leaves (*Homalanthus populneus* (Geiseler) Pax) was 10,740 ppm.

Keywords: Andulpak Leaf Ethanol Extract (*Homalanthus populneus* (Geiseler) Pax), BSLT, *Lethal Concentration 50* (LC₅₀), GC-MS.

