DAYA HAMBAT EKSTRAK BUAH MENGKUDU (*Morinda citrifolia* L.)
TERHADAP PERTUMBUHAN BAKTERI *Porphyromonas gingivalis*

**THE INHIBITION OF NONI FRUIT EXTRACT (Morinda citrifolia L.) ON THE GROWTH OF Porphyromonas gingivalis**

**ABSTRACT**

**Background**: Periodontitis is an inflammation on periodontal structure that caused by invasion microorganism. Among periodontitis's types, chronic periodontitis is the most prevalent type and often associated with *Porphyromonas gingivalis*. Nowadays, herbal therapy is often used as antibacterial agent to inhibit microorganism’s growth. The herbs used in this research is noni fruit extract (*Morinda citrifolia* L.) that contain many antibacterial agent such as anthraquinone, saponin, and iridoid. **Purpose**: The aim of this research is to find the inhibition of noni fruit extract (*Morinda citrifolia* L.) on the growth of *Porphyromonas gingivalis*. **Method**: This research was done in vitro experiment using agar disc diffusion method. The extract was diluted into concentration of 100%, 50%, 25%, 12.5%, 6.25%, 3.12%, 1.56%, 0.78%, 0.39%, and 0.19%. The inhibitory zones were recorded in millimeters and analyzed using One Way ANOVA test. **Result**: The result showed that antibacterial activity of noni fruit extract was active on *Porphyromonas gingivalis* with Minimum Inhibitory Concentration (MIC) of 3,12% with average of inhibitory zone 8.21 mm. From statistical test showed that there were significant differences of inhibitory zone from each concentration. **Conclusion**: Noni fruit extract (*Morinda citrifolia* L.) could inhibit the growth of *Porphyromonas gingivalis* with MIC at 3.12%. **Keywords**: Noni fruit extract (*Morinda citrifolia* L.), *Porphyromonas gingivalis*, Minimum Inhibitory Concentration (MIC)