INTISARI

Daun tumbuhan tembelekan (*Lantana camara* L.) sering dimanfaatkan oleh masyarakat sebagai obat tradisional, salah satunya untuk mengobati pembengkakan/tumor, sebagai antiseptik dan antitoksik. Telah diketahui bahwa ekstrak etanol daun tumbuhan tembelekan memiliki efek toksik terhadap larva artemia akan tetapi belum ada laporan ilmiah mengenai efek paling toksik dari fraksi ekstrak etanol. Untuk mengetahui fraksi paling toksik tersebut dilakukan penelitian dengan menggunakan metode *Brine Shrimp Lethality Test* (BST), yang dinyatakan dengan nilai *Lethal Concentration* 50 (LC_{50}).

Penelitian ini merupakan eksperimental murni dengan rancangan *posttest only control group design*. Penelitian dilakukan dengan menggunakan ekstrak etanol dari daun tumbuhan tembelekan yang dibuat fraksi. Fraksi diperoleh dengan metode *Vaccum Coloumn Chromatography* (VCC). Hasil fraksinasi diperoleh 3 fraksi yaitu **F_2**, **F_3**, dan **F_4** yang kemudian diuji dengan metode BST. Sampel uji dan kontrol dibuat seri konsentrasi yaitu **F_2** (100; 178; 316,84; 563,97; 1003,87) µg/ml, **F_3** (5; 10,5; 22,05; 43,3; 97,2) µg/ml, dan **F_4** (10; 32; 102,4; 327,7; 1048,6) µg/ml. Kontrol menggunakan air laut buatan, replikasi sebanyak 5 kali. Jumlah larva *Artemia salina* Leach yang mati pada tiap konsentrasi dihitung setelah 24 jam perlakuan. Nilai LC_{50} dihitung dengan analisis probit. Fraksi dikatakan toksik apabila harga $LC_{50} \leq 1000$ µg/ml. Dari fraksi yang paling toksik dilakukan Kromatografi Lapis Tipis (KLT) untuk mengetahui profil bercak yang terkandung di dalamnya.

Hasil penelitian menunjukkan nilai LC_{50} dari **F_2** sebesar 508 µg/ml, **F_3** sebesar 23 µg/ml, dan **F_4** sebesar 101 µg/ml sehingga dapat dinyatakan bahwa **F_3** bersifat paling toksik. Gambaran profil bercak dari fraksi yang paling toksik dengan KLT menunjukkan bahwa bercak yang diduga menyebabkan kematian larva artemia adalah golongan terpenoid dengan Rf sebesar 0,3.

Kata kunci : Daun tumbuhan tembelekan (*Lantana camara* L.), *Vaccum Coloumn Chromatography* (VCC), Fraksi toksik, *Brine Shrimp Lethality Test* (BST), LC_{50}.

ABSTRACT

People often use Tembelekan leaf (*Lantana camara* L) as the traditional medicine to cure tumor, as antiseptic and also as an antitoxin. It has been known that the ethanol extract and chloroform extract of *Lantana camara* L has toxin effect to artemia larva but there is no scientific report about the most toxicity of fraction etanol extract. To know the toxicibility of that fraction, the research using *Brine Shrimp Lethality Test* (BST) method which was determined with LC_{50}.

This research was a pure experiment by applying the *posttest only control group design* and the etanol extract of tembelekan leaf -that was made into fraction- was used. To get the fraction, the *Vaccum Coloumn Chromatography* method that was applied. Three fractions to test by using BST method- those are $\mathbf{F_2}$, $\mathbf{F_3}$, $\mathbf{F_4}$, were gotten. The test and control sample were formed as concentration series-those were $\mathbf{F_2}$ (100; 178; 316,84; 563,97; 1003,87) µg/ml, $\mathbf{F_3}$ (5; 10,5; 22,05; 43,3; 97,2) µg/ml and $\mathbf{F_4}$ (10; 32; 102,4; 327,7; 1048,6) µg/ml. The control used the water with 5 replicate. The number of the dead Artemia Salina Leach on every concentration was counted after 24 hours. The percentage of LC_{50} was counted by using the probit analysis. Fraction was determined as toxin if the percentage of LC_{50} was ≤ 1000 µg/ml. To know the contents of the spotted profile, a thin layer chromatography was done to the most toxic fraction.

The result of the research showed that the LC_{50} percentage of $\mathbf{F_2}$ was 508 µg/ml, $\mathbf{F_3}$ was 23 µg/ml, and $\mathbf{F}_4$ was 101 µg/ml. So it could be said that $\mathbf{F_3}$ was the most toxic fraction. The description of spotted profile of the most toxic fraction by using a Thin Layer Chromatography showed that the spot that was estimated as the causing the artemia dead is terpenoid and had Rf of 0,3

Key words: *Lantana camara* L, *Vaccum Coloumn Chromatography* (VCC), *Brine Shrimp Lethality Test* (BST), LC_{50}, toxic fraction.