ABSTRAK

Tujuan penelitian ini adalah untuk mengetahui pengaruh modifikasi tepung ganyong dengan variasi suhu dan waktu pemanasan dapat memperbaiki karakteristik tepung ganyong dan meningkatkan penggunaannya dalam pengolahan pangan.

Rancangan percobaan yang digunakan pada penelitian ini adalah pola faktorial 3 x 3 dalan Rancangan Acak Kelompok (RAK) dan ulangan yang dilakukan sebanyak tiga kali, sehingga diperoleh 27 satuan percobaan. Faktor yang digunakan dalam penelitian adalah suhu pemanasan modifikasi *Heat Moisture Treatment* (HMT) (80°C, 90°C dan 100°C) dan waktu pemanasan modifikasi *Heat Moisture Treatment* (HMT) (1 jam, 2 jam dan 3 jam). Respon penelitian utama mencakup respon kimia yaitu sifat amilografi, kadar air, kadar amilosa dan kadar serat kasar.

Berdasarkan hasil penelitian diperoleh suhu pemanasan modifikasi *Heat Moisture Treatment* (HMT) berpengaruh terhadap sifat amilografi, kadar air, kadar amilosa dan kadar serat kasar. Waktu pemanasan modifikasi *Heat Moisture Treatment* (HMT) berpengaruh terhadap sifat amilografi, kadar air, kadar amilosa dan kadar serat kasar. Interaksi antara suhu dan waktu pemanasan modifikasi *Heat Moisture Treatment* (HMT) berpengaruh terhadap sifat amilografi, kadar air, kadar amilosa dan kadar serat kasar.

Berdasarakan hasil penelitian diperoleh sampel terpilih yaitu pada kode sampel m3n3 (suhu pemanasan 100°C dan waktu pemanasan 3 jam) dengan hasil rata-rata kadar air 5,47%, kadar amilosa 27,07% dan viskositas *setback* 856,7 Cp. Pembuatan *cookies* dari tepung ganyong modifikasi terpilih dilakukan pengujian respon organoleptik. Berdasarkan hasil pengujian *cookies* tepung ganyong modifikasi *Heat Moisture Treatment* (HMT) disukai dalam hal rasa, warna dan tekstur.

Kata Kunci: Tepung Ganyong, *Heat Moisture Treatment*, *Cookies*.

ABSTRACT

The purpose of this study was to determine the effect of modification of flour ganyong with temperature variations and heating time can improve the characteristics of flour ganyong and increase its use in food processing.

The experimental design used in this study is a 3 x 3 factorial pattern in Randomized Block Design (RBD) and replication conducted three times, resulting in 27 experimental units. Factors used in the study were Heat Moisture Treatment (HMT) heating temperature (80°C, 90°C and 100°C) and Heat Moisture Treatment (HMT) heating time (1 hour, 2 hours and 3 hours). The main research responses include chemical responses: pasting properties, moisture content, amylose content and crude fiber content.

Based on the result of the research, Heat Moisture Treatment (HMT) heating temperature has an effect on pasting properties, moisture content, amylose content and crude fiber content. Heat Moisture Treatment (HMT) heating time has an effect on pasting properties, moisture content, amylose content and crude fiber content. The interaction between temperature and heating modification time of Heat Moisture Treatment (HMT) has an effect on pasting properties, moisture content, amylose content and crude fiber content.

The result of this research is the sample of m3n3 (heating temperature 100°C and heating time 3 hours) with average water content 5,47%, amylose 27,07% and viscosity setback 856,7 Cp. The preparation of cookies from selected modified ganyong flour is carried out by the organoleptic response test. Based on the test results of ganyong flour cookies modification Heat Moisture Treatment (HMT) is preferred in terms of taste, color and texture.

Keyword: *Flour Ganyong, Heat Moisture Treatment, Cookies*