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**SKRIPSI**

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**STUDI HUBUNGAN ANTARA NILAI LIPOFILITAS ( $\Sigma f$ )  
TURUNAN N-BENZOILSEFALEKSIN DENGAN  
AKTIVITAS ANTIBAKTERI TERHADAP  
*Staphylococcus aureus* ATCC 25923**

**MILIK  
PERPUSTAKAAN  
UNIVERSITAS AIRLANGGA  
SURABAYA**



**FAKULTAS FARMASI UNIVERSITAS AIRLANGGA  
BAGIAN KIMIA FARMASI  
SURABAYA**

**2004**

Lembar Pengesahan

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DIBUAT UNTUK MEMENUHI SYARAT  
MENCAPAI GELAR SARJANA FARMASI PADA FAKULTAS FARMASI  
UNIVERSITAS AIRLANGGA  
2004

Oleh :

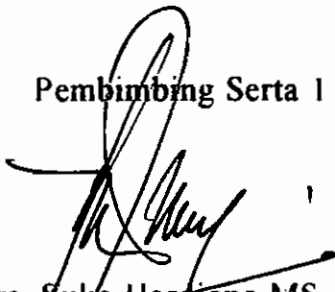
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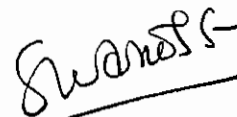
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## ABSTRACT

### **A Relationship Study Between Lipophilicity Parameter of *N*-benzoilcephalexin Derivates With Their Antibacterial Activity Against *Staphylococcus aureus* ATCC 25923**

This research was done to understand relationship between lipophilicity parameter of *N*-benzoilcephalexin derivatives with their antibacterial activity againts *Staphylococcus aureus* ATCC 25923. Lipophilicity parameter that was chosen is “sigma Rekker ( $\Sigma f$ )” and antibacterial activity test was done with cylinder diffusion method. The relationship between lipophilicity parameters of *N*-benzoilcephalexin derivatives with their antibacterial activity againts *Staphylococcus aureus* ATCC 25923 was explained with linier regression. The result is  $\text{Log DDH} = -0,060 \Sigma f + 1,306$  ( $r^2 = 0,126$ ;  $r = 0,354$ ;  $F = 0,431$ ;  $n = 5$ ;  $t_{\text{table}} (\alpha = 0,05; dF = 3) = 0,8783$ ;  $F_{\text{table}} (1;3;0,05) = 10,13$ ). From the result, it could be concluded that lipophilicity parameters didn't influence antibacterial activity *N*-benzoilcephalexin's generation against *Staphylococcus aureus* ATCC 25923.

**Key word:** *lipophilicity parameters, sigma Rekker ( $\Sigma f$ ), cylinder diffusion method, N-benzoilcephalexin, Staphylococcus aureus*