ABSTRACT

Sambiloto (Andrographis paniculata) is used to increase the body's resistance from infectious germs, anti-diarrhea, liver disorders, and antibacterials (Fitriyah, 2015) Staphylococcus epidermidis is a bacteria Staphylococcus coagulate-negative which found on the surface of the human body and these bacteria is an opportunistic bacterium that produces a molecule as a protector of the body defenses specifically protein and exopolimer as useful exopolysaccharida which make bio film formation (Otto, 2011). This bacteria is commonly more resistant than Staphylococcus aureus. The purpose of this study was to determine the smallest concentration of ethanol extract of sambiloto’s leaf (Andrographis paniculata) which can inhibit growth and kill the Staphylococcus epidermidis.

The method is dilution test with eight treatments and two controls. The highest concentration selected was 400 mg / ml with four times replication. After incubation at 37 ° C for 24 hours, the data obtained by observing turbidity of the solution so that the value of the minimum inhibitory concentration (MIC) can be determined. Then, the streaking toward the tube dilution test results in order Nutrient agar plate (NAP) to determine the value of the minimum bactericidal concentration (MBC).

From this experiment, the MIC cannot be determinate because the turbidity of the solution cannot be compared and MBC also cannot be found. So, with the highest levels of 400 mg/ml, the ethanol extract of sambiloto’s leaf (Andrographis paniculata) does not have an antibacterial effect against Staphylococcus epidermidis. More research must be done by changing the method, increasing the measure of extracts, and by taking the various parts of the plant Andrographis paniculata.

Keywords: Andrographis paniculata- Staphylococcus epidermidis- antibacterial – dilution test