

## ABSTRAK

### KAJIAN SIFAT FISIKOKIMIA DAN ORGANOLEPTIK PERMEN KERAS (*HARD CANDY*) DARI PISANG MULU BEBE (*Musa Acuminata*)

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## ABSTRAK

Pisang mulu bebe (*Musa acuminata*) merupakan salah satu jenis pisang yang banyak dikenal di Halmahera Utara, dan memiliki peluang sebagai salah satu bahan diversifikasi pangan diantaranya untuk pembuatan permen keras. Penelitian ini bertujuan untuk mengetahui konsentrasi ekstrak sari buah pisang mulu bebe yang terbaik dalam pembuatan permen keras dan mengetahui sifat fisikokimia dan organoleptik permen keras dari pisang mulu bebe. Metode penelitian ini menggunakan Rancangan Acak Lengkap (RAL) satu faktor yang terdiri dari 5 perlakuan dan 3 kali ulangan sehingga diperoleh  $5 \times 3 = 15$  unit percobaan. Perlakuan terdiri dari 5 perlakuan yaitu penambahan konsentrasi sari buah pisang mulu bebe 0% (P1), sari buah pisang mulu bebe 20% (P2), sari buah pisang mulu bebe 25% (P3), sari buah pisang mulu bebe 30% (P4), dan sari buah pisang mulu bebe 35% (P5). Sampel yang diperoleh dianalisis sifat fisik (tingkat kekerasan), sifat kimia (kadar air, kadar abu, kadar gula reduksi dan kadar vitamin C) dan analisis organoleptik (warna, aroma, tekstur dan rasa). Penambahan sari buah pisang mulu bebe memberikan hasil yang berpengaruh nyata terhadap warna, aroma, rasa dan tekstur. Pada parameter tingkat kekerasan, kadar abu, kadar air, kadar gula reduksi dan kadar vitamin C memberikan hasil yang tidak berpengaruh nyata. Permen keras pisang mulu bebe terbaik yaitu pada perlakuan perlakuan 25% ekstrak pisang mulu bebe. Permen keras dengan penambahan ekstrak pisang mulu bebe menghasilkan kadar air berkisar antara 3,58%-12,76%, kadar abu 0,48%-0,66%, tingkat kekerasan 21,39N-30,21N, kadar vitamin C 0,21 mg/g-0,41 mg/g, kadar gula reduksi 16,09%-18,08%. Sedangkan sifat organoleptik yaitu warna 3,62-4,03, aroma 2,99-3,96, rasa 2,99-4,08, dan tekstur 3,11 N-3,97 N.

**Kata kunci :** permen keras, sari buah pisang mulu bebe, sifat fisikokimia, organoleptik.

## ABSTRACT

### STUDY OF PHYSYCHEMICAL AND ORGANOLEPTIC PROPERTIES OF HARD CANDY FROM MULU BEBE BANANA (*Musa acuminata*)

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## ABSTRACT

Pisang mulu bebe (*Musa acuminata*) is a type of banana that is widely known in North Halmahera, and has an opportunity as a food diversification material for making hard candy. This study aims to determine the best concentration of Mulu Bebe banana juice extract in making hard candy and to determine the physicochemical and organoleptic properties of the Mulu Bebe banana juice. This research method used a one-factor completely randomized design (CRD) consisting of 5 treatments and 3 replications in order to obtain  $5 \times 3 = 15$  experimental units. The treatments consisted of 5 treatments, namely the addition of 0% mulu bebe banana juice concentration (P1), 20% mulu bebe banana juice (P2), 25% mulu bebe banana juice (P3), 30% mulu bebe banana juice (P4), and banana juice mulu free 35% (P5). The samples obtained were analyzed for physical properties (hardness level), chemical properties (moisture content, ash content, reducing sugar content and vitamin C content) and organoleptic analysis (color, aroma, texture and taste). The addition of Mulu Bebe banana juice gave a very significant effect on color, aroma, taste and texture. On the parameters of the level of hardness, ash content, water content, reducing sugar content and vitamin C content gave no significant effect. The best Mulu Bebe banana hard candy was the 25% treatment of Mulu Bebe banana extract. Hard candy with the addition of Mulu Bebe banana extract produced moisture content ranging from 3.58% -12.76%, ash content 0.48% -0.66%, hardness level 21.39N-30.21N, vitamin C 0, 21 mg / g-0.41 mg / g, reducing sugar levels 16.09% -18.08%. While the organoleptic properties are color 3.62-4.03, aroma 2.99-3.96, taste 2.99-4.08, and texture 3.11 N-3.97 N.

**Key words:** *hard candy, Mulu Bebe banana juice, physicochemical properties, organoletics.*