

INTISARI

Daun pepaya (*Carica papaya* L) dari famili *Caricaceae* merupakan salah satu jenis tanaman yang secara tradisional digunakan oleh masyarakat Indonesia untuk mengobati demam, malaria, disentri amuba, tidak nafsu makan, dan cacing keremi. Menurut Dalimartha (1999), daun pepaya dapat digunakan sebagai obat kanker. Untuk mengetahui efek toksik dari daun pepaya maka dilakukan penelitian ini yang bertujuan untuk mengetahui toksisitas akut ekstrak kloroform dan ekstrak metanol daun pepaya (*Carica papaya* L) terhadap *Artemia salina* Leach yang dinyatakan dalam LC_{50} dan untuk mengetahui kandungan golongan senyawa aktif daun pepaya.

Jenis penelitian yang dilakukan adalah eksperimental murni dengan rancangan eksperimental sederhana. Ekstrak kloroform dan ekstrak metanol diperoleh dengan cara penyarian berkesinambungan menggunakan alat soxhlet. Uji toksisitas akut ini dilakukan dengan membagi flakon ke dalam 2 kelompok perlakuan yaitu kelompok 1 diberi pelarut sebagai kontrol dan kelompok 2 diberi sampel uji. Konsentrasi sampel uji yang digunakan adalah $100 \mu\text{g/ml}$, $200 \mu\text{g/ml}$, $400 \mu\text{g/ml}$, $800 \mu\text{g/ml}$, $1600 \mu\text{g/ml}$, dan $3200 \mu\text{g/ml}$. Masing-masing ekstrak dilakukan replikasi sebanyak 6 kali. Data diperoleh dengan menghitung jumlah *Artemia salina* yang mati setelah 24 jam perlakuan. Harga LC_{50} dihitung dengan metode analisis probit. Harga $LC_{50} < 1000 \mu\text{g/ml}$ dikatakan toksik.

Hasil uji toksisitas dengan metode BST menunjukkan harga LC_{50} ekstrak kloroform sebesar $3490 \mu\text{g/ml}$ dan ekstrak metanol sebesar $359 \mu\text{g/ml}$. Dengan demikian ekstrak metanol bersifat toksik, sedangkan ekstrak kloroform bersifat tidak toksik.

Berdasarkan hasil uji kualitatif terhadap serbuk daun pepaya diperoleh senyawa golongan tanin dan alkaloid, dan dengan metode KLT menunjukkan bahwa daun pepaya diduga mengandung senyawa golongan alkaloid.

ABSTRACT

Papaya leaves (*Carica papaya* L) from *Caricaceae* family is one of the plant which is traditionally used by Indonesian people to cure fever, malaria, dysentery, no appetite for food, and worm. According to Dalimartha (1999), the leaf can be used as a medicine for cancer. To know the toxic effect of papaya leaf, then a research was conducted. It purposed to know the chloroform extract acute toxicity and methanol extract of papaya leaf (*Carica papaya* L) toward *Artemia salina* Leach which was stated in LC_{50} and to determine the content of active compound of this leaf.

The research done was pure experimental using a simple experimental plan. The chloroform and methanol extracts were got by summing up continuity using soxhlet. The test of acute toxicity was done by distributing vial in 2 treatment groups. Those were that the first group was given solventas a controller and the second group was given test sample. The concentration of the test sample used was $100 \mu\text{g}/\text{ml}$, $200 \mu\text{g}/\text{ml}$, $400 \mu\text{g}/\text{ml}$, $800 \mu\text{g}/\text{ml}$, $1600 \mu\text{g}/\text{ml}$, and $3200 \mu\text{g}/\text{ml}$. Each extract got six times replication. The data was got by counting the number of *Artemia salina* Leach which died after 24 hours treatment. The value of LC_{50} was counted using probit analysis method. The value of the $LC_{50} < 1000 \mu\text{g}/\text{ml}$ was determined as toxic.

The result of toxicity test using BST method showed that the value of chloroform extract LC_{50} was $3490 \mu\text{g}/\text{ml}$ and the methanol extract was $359 \mu\text{g}/\text{ml}$. So, the methanol extract was determined as toxic and the chloroform extract was determined as not toxic.

Based on the qualitative test from powdered papaya leaves the content of active is tannin and alkaloid compound. And with using Thin Layer Chromatography (TLC) Method, it showed that papaya leaves was considered having alkaloid compound.