

ABSTRACT

Currently, Indonesia's dependence on wheat was increasing as more and more processed products of flour as staple food, one of which is bread. On the basis of this fact, this study aims to determine whether the use of wheat flour can be reduced.

The research method was done through several stages including the analysis of raw materials, that was determination of gluten content of millet flour, tested of amylographic properties of wheat flour and millet flour. Made sweet bread by determined the minimum limit of wheat flour using 5:5, 6:4, 7:3, 8:2, and 9:1 ratio. The bread that was produced was tested the development volume and porosity. The next step were determined the formulation of making sweet breads with a ratio of wheat flour and 7: 3, 7.5: 2,5 and 8: 2. The finished sweet bread was done by organoleptic test to select 1 sample then the selected bread sample was tested the water content, protein, fat, carbohydrate, dietary fiber and calcium and determined the nutritional value of the bread produced.

The results of research preliminary study showed 1.06% gluten starch gluten, and amylography properties of millet flour which is gelatinization temperature 85,4°C, peak viscosity 660 BU, viscosity breakdown 2210 BU and viscosity setback 1550 BU. The amylography properties of wheat flour are gelatinization temperature 89,3°C, peak viscosity 530 BU, viscosity breakdown 645 BU and viscosity setback 115 BU. Minimum limit of the ratio of wheat flour and millet flour by 7: 3 for making sweet bread. Selected sweet bread was used a ratio of wheat flour and millet flour by 8: 2 because it is preferred by the panelists based on organoleptic tests. Selected sweet bread contains 19.22% moisture content, 7.48% protein content, carbohydrate content of 57.37%, 2.2% fat content, 3.54% dietary fiber content and 1.91 mg / 100gram calcium with energy a total of 279 kcal that meets 17.44% of nutritional adequacy per day. While the control sweetbread contains 22.49% moisture content, 8.59% protein content, 52.17% carbohydrate, 2.50% fat content, 1.63% dietary fiber and 1.33 mg / 100gram calcium total energy of 266 kcal which fulfill 16,62% nutrient adequacy per day.

Keywords: Wheat Flour, Millet Flour, Sweet Bread.