

ABSTRACT

The purpose of this research is to study comparative canna flour and potato flour on the characteristics of composite flour as an intermediate form of processed food.

Method of research done in this study consisted of two phases: preliminary research and primary research. Preliminary research conducted is the manufacture of flour and raw materials analysis tubers (canna and potato) that will be used as raw material in the manufacture of composite flour. The analysis conducted in the preliminary study is the analysis on raw materials, namely the analysis of water content gravimetric method tuber canna white and tubers of potato varieties Galora, and analysis of water content gravimetric method, analysis amilography, analysis of gel consistency, testing swelling power and calculation of yield on flour canna and potato flour. The main research is to determine the effect of comparison canna flour and potato starch using a randomized block design (RBD). The design of treatment consists of one factor, namely the ratio of canna flour and potato flour on the characteristics of composite flour. The draft response consists of a chemical response that determination of water content and swelling power, as well as the nature of the test carried amilography, gel consistency, and sulfite residue tests on selected samples.

The results of the study sample was selected t_5 ratio (7: 3) found that in the analysis of qualitative test residual sulphite (SO_2) is negative samples containing residues of sulphite (SO_2), and the resulting fiber content has a value of 7.76%, testing the nature amilography can be seen that the process heating from the early minutes until the 12th minute of new breaking of the starch granules with a starting temperature gelatinization of $73.9^\circ C$ with a viscosity of 165.0 cp and continued to increase until it reached its peak gelatinization which occurred in the 45th minute with a temperature of $50.50^\circ C$ and value amounted to 2200.0 cp viscosity, gel consistency test results showed that the gel consistency of the selected sample composite flour has an average value of 50.3 mm gel consistency, so that the sample had the texture of the rice in the form of crumbs.

Keywords : *composite flour, canna, and potato*