

ABSTRAK

MUTHIA DAMAYANTI. Pengaruh Konsentrasi Larutan Perendam Natrium Metabisulfit terhadap Sifat Fisik dan Sensori Tepung Pisang Kepok Putih dan Aplikasinya pada Pembuatan Stik. Dibimbing oleh NURRAHMAN dan WIKANASTRI HERSOELISTYORINI.

Perendaman pisang yang telah dikupas ke dalam larutan natrium metabisulfit (NaS_2O_5) diketahui mampu mengendalikan reaksi pencoklatan enzimatis atau non enzimatis, menghambat pertumbuhan mikroba dan berfungsi sebagai pemutih. Tujuan umum penelitian yaitu mengetahui pengaruh konsentrasi larutan perendam natrium metabisulfit terhadap sifat fisik (derajat putih) dan sensori tepung pisang kepok putih dan mengetahui pengaruh substitusi tepung pisang kepok putih terhadap sifat fisik (kekerasan) dan sensori stik. Metode penelitian tepung pisang ini terdiri dari 4 perlakuan perendaman konsentrasi natrium metabisulfit yaitu 0; 0,02; 0,04; dan 0,06 persen sedangkan pada pembuatan stik pisang terdiri dari 4 perlakuan penambahan tepung pisang kepok putih yaitu 0, 10, 20 dan 30 gram. Setiap perlakuan dilakukan pengulangan sebanyak 6 kali, sehingga diperoleh 24 unit percobaan pada masing-masing percobaan. Hasil penelitian menunjukkan ada pengaruh nyata dari perendaman konsentrasi natrium metabisulfit dan tepung pisang kepok putih terhadap karakteristik fisik (derajat putih dan kekerasan) dan sensori. Sifat fisik dan sensori terbaik terdapat pada tepung dengan konsentrasi natrium metabisulfit 0,06 persen dengan hasil analisis proksimat kadar air 12,43%, kadar abu 3,05%, kadar lemak 1,77%, protein 2,49% dan karbohidrat 80,26% serta untuk aplikasi pembuatan stik terdapat pada penambahan tepung pisang 10 gram dengan hasil analisis proksimat kadar air 9,74%, kadar abu 0,93%, kadar lemak 35,86%, protein 3,83% dan karbohidrat 49,64%. Semakin meningkat penggunaan natrium metabisulfit maka semakin tinggi tingkat keputihan tepung pisang kepok putih, namun aroma dan tekstur tidak ada perbedaan. Semakin banyak penambahan tepung pisang kepok putih stik yang dihasilkan akan semakin keras dan menghasilkan warna stik yang semakin kecoklatan, aroma karamel dan rasa sedikit manis.

Kata Kunci: tepung pisang, stik pisang, natrium metabisulfit, derajat putih, kekerasan

ABSTRACT

MUTHIA DAMAYANTI. Effect of Sodium Metabisulfite Concentration on Physical Characteristic and Sensory of White Banana Flour and Its Application on Making of Stik. Guided by NURRAHMAN and HERSOELISTYORINI WIKANASTRI.

Immersion of bananas that have been peeled into a solution of sodium metabisulfite (NaS_2O_5) is known to control the reaction of enzymatic or non enzymatic browning, inhibit the growth of microbes and bleach. The general objective of the research was to know the effect of soluble sodium metabisulfite solution concentration on physical properties (white degree) and white banana flour sensori and to know the effect of white kepok banana flour substitution on physical properties (hardness) and sticks sensori. The research method of banana flour consists of 4 treatments of soaking the concentration of sodium metabisulfite which is 0; 0.02; 0.04; and 0.06 percent while on the making of banana sticks consisted of 4 treatment of white banana flour added 0, 10, 20 and 30 gram. Each treatment was repeated 6 times, so that 24 experimental units were obtained in each experiment. The results showed that there was a significant effect of immersion of sodium metabisulphite concentration and white banana flour on physical characteristics (degree of white and hardness) and sensory. The best physical and sensory properties were found in flour with 0.06 percent sodium metabisulfite concentration with proximate analysis of 12.43% moisture content, 3.05% ash content, 1.77% fat content, 2.49% protein and 80 carbohydrates, 26% and for the application of making sticks there were 10 grams of banana flour with the results of proximate analysis of water content of 9.74%, ash content 0.93%, fat content of 35.86%, protein 3.83% and carbohydrates 49.64% . The higher the use of sodium metabisulfite the higher the whiteness level of white banana flour, but the aroma and texture there is no difference. The more addition of white kepok banana flour the resulting sticks will be harder and produce a color that is increasingly brownish, caramel aroma and slightly sweet taste.

Keywords: banana flour, banana stick, sodium metabisulfite, white degree, hardness