ABSTRACT

The purpose of this research was to studied the effect of substitution of semolina flour on the characteristics of purple sweet potato macaronis. The benefits of this research was to increase the utilization of purple sweet potato.

The experimental design of this research used Randomized Block Design with one factor and repeated four times. The factors of this research were substitution of semolina flour (A) with 7 treatment levels is 0% (a₁), 5% (a₂), 10% (a₃), 15% (a₄), 20% (a₅), 25% (a₆)), and 30% (a₇). Organoleptic responses analyzed to raw macaroni is color, while to mature macaroni is color, aroma, falvor, and elasticity. Chemical responses analyzed content of water, protein, coarse fiber, and starch. Selected samples were analyzed by antioxidant activity.

The results of research indicated of substitution of semolina flour on the characteristics of purple sweet potato macaroni affect on content of water, protein, coarse fiber, and starch. Organoleptic test affect to color of raw macaroni; and color, flavor, aroma, and elasticity of mature macaroni.

The results of research obtained the selected sample is code a_2 with substitution 5% semolina flour has a water content of 8.3%, protein content of 5.19%, coarse fiber content of 4.28%, starch content of 35.43%, and activity antioxidant of 1760,2308 ppm.

Keywords: Purple Sweet Potato Flour, Semolina Flour, Macaroni.