

The Effect of Sago Flour Substitution on the Physical, Chemical, and Sensory Properties of White Bread

Supervised by: Dr. Elly Kurniawati, S.TP., M.P.

Citra

*Study Program of Food Engineering Technology
Majoring of Agricultural Technology*

ABSTRACT

White bread is a processed food product that contains carbohydrates and is widely consumed by the public as an alternative to rice. Bread is usually made using only wheat flour. One alternative is to substitute sago flour. The substitution of sago flour in white bread production is expected to improve the quality of white bread. The purpose of this study was to determine the effect of sago flour substitution on the physical, chemical, and sensory properties of white bread, as well as the optimal concentration of sago flour substitution to produce white bread with the best quality. This study used a Completely Randomized Design (RAL) with 6 treatments and 3 replicates. The sago flour substitution with the best quality was P6 (50% wheat flour and 50% sago flour) for carbohydrate content (5.54%) and moisture content (30.89%). Meanwhile, P2 (90% wheat flour and 10% sago flour) had the best quality for specific volume (2.56), expansion power (26.80), texture (39.73), lightness intensity (L) (73.91), red color intensity (a) (7.61), yellow color intensity (b) (27.95), and hedonic quality organoleptic tests for color (3.35), aroma (3.59), taste (3.76), texture (3.65), structure (3.49), organoleptic test for hedonic color (4.21), aroma (3.69), taste (3.89), texture (3.71), structure (3.76).

Keywords: *white bread, sago flour*