

INTISARI

Daun puring (*Codiaeum variegatum* BL.) digunakan sebagai bahan obat tradisional. Dalam rangka meningkatkan obat tradisional, telah dilakukan penelitian uji daya antibakteri ekstrak etanol dan rebusan daun puring terhadap bakteri uji. Penelitian ini bertujuan untuk membuktikan secara ilmiah bahwa daun puring juga mempunyai daya antibakteri khususnya *Staphylococcus aureus* dan *Escherichia coli*.

Uji daya antibakteri daun puring dengan metode difusi teknik *paper disc*. Ekstrak etanol yang didapat dibuat seri konsentrasi untuk uji daya antibakteri yaitu 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 $\mu\text{g}/\text{ml}$ dengan menggunakan DMSO sebagai kontrol negatif dan streptomisin 10 $\mu\text{g}/\text{ml}$ sebagai kontrol positif. Hasil uji daya antibakteri yang diperoleh ternyata menunjukkan rebusan daun puring tidak mempunyai daya antibakteri sedang ekstrak etanol mempunyai daya antibakteri yang terbesar pada konsentrasi 100 $\mu\text{g}/\text{ml}$ dengan diameter hambatan rata-rata 11,27 mm untuk *Escherichia coli* dan 10,17 mm untuk *Staphylococcus aureus*.

Data ini dianalisis secara statistik dengan ANOVA dua arah, yang dilanjutkan uji LSD dengan taraf kepercayaan 95%. Analisis ini menghasilkan zona hambatan pada konsentrasi 100 $\mu\text{g}/\text{ml}$ berbeda bermakna dengan konsentrasi 200 $\mu\text{g}/\text{ml}$, 400 $\mu\text{g}/\text{ml}$, 800 $\mu\text{g}/\text{ml}$, dan konsentrasi 1600 $\mu\text{g}/\text{ml}$. Pada konsentrasi 200 $\mu\text{g}/\text{ml}$ dengan konsemntrasi 400 $\mu\text{g}/\text{ml}$ tidak berbeda bermakna begitu juga 400 $\mu\text{g}/\text{ml}$ dengan 800 $\mu\text{g}/\text{ml}$. Semua konsentrasi berbeda bermakna dengan kontrol negatif maupun dengan kontrol positif.

Uji kualitatif dengan metode kromatografi lapis tipis menggunakan silika gel GF 254 sebagai fase diam dan heksana - etil asetat (4:1 v/v) sebagai fase gerak. Deteksi bercak menggunakan pereaksi anisaldehid - asam sulfat yang menimbulkan bercak berwarna ungu. Ini menunjukkan daun puring mengandung senyawa terpenoid.

ABSTRACT

The *puring* leaf (*Codiaeum variegatum* BL.) is used as a material of the traditional medicine. In the way to increasing the traditional medicine, a research to power test of antibacterial in the ethanol extract and boiled *puring* leaf to the experiment's bacteria had been done. This research purposes to prove scientifically that *puring* leaf have an antibacterial's power too especially the *Staphylococcus aureus* and *Escherichia coli*.

The experiment of antibacterial power in the *puring* leaf uses a diffusion method *paper disc* technique. Ethanol extract that is made by series of concentration to test the antibacterial power that is 100 µg/ml, 200 µg/ml, 400 µg/ml , 800 µg/ml, 1600 µg/ml by using DMSO as the negative control and Streptomycin as the positive control. Actually the result of the experiment of the antibacterial power, which is got shows that the boiled *puring* leaf does not have antibacterial power. While the ethanol extract of *puring* leaf have the biggest antibacteria's power in the concentration of 100 µg/ml with the diameter rate of 11,27 mm for *Escherichia coli* and 10,17 mm for *Staphylococcus aureus*.

This data is analyzed statistically two way of ANOVA that is continued with the LSD test of 95% reliability. This analysis results inhibition zone in concentration of 100 µg/ml which is significantly different with concentration 200 µg/ml, 400 µg/ml, 800 µg/ml, and concentration of 1600 µg/ml. Concentration 200µg/ml is not significantly different with concentration of 400 µg/ml. So is significantly different concentration of 400 µg/ml with 800 µg/ml. All of the concentrations are significantly different with both negative control and positive control.

The qualitative experiment with the chromatography method of thin layer using of silica gel GF 254 nm as stationary phase and hexane - ethyl acetate (4:1 v/v) is used as the mobile phase. The detection of spot uses anisaldehyde- sulphuric acid that causes a purple spot. It shows that *puring* leaf contains of terpenoid compound.