

**ABSTRACT****TRANSVERSE STRENGTH OF ACRYLIC RESIN PLATES HEAT-CURED  
SOAKING IN THE PINEAPPLE  
(ANANAS COSMOSUS LINN MERR) EXTRACT****ABSTRACT**

**Background:** Pineapple fruit (*Ananas Cosmosus Linn Merr*) is a fruit that has a very complex content, and it has the effect of suppressing the growth of bacteria, so the pineapple can be used as an antiseptic, as well as the soaking dentures. The use of pineapple extract as a soaking dentures will affect the transverse strength of the acrylic resin, because the content of polyphenols of pineapple in chemical compounds will damage the content of polymethyl methacrylate, so the impact on the declining strength of the acrylic resin transversa. **Purpose:** This study was conducted to determine the transverse strength of resin heat-cured acrylic soaking in the pineapple extract. **Method:** The sample of this study is the plate made of PMMA acrylic resin heat-cured (6,5x10x2,5 mm) were divided into six groups, each group consistising of 9 samples. Immersion heat cured resin acrylic plate in a solution of distilled water as a control group and in the pineapple extract as a treatment group, each group were immersed in 8 hours, 10 days, and 30 days. After soaking, the transverse strength of heat cured acrylic resin was measured using a Simazu AG-10TE Autograph machine. Further transverse strength test results were analyzed by statistical test TwoWay ANOVA. **Result:** The p-values higher than ( $p > 0.05$ ), which means there is no significant difference in the transverse strength after heat cured acrylic resin soaked for 8 hours, 10 days, and 30 days in the pineapple extract. **Conclusion:** Soaking heat cured acrylic resin in the pineapple extract for 8 hours, 10 days, and 30 days, did not experience a significant decrease in the transverse strength.

**Keywords:** Heat cured acrylic resin, the pineapple extract, transverse strength.