

***Pengaruh Penambahan Putih Telur Dan Lama Pemanggangan Terhadap
Kualitas Rice Crackers Berbasis Beras Merah (Oryza Nivara)
The Effect of Egg White Addition and Baking Time on the Quality of Rice
Crackers Made from Brown Rice (Oryza Nivara)***

Dr. Elly Kurniawati, S. TP., MP.

Nurul Febrianti

Program Studi Teknologi Rekayasa Pangan

Jurusan Teknologi Pertanian

Study Program of Food Engineering Technology

Majoring of Agricultural Technology

ABSTRACT

Rice crackers are thin, crispy snacks that can be made from rice or rice flour. Brown rice has the potential to be used as a raw material for rice crackers, but the characteristics of the raw material can affect the product's structure and texture. Adding egg whites can help form the structure while increasing the protein content, whereas baking time affects the product's characteristics. This study aims to determine the effects of egg white addition, baking time, and their interaction on the characteristics of brown rice-based rice crackers and to identify the optimal treatment. The study used a factorial Complete Randomized Design (CRD) with egg white additions of 0 g, 40 g, 60 g, 80 g, and 100 g per 100 g of red rice, as well as baking times of 35, 40, and 45 minutes, with three replicates. The data were analyzed using ANOVA and DMRT at the 5% significance level. The results showed that both factors and their interactions had a significant effect ($p < 0.05$) on the physical, chemical, color, and organoleptic characteristics. Moisture content ranged from 2.98–11.06%, ash content from 1.20–7.82%, protein content from 7.81–42.19%, crude fiber from 1.99–1.20%, and texture from 0.56–1.79 N. The best results were obtained by adding 100 g of egg white and baking for 45 minutes, yielding a protein content of 42.19%, moisture content of 2.99%, texture of 1.79 N, and good panelist acceptance. The results of the study show that a combination of these two factors can produce rice crackers with good characteristics that are acceptable to the panelists.

Keywords: brown rice, rice crackers, baking, egg white