ABSTRACT

FORMULATION OF FERMENTED MAIZE (Zea Mays L) AND WHEAT FLOUR ON THE CHEMICAL, PHYSICOCHEMICAL AND SENSORY PROPERTIES OF SWEET BREAD

By

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This study was aimed in getting formulations of those mixed wheat flour that produce the best chemical, physicochemical and preferably of sweet breads. This research was arranged in a Complete Randomized Block Design (RAKL) with four replications. The treatments were comparisons of fermented maize and wheat flour as much as 6 levels: L1 (0%: 100%); L2 (5%: 95%); L3 (10%: 90%); L4 (15%: 85%); L5 (20%: 80%); and L6 (25%: 75%). Sweet bread is then carried out chemical analysis, physicochemical and sensory produce the best. Analysis chemical and physicochemical of moisture, ash, fat and protein and the degree of development of the dough, sensory properties of color, texture, flavor and aroma and overall acceptance. The data were analyzed using ANOVA and further tested with Honestly Significant Difference (HSD) at 5%. The homogenity was analyzed using Bartlett test and additivity was analyzed using Tuckey test.
Comparison of wheat flour and fermented maize didn’t show significant difference on water content of sweet bread. While the ash, fat, protein content and the degree of development of the sweet bread dough showed significant difference. Sensory attributeds comparison of wheat flour and fermented maize showed significant difference on scores of color, texture, taste and aroma and overall acceptance. The results showed that the best treatment was L4 (15% fermented maize : 85% wheat flour) with a 24.41% of water content, 1.55% of ash content, 10.66% of fat content, 17.34% of protein content and 65.50% of dough’s degree of development, 3.09 of texture’s score (rather soft), 3.02 of flavor and aroma’s score (typical corn), 2.05 of color’s score (slightly yellow), and the overall acceptance’s score of 3.43 (love).

**Keywords**: Fermented maize, sweet bread, wheat flour