

## **ABSTRACT**

### **THE INFLUENCE OF GLUCOMANNAN COMMERCIAL ADDITION TOWARD THE ORGANOLEPTIC CHARACTERISTICS OF WET NOODLES SUBSTITUTED BY CASSAVA FLOUR**

By

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Glucomannan are polysaccharide compounds which are widely used as materials food for gel maker and coagulated food as well as dietary fiber which helps to overcome constipation. Addition of glucomannan as a food ingredient manufacture is worth considered to improve such food products. One product that can be created with the addition of glucomannan is a wet noodle. Wet Noodle is a food product made from wheat with or without the addition of other food ingredients and food additives are permitted, typically shaped noodle that is not dried. This research aimed to get the amount of substitution of cassava flour and glucomannan which can produce wet noodle with the best organoleptic quality.

This research is divided into two steps. First step is a preliminary research and the second step is primary research. Preliminary studies are arranged in Completely Randomized Design (CRD) with 2 replicates. The treatments were five formulas of wheat flour that are substituted with cassava flour in a row that is 100%:0% (TC1), 80%:20% (TC2), 60%:40% (TC3), 40%:60% (TC4), and 20%:80% (TC5). The result data of the research were analyzed with ANOVA to get a variety of error estimators. Then the data obtained were tested in common manifold with Barlett test and the addition of data were tested with Tuckey and significance test to determine whether there is a difference between treatment with Least Significant Difference test (LSD). All tests are carried out at level 1% and 5%. The main research was arranged in Completely Randomized Design (CRD) with 2 replicates. Treatment of 7

formulas best organoleptic test results of preliminary research and glukomannan respectively were 0% (F1), 0.5% (F2), 1% (F3), 1.5% (F4), 2% (F5) , 2.5% (F6), and 3% (F7). Data were analyzed with ANOVA for a variety of error estimators. Then the data obtained were tested in common manifold with Barlett test and tested with the addition of data were tested with Tuckey and significance test to determine whether there is a difference between treatment with Least Significant Difference test (LSD). All tests are carried out at level 1% and 5%.

The results of research showed that wet noodle with formulations of cassava flour that were substituted with wheat flour by 20% (TC2) is a wet noodle of the most preferred. The treatment is to produce wet noodle with a rating panelists include taste with the highest score is 3.40 with the criterion of sufficient acceptable, suppleness with the highest score of 3.57 with the criterion of sufficient chewy, and overall acceptance by the highest value of 3.35 with the criterion rather liked. The result of organoleptic assessment toward the wet noodle formulation with the addition of glucomannan did not show differences between the treatments.