

Effect of Temperature and Drying Process Time on Physical and Chemical Properties of Okra Flour (*Abelmoschus Esculentus* L. Moench)

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ABSTRACT

*Okra (*Abelmoschus Esculentus* L. Moench) is one type of vegetable that is included in functional vegetables, which means that okra contains various health benefits. The high water content causes okra vegetables to be easily damaged by microorganisms. The food industry varies depending on the commodity to be processed or dried. The parameters of this research are the treatment time and temperature of drying okra to become okra flour, namely 8 hours, 9 hours, and 10 hours with the temperatures given are 50°C, 60°C, 70°C, with analysis of physical properties including yield, fineness, color and chemical properties including moisture content and antioxidants as well as organoleptic testing.*

The application of time and temperature in the drying process affects the physical and chemical properties, the longer the drying time and the higher the temperature used, the lower the yield of okra flour with a value of 2.90% at 70°C temperature treatment with a time of 10 hours, the water content contained in okra flour is getting smaller at 70°C temperature treatment with a time of 10 hours by 10% fault, the color produced by okra flour tends to be bright with a white degree value at 70°C temperature treatment with a time of 9 hours at 48.48, antioxidant activity in okra flour increased with drying time with the highest value at a temperature of 50°C with a temperature treatment for 10 hours of 71.71%. Testing the level of preference of the panelists using the hedonic method and the hedonic quality showed that the hedonic test or the panelists' grief gave the highest value to okra flour with a temperature treatment of 70°C with a temperature of 9 hours with a color value of 3.40, aroma 3.75, texture 3.30, the appearance of 3.40, for the value of hedonic quality the panelists gave various values, the highest color value was 3.45 at a temperature treatment of 50°C with a time of 8 hours, the highest value of aroma was 3.50 at the treatment of 50°C with a temperature of 9 hours, and with the highest texture value of 3.50 with a temperature treatment of 70°C with a time of 10 hours.

Keywords: *drying, physical and chemical properties, okra flour, okra*