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Nunuk Susanti

Uji Efektivitas Ekstrak Daun Pare (*Momordica charantia L.*) Dalam Menghambat Pertumbuhan Bakteri *Salmonella typhosa* ATCC 14028

Xii + 70 halaman, 2 gambar, 5 tabel dan 17 lampiran

ABSTRAK

Salmonella typhosa merupakan bakteri penyebab demam tifoid. Penyakit ini sering dijumpai di negara berkembang yang terletak di subtropis dan daerah tropis seperti Indonesia. Daun pare memiliki kandungan senyawa flavonoid, saponin, tanin, alkaloid, dan triterpenoid yang diketahui bersifat antibakteri. Tujuan penelitian ini adalah mengetahui efektivitas ekstrak daun pare (*Momordica charantia L.*) dalam menghambat pertumbuhan bakteri *Salmonella typhosa* ATCC 14028. Jenis penelitian ini adalah eksperimen. Metode pemeriksaan Difusi cara Kirby Bauer. Konsentrasi ekstrak daun pare yang digunakan adalah 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, dan 100% dengan 3 kali pengulangan. Hasil penelitian menunjukkan konsentrasi ekstrak daun pare mampu menghambat pertumbuhan bakteri *Salmonella typhosa* ATCC 14028 pada konsentrasi 40%-100% dengan rerata zona hambat 6,66 mm, 7,36 mm, 8,51 mm, 11,40 mm, 14,15 mm, 16,08 mm, 17,66 mm. Data diolah menggunakan uji *One-Way Anova* dengan hasil nilai $p=0,000$ ($p<0,05$) yang berarti bahwa ekstrak berpengaruh terhadap pertumbuhan bakteri *Salmonella typhosa* ATCC 14028, dilanjutkan dengan uji beda nyata terkecil dengan hasil $p<0,05$ yang menunjukkan terdapat perbedaan yang nyata setiap konsentrasi. Pada konsentrasi 100% dengan konsentrasi 10%-80%, konsentrasi 90% dengan konsentrasi 10%-70%, konsentrasi 80% dengan konsentrasi 10%-70%, konsentrasi 70% dengan konsentrasi 10%-60%, konsentrasi 60% dengan konsentrasi 10%-30%, konsentrasi 50% dan 40% dengan konsentrasi 10%-30%.

Kata kunci : Uji efektivitas, *Salmonella typhosa* ATCC 14028, daun pare.

Daftar bacaan : 32 (1997-2018)

THE HEALTH POLYTECHNIC OF TANJUNGPUR
DEPARTEMENT HEALTH ANALYST
STUDY PROGRAM OF MEDICAL LABORATORY TECHNOLOGY
BACHELOR OF APPLIED PROGRAM
A thesis, July 2021

Nunuk Susanti

The Effectiveness Test Of Extract Pare Leaf (*Momordica charantia L.*) In
Hampering The Growth Of *Salmonella typhosa* Bacteria ATCC 14028

Xii + 70 page, 2 picture, 5 tables and 17 attachment

ABSTRACT

Salmonella typhosa is a bacterium that causes typhoid fever. This disease is often found in developing countries located in the subtropics and tropical areas such as Indonesia. Pare leaves contain flavonoid compounds, saponins, tannins, alkaloids, and triterpenoids which are known to have antibacterial properties. The purpose of this study was to determine the effectiveness of bitter melon leaf extract (*Momordica charantia L.*) in inhibiting the growth of *Salmonella typhosa* ATCC 14028. This type of research was experimental. *Kirby Bauer's* Diffusion method. The concentration of bitter melon extract used was 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, and 100% with 3 repetitions. The results showed that the concentration of bitter melon leaf extract was able to inhibit the growth of *Salmonella typhosa* ATCC 14028 bacteria at a concentration of 40%-100% with an average inhibition zone of 6.66 mm, 7.36 mm, 8.51 mm, 11.40 mm, 14.15 mm, 16.08mm, 17.66mm. The data was processed using the *One-Way Anova* test with the results of $p = 0.000$ ($p < 0.05$) which means that the extract had an effect on the growth of *Salmonella typhosa* ATCC 14028 bacteria, followed by the smallest significant difference test with $p < 0.05$, which indicated that there were significant difference for each concentration. At a concentration of 100% with a concentration of 10%-80%, a concentration of 90% with a concentration of 10%-70%, a concentration of 80% with a concentration of 10%-70%, a concentration of 70% with a concentration of 10%-60%, a concentration of 60% with a concentration of 10%-30%, 50% concentration and 40% with 10%-30% concentration.

Keywords: Effectiveness test, *Salmonella typhosa* ATCC 14028, pare leaf.

Reading List : 32 (1997-2018)