

EFEKTIFITAS EKSTRAK BIJI KELOR (*Moringa oleifera*) DALAM MENGHAMBAT PERTUMBUHAN BAKTERI PLAK

Effectivity of Kelor Seed Extract (Moringa oleifera) to Inhibit Dental Plaque Growth

Dina Puspitasari¹, Noer Ulfah², Lambang Bargowo²

¹Mahasiswa S1 PendidikanDokter Gigi

²Staf Pengajar Departemen Periodonsia

Fakultas Kedokteran Gigi Universitas Airlangga

Surabaya – Indonesia

ABSTRACT

BACKGROUND : Dental plaque in the oral cavity can cause all sorts of problems, such as caries, gingivitis, and until periodontitis. The plaque starts from supragingival expands towards subgingival thus causing inflammation in periodontal. Nowadays, herbs acting as antimicrobial agent are often used in the therapy. *Moringa oleifera* seeds are usually used for water purification because of its coagulant effect. *Moringa oleifera* seeds contains tannins, flavonoid, saponin, and alkaloids. **AIM** : To find the inhibitory zone of *Moringa oleifera* seed extract on the growth of dental plaque. **METHOD**: This experiment was done by using dilution method. The extract was diluted into 8 different concentrations (100%; 50%; 25%; 12,5%; 6,25%, 3,12%; 1,56%; 0,78%). Then cross check was done to see the inhibition zone in Mueller Hinton Agar. The counting was done by counting the diameter of the inhibition zone. The result was recorded and analyzed with One-Way ANOVA. **RESULT**: The result showed that antimicrobial activity appeared at concentration 100%, 50%, and 25%, while there's no antibacterial activity at concentration 12,5%; 6,25%; 3,12%; 1,56%; and 0,78%. Statistical test showed that there were significant differences from each concentration. **CONCLUSION**: *Moringa oleifera* seed extract could inhibit the growth of dental plaque.

Keywords: *Moringa oleifera*, Seeds, Extract, Dental plaque, Inhibition zone