

## **ABSTRACT**

### **COMPARISON OF ANTIBACTERIAL EFFECTIVITY STAR FISH *Culcita sp* EXTRACT AGAINST *Staphylococcus aureus* AND *Salmonella typhi* Growth.**

**By**

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**Background:** Bacterial resistance to infectious diseases has become an international problem. Resulting in antibiotic resistance fails to respond to treatment and raises some worst consequences. One of the handling of the problem of resistance is to look for alternatives that have antibacterial properties. One alternative materials as antibacterial is a starfish. In the study the extraction of star fish are able to produce antibacterial compounds. One starfish contained Lampung province is *Culcita sp*. This study aims to determine the antibacterial effect of star fish *Culcita sp* against *Staphylococcus aureus* and *Salmonella typhi*.

**Methods:** In this research, synthesis of starfish extract in a concentration of 1000, 2000, 4000, 8000, and 16000 ppm through the extraction process starfish storied dry powder obtained from Ketapang. In this research, four repetitions in two test group, namely *Staphylococcus aureus* and *Salmonella typhi* groups and positive control (Chloramphenicol) and negative control (Aquadest). Antibacterial test conducted at culture medium Muller Hinton Agar (MHA) with the disk diffusion technique of Kirby bauer. MHA incubated at 37 ° C for 24 hours and measuring the inhibition zone

**Results:** The result showed extracts of starfish have antibacterial activity against bacteria *Staphylococcus aureus* and *Salmonella typhi*. It is seen by the inhibition zone formed and obtained the greatest inhibition at concentrations of 16000 ppm.

**Conclusions:** After a study there is no difference of antibacterial effectivity starfish extracts against both bacteria

**Keywords:** *Culcita sp*, disc-diffusion technique, *Salmonella typhi*, *Staphylococcus aureus*