

## **ABSTRACT**

*This research aims at identifying the effect of substitution of banana peel flour on wheat flour on the characteristics of ice cream wafer cone.*

*In addition, the experimental design used in this study was a randomized block design (RAK) with a factorial pattern of 7 (grade) x 4 (replication) followed by the Duncan test. The experimental variable consisted of the substitution of banana peel flour on wheat flour (S), namely  $s_1 = 0\%$ ,  $s_2 = 5\%$ ,  $s_3 = 10\%$ ,  $s_4 = 15\%$ ,  $s_5 = 20\%$ ,  $s_6 = 25\%$ , and  $s_7 = 30\%$ . The response design consisted of organoleptic responses (color, flavor, taste, and texture), chemical responses (water content testing, ash content, and crude fiber content), and physical responses (time of cone resistance to the ice cream). In addition to the selected products, the protein and calcium levels were also respectively tested.*

*The results showed that the substitution of banana peel flour on wheat flour had an effect on the organoleptic response which consisted of color, flavor, aroma, and texture on the ice cream wafer cone. In addition, the substitution of banana peel flour on wheat flour had effects on the chemical response of the crude fiber content, and on the physical response in terms of the time of cone resistance to the ice cream of the produced products.*

*Based on the organoleptic, chemic, and physic response, obtained the selected product that is S2 treatment (substitution banana peel flour about 5% on wheat flour) which had the average value of the preferred level of color, taste, aroma, and texture consecutively is 5,0; 4,9; 4,8; and 5,0. It also contains water content of 5,53%, ash content of 2,18%, crude fiber content of 7,73%, protein level of 12,49%, calsium level of 112,91 mg Ca/100 g sample, and time of cone resistance to the ice cream of 36 minute and 75 second.*

**Keyword: Ice Cream Wafer Cone, Banana Peel Flour, and Wheat Flour.**