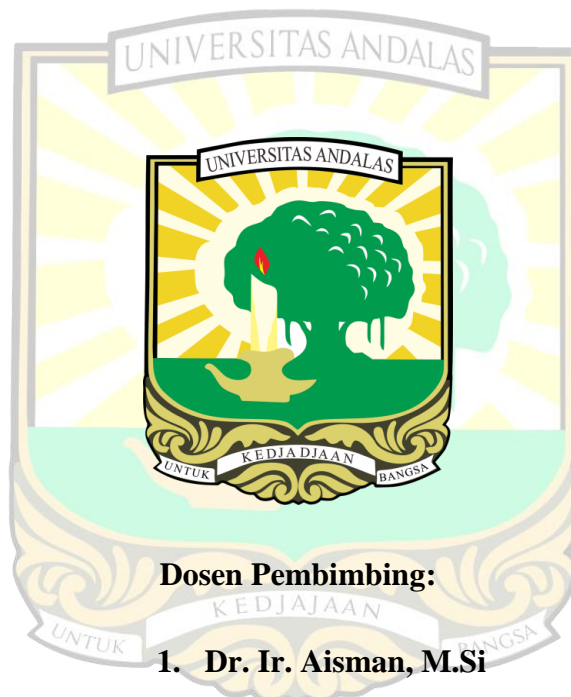


**PENGARUH PENAMBAHAN MAGNESIUM KARBONAT
(MgCO₃) TERHADAP KARAKTERISTIK MUTU BUBUK
PEWARNA ALAMI DARI LABU KABOCHA
(*Cucurbitamaxima. L.*)**

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**FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2023**

Pengaruh Penambahan Magnesium Karbonat (MgCO₃) Terhadap Karakteristik Mutu Bubuk Pewarna Alami Dari Labu Kabocha (*Cucurbita Maxima. L.*).

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ABSTRAK

Secara umum ada dua jenis pewarna yaitu pewarna sintesis dan pewarna alami. Pewarna sintesis lebih sering digunakan karena harganya lebih murah tetapi penggunaannya dapat berdampak buruk bagi kesehatan. Keadaan ini menyebabkan berkembangnya penggunaan bahan pewarna alami. Tujuan penelitian ini adalah mengetahui pengaruh penambahan MgCO₃ pada pembuatan pewarna bubuk labu kabocha, mengetahui formulasi terbaik, dan mengetahui kondisi penyimpanan terbaik bubuk labu kabocha. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan enam perlakuan dan dilakukan 3 kali ulangan. Faktor yang digunakan adalah konsentrasi magnesium karbonat (1%; 1,5% ; 2%; 2,5%, 2% dan 3%). Metode yang digunakan adalah metode pengeringan *tray* menggunakan *food dehydrator*. Analisis bubuk pewarna meliputi analisis rendemen, kadar air, warna, dan total karoten. Hasil penelitian menunjukkan perlakuan terbaik diperoleh pada perlakuan konsentrasi magnesium karbonat (MgCO₃) 2% yang memiliki kadar air 1,14%, rendemen 5,95%, °hue 75,758 (oranye), dan total karoten 200,296 µg/g bahan. Peningkatan konsentrasi magnesium karbonat (MgCO₃) menyebabkan adanya peningkatan total karoten hingga titik optimum, meningkatnya rendemen, warna menjadi semakin terang, namun menyebabkan turunnya kadar air. Hasil uji stabilitas menunjukkan bahwa selama penyimpanan sampai hari ke-6, semakin lama penyimpanan, maka total karoten akan semakin menurun. Bubuk pewarna alami labu kabocha stabil pada suhu penyimpanan 4°C, kondisi gelap, dan pH 7.

Kata kunci: bubuk pewarna alami, maltodekstrin, MgCO₃, labu kabocha

Effect Of Magnesium Carbonate (MgCO₃) Addition On The Quality Characteristics Of Natural Color Powders From Kabocha Pumpkin (Cucurbita Maxima. L.)

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ABSTRACT

There are two types of dyes, synthetic dyes and natural dyes. Synthetic dyes are more often used because they are cheaper but their use can have a negative impact on health. This situation led to the development of the use of natural coloring materials. The purpose of this study was to determine the effect of the addition of MgCO₃ on the manufacture of kabocha pumpkin powder dye, determine the best formulation, and determine the best storage conditions of kabocha pumpkin powder. The research design used was a completely randomized design (CRD) with six treatments and 3 replications. The factor used was magnesium carbonate concentration (1%; 1.5%; 2%; 2.5%, 2% and 3%). The method used was tray drying method using food dehydrator. Analysis of dye powder includes analysis of yield, moisture content, color, and total carotene. The results showed that the best treatment was obtained in the treatment of 2% magnesium carbonate (MgCO₃) concentration which had a moisture content of 1.14%, yield of 5.95%, °hue 75.758 (orange), and total carotene 200.296 µg/g material. Increasing the concentration of magnesium carbonate (MgCO₃) caused an increase in total carotene to the optimum point, increased yield, became lighter in color, but caused a decrease in moisture content. The stability test results showed that during storage until day 6, the longer the storage, the more the total carotene will decrease. Kabocha pumpkin natural coloring powder is stable at 4°C storage temperature, dark conditions, and pH 7.

Key words: natural coloring powder, maltodextrin, MgCO₃, kabocha pumpkin