ABSTRACT

THE EFFECTIVENESS TEST OF RED BETEL LEAVES (Piper crocatum) TOWARDS Staphylococcus aureus AND Salmonella typhi

By

STEVAN WEDI KURNIAWAN

The red betel leaves (Piper crocatum) has many benefits such as antioksidant, antidiabetic, antineoplastic, antiseptic, and antiinflammation. This research aims to investigate the antibacterial activity on red betel leaves againsts Staphylococcus aureus and Salmonella typhi with determine the red betel leaves extract minimum resist concentrate which capable to inhibit the growth of bacteria.

This research was held on October 2014 at Microbiological Laboratory of Lampung University Medical Faculty. The red betel leaves extract obtained from Organic Chemical Laboratory of Lampung University with maceration technique. The sirih merah leaves activity performed with in vitro particularly with Kirby bauer method which is done by making the well.

The results of the research presented that the all concentration of red betel leaves such 3.125%, 6.25%, 12.5%, 25%, 50% and 100%, has antibacterial activity towards Staphylococcus aureus and Salmonella typhi bactery, with the highest inhibitory at 100% concentrate that is 16.3 mm on Staphylococcus aureus and 12 mm on Salmonella typhi.

This research presented that red betel leaves inhibit the growth of positive gram bacteria stronger than the negative gram bacteria.

Kata Kunci: Piper crocatum, Staphylococcus aureus, Salmonella typhi.