

VARIASI PENCAMPURAN UBI JALAR UNGU (*Ipomoea batatas L.*) TERHADAP SIFAT FISIK, SIFAT ORGANOLEPTIK, DAN AKTIVITAS ANTIOKSIDAN PADA ES KRIM

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ABSTRAK

Latar Belakang : Penyakit degeneratif merupakan masalah Kesehatan yang serius dan menjadi penyebab kematian tertinggi di Indonesia, Antioksidan mampu untuk menghambat reaksi oksidasi dengan cara mengikat radikal bebas dan molekul yang sangat reaktif sehingga kerusakan sel dapat dicegah. Ubi jalar ungu mengandung antosianin memiliki kemampuan tinggi sebagai antioksidan, Makanan olahan es krim banyak digemari oleh semua kalangan merupakan pengolahan pangan modern yang telah menghasilkan kreasi baru olahan ubi jalar ungu,

Tujuan Penelitian : Untuk mengetahui variasi pencampuran ubi jalar ungu dalam pembuatan es krim terhadap sifat fisik, sifat organoleptik, dan aktivitas antioksidan

Metode Penelitian : Penelitian ini merupakan penelitian eksperimen murni dengan desain rancang acak lengkap. Terdapat 4 perlakuan dengan pencampuran ubi jalar ungu 0%, 15%, 25%, dan 35%. Data uji sifat fisik dianalisis secara deskriptif, uji sifat organoleptik, aktivitas antioksidan secara statistik, kadar antosianin dilihat rata-rata dan dianalisis secara deskriptif, daya tahan leleh dan *overrun* secara objektif dan dianalisis secara deskriptif.

Hasil Penelitian : Uji sifat fisik es krim ubi jalar ungu yaitu semakin tinggi persentase pencampuran ubi jalar ungu maka warna akan semakin meningkat, aroma khas ubi jalar ungu, rasa dominan manis, dan tekstur agak halus, daya tahan leleh semakin lama, nilai *overrun* pada es krim semakin banyak pencampuran ubi jalar ungu maka semakin rendah nilai *overrun*, dan semakin sedikit pencampuran ubi jalar ungu maka semakin cepat untuk meleleh. Uji sifat organoleptik menyatakan bahwa es krim dengan pencampuran ubi jalar ungu yang paling disukai pada perlakuan B (15%). Aktivitas antioksidan dan antosianin tertinggi pada perlakuan D (35%).

Kesimpulan : Adanya pengaruh variasi pencampuran ubi jalar ungu terhadap sifat fisik, sifat organoleptik, aktivitas antioksidan, kadar antosianin, daya tahan leleh dan *overrun* es krim ubi jalar ungu.

Kata Kunci : Es krim, Ubi jalar ungu, Sifat fisik, Organoleptik, Aktivitas Antioksidan, *Overrun*, Daya Tahan Leleh.

VARIATIONS OF PURPLE SWEET (*Ipomoea batatas L.*) ON PHYSICAL PROPERTIES, ORGANOLEPTIC PROPERTIES, AND ANTIOXIDANT ACTIVITIES IN ICE CREAM

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ABSTRACT

Background: Degenerative disease is a serious health problem and is the leading cause of death in Indonesia. Antioxidants are able to inhibit oxidation reactions by binding to free radicals and molecules that are highly reactive so that cell damage can be prevented. Purple sweet potato contains anthocyanin which has high ability as an antioxidant. Processed food ice cream is much favored by all circles. It is a modern food processing which has resulted in new creations of processed purple sweet potato.

Research Objectives : To determine the variation of purple sweet potato mixing in the manufacture of ice cream on physical properties, organoleptic properties, and antioxidant activity

Research Methods: This research is a pure experimental study with a completely randomized design. There were 4 treatments with purple sweet potato mixing 0%, 15%, 25%, and 35%. Physical properties test data were analyzed descriptively, organoleptic properties test, antioxidant activity statistically, anthocyanin levels were seen on average and analyzed descriptively, melting resistance and overrun were objectively and analyzed descriptively.

Research Results: Test the physical properties of purple sweet potato ice cream, namely the higher the percentage of mixing purple sweet potato, the color will increase, the distinctive aroma of purple sweet potato, the dominant taste is sweet, and the texture is slightly smooth, the melting resistance is longer, the overrun value is ice cream, the more purple sweet potato is mixed, the lower overrun value, the less the purple sweet potato mixes, the faster it will melt. The organoleptic test stated that the ice cream mixed with purple sweet potato was the most preferred in treatment B (15%). The highest antioxidant and anthocyanin levels was in treatment D (35%).

Conclusion : There is an effect of variations in mixing purple sweet potato on physical properties, organoleptic properties, antioxidant activity, anthocyanin levels, melting resistance and overrun of purple sweet potato ice cream.

Keywords: Ice cream, purple sweet potato, physical properties, organoleptic, antioxidant activity, overrun, melting resistance.