**SKRINING FITOKIMIA DAN UJI AKTIVITAS SITOTOKSIK EKSTRAK ETANOL BONGGOL NANAS (*Ananas comosus* (L*.*) Merr.)DENGAN METODE *BRINE SHRIMP LETHALITY TEST***

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**ABSTRAK**

Tanaman nanas *(Ananas comosus)* merupakan tanaman yang tumbuh subur di Indonesia. Pemanfaatan limbah tanaman nanas berupa bonggol, belum dimanfaatkan secara optimal.Tujuan penelitian ini adalah untuk mengetahui ekstrak etanol bongol nanas dapat memiliki potensi sebagai senyawai antikanker dengan penentuan LC50 serta senyawa metabolit sekunder yang terkandung pada bonggol nanas.

Penelitian ini menggunakan desain eksperimental. Pada penelitian dilakukan pengujian skrining fitokimia dan pengujian karakteristik bonggol nanas. Pengujian 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 bonggol nanas mengandung flavonoid, saponin,triterpenoid dan glikosida. Hasil pengujian karakterisasi bonggol nanas pada kadar air 4 %, kadar sari larut air 79,93 %, kadar sari larut etanol 62,46 %, kadar abu total 8,30 %, dan kadar abu tidak larut asam 2,02 %. 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: 401,7908 µg/ml,sehingga ekstrak etanol bonggol nanas bersifat sitotoksik dan berpotensi sebagai antikanker, karena senyawa uji dikatakan toksik jika harga LC50 lebih kecil dari 1000 µg/mL. Kesimpulan penelitian ini adalah ekstrak etanol bonggol nanas bersifat sitotoksik dan berpotensi sebagai antikanker, dengan nilai LC50 401,7908 µg/ml.

**Kata kunci**: *Sitotoksisitas*, *Bonggol Nanas*, *Ananas comosus (L.) Mer.), LC50, BSLT*

**PHYTOCHEMICAL SCREENING AND CYTOTOXIC ACTIVITY TEST OF PINEAPPLE ETHANOL EXTRACT (*Ananas comosus* (L.) Merr.) USING THE BRINE SHRIMP LETHALITY TEST METHOD**

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**ABSTRACT**

Pineapple plant (Ananas comosus) is a plant that thrives in Indonesia. Utilization of pineapple plant waste in the form of weevils has not been utilized optimally.The aims of this study was to determine the ethanol extract of pineapple weevils can have potential as an anticancer compound by determining LC50 and secondary metabolite compounds contained in pineapple weevils.

This research used an experimental design. In this research, phytochemical screening tests and testing of the characteristics of pineapple weeds were carried out. The Brine Shrimp Lethality Test (BSLT) method was tested with several concentrations: 100 ppm, 200 ppm, 300 ppm, 400 ppm, 500 ppm, 600 ppm, 700 ppm, 800 ppm, 900 ppm, 1000 ppm.

Based on the research results, it can be seen that the phytochemical screening results of pineapple weevils contain flavonoids, saponins, triterpenoids and glycosides. The results of testing the characterization of pineapple weevil at 4% moisture content, 79.93% water soluble extract content, 62.46% ethanol soluble extract content, 8.303% total ash content, and 2.025% acid insoluble ash content. The results of this characterization show results that are in accordance with standardization in Indonesian medical materials. The test results with the Brine Shrimp Lethality Test (BSLT) method gave a value of LC50: 401,7908 µg / ml, so that the ethanol extract of pineapple weevils is cytitoxic and has the potential to be an anticancer, because the test compound is said to be cytotoxic if the LC50 value is less than 1000 g / mL.

The conclusion of this research is that the ethanol extract of pineapple weevil is cytotoxic and has the potential as an anticancer, with an LC50 value of 401,7908 µg / ml.

***Keywords:*** *Cytotoxicity,Pineapple Weevil, Ananas comosus (L.) Merr.) , LC50, BSLT*