

INTISARI

Keanekaragaman organisme di daerah tropis, dapat dimanfaatkan dalam berbagai penelitian ilmiah terutama dalam bidang kefarmasian. Daun Sambiloto (*Andrographis Paniculata* Nees) berkhasiat sebagai obat kencing manis, penurun demam, darah tinggi, radang paru dan anti kanker. Untuk mengetahui efek toksik daun sambiloto, maka dilakukan uji toksisitas, yang bertujuan untuk mengetahui toksisitas akut infus daun sambiloto (*Andrographis Paniculata* Nees) terhadap *Artemia Salina* Leach yang dinyatakan dalam LC_{50}

Brine Shrimp Lethality Test (BST) yang menggunakan hewan uji *Artemia Salina* Leach, merupakan salah satu metode skrining untuk menentukan ketoksikan suatu ekstrak ataupun senyawa murni dan kadar ketoksikannya dinyatakan dengan LC_{50} . Bahan uji dengan harga $LC_{50} < 1000 \mu\text{g/ml}$ secara umum bersifat toksik.

Penelitian ini termasuk jenis penelitian eksperimental murni dengan rancangan sederhana. Hewan uji yang digunakan untuk masing-masing kadar adalah 10 *Artemia Salina* Leach dan direplikasi 6 kali. Respon kematian diketahui 24 jam setelah pemberian infus daun Sambiloto dan kontrol yang digunakan. Adapun kadar yang digunakan adalah $3000 \mu\text{g/ml}$, $2500 \mu\text{g/ml}$, $2000 \mu\text{g/ml}$, $1500 \mu\text{g/ml}$ dan $1000 \mu\text{g/ml}$. Pada kontrol dimasukan aquadest sejumlah $150 \mu\text{l}$. Dilakukan juga identifikasi senyawa atau zat dengan metode Komatografi Lapis Tipis.

Dari hasil penelitian didapatkan LC_{50} infus daun Sambiloto adalah $2086 \mu\text{g/ml}$, yang dihitung dengan metode probit. Jadi infus daun Sambiloto dapat dikatakan tidak toksik, karena $LC_{50} > 1000 \mu\text{g/ml}$. Adapun golongan senyawa kimia yang dimungkinkan terdapat dalam infus daun Sambiloto adalah flavonoid.

ABSTRACT

The organism diversity in tropics, could be used in many kind of scientific research especially in pharmaceutical field. Sambilotto leaf (*Adrographis Paniculata* Nees) has a power to curee diabetes remedy, fever, hypertention, pneumony and cancer. To find out the toxic effect of the sambilotto leaf, toxicity test had been done, which aimed to know the acute toxicity of sambilotto leaf (*Adrographis Paniculata* Nees) infusa toward *Artemia salina* Leach which is stated in LC_{50} .

Brine Shrimp Lethality Test (BST) which was using experiment animal *Artemia Salina* Leach, was one of the screening method to detemine the toxicity of an extract or even pure compound and the toxicity proportion, that had been stated in LC_{50} . Material test with $LC_{50} < 1000 \mu\text{g/ml}$ generally has a toxic characteristic.

This research was included in pure experimental research type with a simple design. Animal test which had been used for each concentration was 10 *Artemia Salina* Leach and replicated 6 times. Death respon had been known 24 hours after given Sambilotto leaf infusa. While the concentration that had been used were $3000 \mu\text{g/ml}$, $2500 \mu\text{g/ml}$, $2000 \mu\text{g/ml}$, $1500 \mu\text{g/ml}$ and $1000 \mu\text{g/ml}$. Control which had been used was water solvent with $150 \mu\text{l}$. Also had been done the compound identification or substance by thin layer chromatograpy.

From the research result had been found that LC_{50} of Sambilotto leaf infusa was $2086 \mu\text{g/ml}$, which had been counted by probit method. Thus Sambilotto leaves infuse could be said un toxic, because $LC_{50} > 1000 \mu\text{g/ml}$. While the chemical compound group which is might be in the Sambilotto leaf infusa was flavonoid.