DAYA HAMBAT EKSTRAK BIJI ANGGUR PROBOLINGGO BIRU
($Vitis$ $vinifera$. $L$.) TERHADAP PERTUMBUHAN BAKTERI PLAK
SUPRAGINGIVA

(INHIBITORY EFFECT OF PROBOLINGGO BLUE GRAPE ($Vitis$ $Vinifera$
$L$.) SEED EXTRACT ON SUPRAGINGIVA BACTERIA GROWTH)

ABSTRACT

Background: The highest prevalence of oral diseases are caries and periodontal
disease. Oral bacteria that form plaque are the main cause of periodontal disease.
Because of that, the prevention of periodontal disease is based on control of
bacteria plaque. Antibacterial activity of grape seed extract to gram-positive and
negative bacteria is the evidence of antiplaque agent from grape seed extract to
inhibit the growth of supragingiva bacteria.

Purpose: The purpose of this study was to know the concentration of grape seed
extract that exhibit antibacterial activity to supragingiva bacteria.

Methods: This research was an experimental study with post test control group
only design. The sample of this experimental study was grape seed extract. The
antibacterial activity test uses diffusion method, these were divided into 8 test
group with concentration $100\%$ v/v, $50\%$ v/v, $25\%$ v/v, $12.5\%$ v/v, $6.25\%$ v/v,
$3.125\%$ v/v, $1.56\%$ v/v, $0.78\%$ v/v, and 2 control groups were positive control,
and negative control. Statistic analysis was done by One-Way Anova Test.

Result: The result of antibacterial activity, Minimum Inhibitory Concentration
(MIC) significant from the concentration $1.56\%$ v/v.

Conclusion: The result of grape seed extract inhibitory effect were effective for
supragingiva bacteria growth. MIC for supragingiva bacteria growth was $1.56\%
$v/v$.

Keywords: supragingiva bacteria, grape seed extract, MIC, antibacterial activity