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## The ability pacar air stem (Impatiens balsamina Linn.) ethanol extract as antibacterial against of Streptococcus mutans

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**Introduction & Objective:** The prevalence of dental and oral diseases in Indonesia is still categorized ASL high. In 2007, it reached to 23.5% and even increased to 25.9% by 2013. The dominant dental and oral disease suffered was caries which has prevalence of 43.4%. Dental caries is an infectious disease that is progressive and accumulative in tooth tissue. The main bacteria that cause caries is *Streptococcus mutans*. Herbal plants can be used as an alternative in preventing the growth of bacterial colonies, one of which is with the balsam plant stem extract. Balsam plant stem extract contain naphthaquinone, kaempferol, quercetin, alkaloid, terpenoid, and phenol suspected to be antibacterial. To determine the inhibition of *balsam* plant stem extract on the growth of *Streptococcus mutans*.

**Method:** Well diffusion method with six samples in each study group. The study group consisted of four treatment groups (6.25%, 12.5%, 25% and 50% of balsam plant stem extract), positive control group (povidone iodine) and negative control group (Aqua Dest). Data were analyzed using Kruskal-Wallis and Mann-Whitney test.

**Result & Conclusion:** Balsam plant stem extract of 12.5%, 25%, and 50% concentrations have a higher inhibitory power than povidone iodine. Balsam plant stem extract has ability as antibacterial to *Streptococcus mutans*.

## **Biography**

Dyah Setyorini has completed her Magister Program from Airlangga University, Indonesia. She is the Dean of Faculty of Dentistry, University of Jember, Indonesia. She has published more than 10 papers in reputed journals.

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