SKRIPSI

SITI ZAENAB

UJI PENDAHULUAN PERBANDINGAN POTENSI ANTIBIOTIKA HASIL FERMENTASI *Streptomyces griseus* ATCC 10137 PADA pH AWAL 7,5,8,0 DAN 8,5 DENGAN SUHU 28°C, 30°C DAN 35°C DALAM MEDIA PADAT YANG MENGANDUNG AMPAS TAHU 2%

FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
BAGIAN KIMIA FARMASI
SURABAYA
2003
UJI PENDAHULUAN PERBANDINGAN POTENSI ANTIBIOTIKA HASIL FERMENTASI \textit{Streptomyces griseus} ATCC 10137 PADA pH AWAL 7,5, 8,0 DAN 8,5 DENGAN SUHU 28°C, 30°C DAN 35°C DALAM MEDIA PADAT YANG MENGANDUNG AMPAS TAHU 2%
ABSTRACT

The potency of antibiotics of *Streptomyces griseus* ATCC 10137 that fermented in media containing tofu refuse at pH 7.5, 8.0 and 8.5 at temperature 28°C, 30°C and 35°C has been assayed.*Streptomyces griseus* ATCC 10137 cultivated in solid media. Fermentation carried out by taking one Osc *Streptomyces griseus* ATCC 10137, cultivated in liquid media, then incubated with shaker for 4 day and used as a culture starter. From starter culture cultivated in media containing tofu refuse 2% at pH 7.5, 8.0 and 8.5 then incubated at temperature 28°C, 30°C and 35°C for 13 days, in every 24 hours the potency of antibiotic test has assayed using *Bacillus subtilis* ATCC 9466 and *Escherichia coli* ATCC 25922 as a microbe test. A resistance zone which shown as a clear area is measured. The potency of antibiotics of *Streptomyces griseus* ATCC 10137 at pH 7.5 temperature 28°C, pH 7.5 temperature 30°C, pH 8.0 temperature 28°C and pH 8.0 temperature 30°C has not shown difference meaning, whereas the pH 8.5 temperature 28°C and temperature 30°C has shown difference meaning when compared by another condition. At temperature 35°C in pH 7.5, 8.0 and 8.5 has not shown a resistance zone, its means that antibiotics is not formed at that temperature.

Keywords: Tofu refuse, *Streptomyces griseus* ATCC 10137, the potency of antibirotical test