

**THE EFFECT OF ADDITION BASIL LEAVES ESSENTIAL OIL
(*Ocimum sanctum L.*) TO DISH SOAP IN LOWERING
GERM NUMBERS ON DINNER PLATE**

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ABSTRACT

Background: Guaranteed food safety can be seen, one of which is from the cleanliness factor of the cutlery used. To increase the antiseptic ability of soap, natural antibacterial ingredients are needed in soap, one of which is basil leaves. The content of essential oils in basil leaves can play a role in killing and inhibiting bacterial growth.

Objective: To determine the effect of adding basil leaves essential oil to liquid soap in lowering germ numbers on dinner plate

Method: This research is quasi experiment with *Nonequivalent Control Group Design* approach. This research was conducted in February 2023. The object of this research was dinner plate at Rumah Makan “X” Gamping, Sleman. The Total sample required was 24 plates. This research used analysis of *One Way Anova* test data followed by LSD.

Results: The average result of lowering the number of plate germs after using basil leaves essential oil soap was 20% concentration of 58.17 CFU/cm² with a percentage of 78%, 25% concentration of 99.17 CFU/cm² with a percentage of 90.29, 30% concentration of 125.17 CFU/cm² with a percentage of 94.47. Based on the results of the *One Way Anova* test, a p-value of 0.035 (Sig. <0.05) was obtained, which means that there is a significant difference in lowering the number of plate germs after using basil leaves essential oil soap.

Conclusion: Based on statistics, there is an effect of adding basil leaves essential oil to dishwashing liquid soap in lowering the number of dish germs and the highest concentration in lowering the number of germs is a concentration of 30%.

Keywords: basil leaves essential oil, soap, plate germs number

**PENGARUH PENAMBAHAN MINYAK ATSIRI DAUN KEMANGI
(*Ocimum sanctum L.*) PADA SABUN CUCI PIRING
DALAM MENURUNKAN ANGKA KUMAN
PADA PIRING MAKAN**

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INTISARI

Latar Belakang: Terjaminnya keamanan makanan dapat terlihat salah satunya dari faktor kebersihan alat makan yang digunakan. Untuk meningkatkan kemampuan antiseptik pada sabun diperlukan bahan antibakteri alami pada sabun salah satunya daun kemangi. Kandungan minyak atsiri pada daun kemangi dapat berperan untuk membunuh dan menghambat pertumbuhan bakteri.

Tujuan: Mengetahui pengaruh penambahan minyak atsiri daun kemangi pada sabun terhadap penurunan angka kuman piring makan

Metode: Penelitian ini adalah penelitian eksperimen semu dengan pendekatan *Nonequivalent Control Group Design*. Penelitian ini dilaksanakan pada bulan Februari 2023. Objek penelitian ini adalah piring makan di Rumah Makan “X” Gamping, Sleman. Total sampel yang dibutuhkan 24 piring makan. Penelitian ini menggunakan analisis data uji *One Way Anova* dilanjutkan LSD.

Hasil: Hasil rata-rata penurunan angka kuman piring setelah menggunakan sabun minyak atsiri daun kemangi yaitu konsentrasi 20% sebesar 58,17 CFU/cm² dengan persentase 78%, konsentarsi 25% sebesar 99,17 CFU/cm² dengan persentase 90,29%, konsentarsi 30% sebesar 125,17 CFU/cm² dengan persentase 94,47. Berdasarkan hasil uji *One Way Anova* diperoleh *p-value* sebesar 0,035 (*Sig.* <0,05) yang artinya ada perbedaan signifikan pada penurunan angka kuman piring setelah menggunakan sabun minyak atsiri daun kemangi.

Kesimpulan: Berdasarkan statistik ada pengaruh penambahan minyak atsiri daun kemangi pada sabun cuci piring dalam menurunkan angka kuman piring dan diperoleh konsentrasi paling tinggi dalam menurunkan angka kuman adalah konsentrasi 30%.

Kata Kunci: minyak atsiri daun kemangi, sabun, angka kuman piring