**SKRINING FITOKIMIA DAN UJI SITOTOKSISITAS EKSTRAK ETANOL DAUN TAPAK DARA (*Catharanthus roseus* L.) DENGAN METODE *BRINE* *SHRIMP***

***LETHALITY TEST* (BSLT)**

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**ABSTRAK**

Tanaman tapak dara (*Catharanthus roseus* L.) merupakan tanaman yang banyak tumbuh di Indonesia. Tanaman ini tumbuh liar maupun dibudidayakan sebagai tanaman hias. Tujuan penelitian ini adalah untuk mengetahui ekstrak etanol daun tapak dara dapat memiliki potensi sebagai senyawa antikanker dengan penentuan LC50 dan juga senyawa metabolit sekunder yang terkandung pada daun tapak dara.

 Pada penelitian ini dilakukan pengujian skrining fitokimia dan pengujian karakteristik daun tapak dara. Pengujian sitotoksititas ekstrak etanol daun tapak dara menggunakan metode *Brine Shrimp Lethality Test (BSLT)* dilakukan dengan beberapa konsentrasi : 100 ppm, 200 ppm, 300 ppm ,400 ppm, 500 ppm, 600 ppm, 700 ppm, 800 ppm, 900 ppm, 1000 ppm.

Berdasarkan hasil penelitian dapat diketahui bahwa hasil skrining fitokimia daun tapak dara mengandung alkaloid, flavonoid, saponin, tanin dan steroid. Hasil pengujian karakterisasi daun tapak dara pada kadar air 6,66 %, kadar sari larut air 38,23 %, kadar sari larut etanol 24,85 %, kadar abu total 6,29 %, dan kadar abu tidak larut asam 0,66 %. Hasil karakterisasi ini menunjukkan hasil yang sesuai dengan standarisasi dalam materia medika indonesia. Hasil pengujian dengan metode *Brine Shrimp Lethality Test* (BSLT)memberikan nilai LC50: 305,1406 µg/ml,sehingga ekstrak etanol daun tapak dara bersifat toksik dan berpotensi sebagai antikanker, karena senyawa uji dikatakan toksik jika harga LC50 lebih kecil dari 1000 µg/mL.

**Kata kunci** : Sitotoksisitas, Daun Tapak Dara, BSLT, LC50

**PHOTOCHEMICAL SCREENING AND CYTOTOXICITY**

**TESTING OF ETHANOL EXTRACT OF PERIWINKLE**

**(*Chatharanthus roseus* L.) WITH *BRINE***

***SHRIMP LETHALITY* *TEST* (BSLT)**

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**ABSTRACT**

Periwinkle (*Catharanthus roseus* L.) is a plant that grows in Indonesia. This plant grows wild or is cultivated as an ornamental plant. The purpose of this study was to determine the ethanolic extract of periwinkle leaves potential as anticancer agent by determining the LC50 and also secondary metabolites contained in tapak dara leaves.

In this study, phytochemical screening and characterization of periwinkle leaves were carried out. Cytotoxic testing of the ethanol extract of periwinkle leaves using the Brine Shrimp Lethality Test (BSLT) method was carried out at several concentrations: 100 ppm, 200 ppm, 300 ppm ,400 ppm, 500 ppm, 600 ppm, 700 ppm, 800 ppm, 900 ppm, 1000 ppm. The results of the study, showed that the phytochemical screening of periwinkle leaves contain alkaloids, flavonoids, saponins, tannins and steroids.

The results of the characterization of tapak dara leaves have 6.66% water content, 38.23% water soluble extract content, 24.85% ethanol soluble extract content, 6.29% total ash content, and 0.66% acid insoluble ash content. The results of this characterization show results that they are in accordance with the Materia Medica Indonesia. The results of the test using the Brine Shrimp Lethality Test (BSLT) method gave an LC50 value of: 305.1406 µg/mL , so that the ethanol extract of tapak dara leaves is toxic and has the potential as anticancer, because the test compound is said to be toxic if the LC50 value is less than 1000 µg/mL

**Keywords** :Cytotoxicity, Periwinkle Leaf, BSLT, LC50