

## ABSTRACT



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### **THE EFFECT OF SORGHUM ADDITION (*Sorghum bicolor* (L.) Moench) ON SOY MILK (*Glycine max* (L.) Merrill) TO ANTIOXIDANT ACTIVITY, ORGANOLEPTIC TEST AND NUTRITIONAL VALUES**

**ix, VI Chapters, 76 Pages, 12 Tables, 2 Pictures, 8 Attachments**

**Background:** In Indonesia the prevalence of degenerative diseases is still high, thus increasing the need for antioxidants. Therefore, it takes functional food products with high antioxidants. The excess of sorghum as food, feed, and industry is rich in functional food components.

**Objective:** To analyze the effect of sorghum addition (*Sorghum bicolor* (L.) Moench) on soy milk (*Glycine max* (L.) Merrill) to antioxidant activity, organoleptic test and nutritional values.

**Method:** Experimental research with Randomized Complete Random Design (RAL), statistical analysis using One Way Anova test, antioxidant activity with DPPH method, receiving capacity with organoleptic test and nutrient values with proximate test.

**Result:** The preferred product is soybean milk with sorghum addition is F2 (160 ml: 40 g) with antioxidant activity of IC50 28,45 ppm with very strong category, organoleptic rating is preferred and has the desired characteristic and nutrient content in F2 is carbohydrate 4,02 %  $\pm$  2.07, 1.91%  $\pm$  0.35 protein content, 1.07%  $\pm$  1.07 fat content, moisture content 92.74%  $\pm$  2.13 and ash content of 0.26%  $\pm$  0.001.

**Conclusion:** This study shows that the addition of sorghum in soy milk affects antioxidant activity, organoleptic assessment and nutrient content in the product. It is recommended to continue the test of shelf life, alt and viscosity.

**Keywords:** Soy Milk, Sorghum, Antioxidant Activity, Nutritional Values, Organoleptic Test

**Bibliography:** 40 (1995 - 2017)