

**INFLUENCE OF GRONTOL SUBSTITUTION AND  
CINNAMON (*Cinnamomum burmannii*) POWDER ADDITION ON  
PHYSICAL PROPERTIES, ANTIOXIDANT ACTIVITY AND LEVEL OF  
PREFERENCE WHITE CORN CUPCAKE**

**ABSTRACT**

The previous cupcake was made from wheat flour which until now is still imported. Efforts to reduce imports of wheat flour are by utilizing local food-based agricultural products, one of which is white corn. White corn can be processed into *grontol* and substituted with wheat flour. The purpose of this study was to produce *grontol* substitution cupcakes and the addition of cinnamon powder which was favored by panelists.

The study was conducted in two stages, namely the manufacturing of white corn *grontol* and cupcake making. The making of white corn *grontol* includes immersion, washing, boiling I, washing, boiling II, draining, while cupcake making with mixing ingredients, printing, roasting. The experimental design used RAK (Randomized Block Design) with two factors namely white corn *grontol* substitution (0, 10, 20 and 30%) and the addition of cinnamon powder (0 and 4%). The data obtained were calculated statistically by univariate analysis, if the real difference was continued by DMRT, then white corn cupcake was analyzed for water content, color with lovibond tintometer, level of expansion of volume, antioxidant activity and level of preference.

The results showed that the white corn *grontol* substitution cupcake and the addition of cinnamon powder favored the panelists. Cupcake chosen is by *grontol* 30% substitution and 4% cinnamon powder is a cupcake that is preferred by panelists with water content of 26,55% b/b, redness value of 4,95; yellow 2,65; blue 4,55; level of expansion of volume of 53,53%, and antioxidant activity 7,73% RSA.

Keywords: Cupcake, white corn *grontol*, cinnamon, antioxidant activity.