

ABSTRACT

POTENTIAL TESTING OF PAPAYA SEED EXTRACT (*Carica papaya* L.) AGAINST *Bacillus subtilis* USING MACERATION METHOD

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Bacillus subtilis can cause stomach ache, vomiting, and diarrhea and can also cause other, more dangerous infections such as extra-gastrointestinal infections, respiratory tract infections, and urinary tract infections. Papaya seeds contain chemical compounds including alkaloids, saponins, flavonoids and papain. The aim of this research was to determine the potential of papaya seed extract in inhibiting *Bacillus subtilis* bacteria. Papaya seeds are made in the form of a thick extract using the maceration method. Anti-bacterial testing uses the disc diffusion method. Five treatment were carried out, namely papaya seed extract concentrations of 25%, 50%, 75% 100% and DMSO 10% as negative control. Each treatment was carried out four times repetition. The results of the papaya seed extract test showed that there was growth inhibition of *Bacillus subtilis* bacterial activity, namely at a 25% concentration of 0mm, a 50% concentration of 0.45mm, a 75% concentration of 1.42 mm and a 100% concentration of 2.82 mm. Based on these results, it can be concluded that the anti-bacterial activity of papaya seed extraction against *Bacillus subtilis* bacteria is weak.

Keywords: *Anti-bacterial, Papaya Seed Extract, Bacillus subtilis*