

**RECOVERY FROM DEFORMATION AKIBAT PENGGANTIAN
SEBAGIAN BAHAN CETAK ALGINAT DENGAN PATI BERAS
(ORYZA SATIVA)**

**(RECOVERY FROM DEFORMATION CAUSED BY PARTIAL
REPLACEMENT OF ALGINATE IMPRESSION MATERIAL WITH
RICE STARCH (ORYZA SATIVA))**

ABSTRACT

Background. Some of the qualities that should be there in impression material are high elasticity and recovery from deformation. So that, it can print out a deep undercut areas without dimensional changes. As substance usually be used, alginate impression material still has susceptibility, the price is still quite expensive because it should be imported from abroad. So the authors suggest the rice starch (*Oryza sativa*) as an alternative to a mixture of alginate impression material. **Purpose.** The aim of this study was to find out the value of the recovery from deformation caused by partial replacement of alginate impression material with rice starch (*Oryza sativa*). **Method.** Samples were tube shaped with 12.5 mm of diameter and 20 mm of height. Samples were divided into four groups. Group 1, 100% ratio of alginate impression material. Group 2, 55% ratio of alginate impression material and 45% ratio of rice starch. Group 3, 52,5% ratio of alginate impression material and 47,5% ratio of rice starch. Group 4, 50 % ratio of alginate impression material and 50% ratio of rice starch. **Result.** There were no significant differences in recovery from deformation values ($p>0.05$) between groups. **Conclusion.** Partial replacement of alginate impression material with rice starch (*Oryza sativa*) was still in the standart value of the recovery from deformation.

Keywords: Recovery from deformation, alginate impression material, rice starch (*Oryza sativa*)