

**SIFAT FISIK, KIMIA, DAN TINGKAT KESUKAAN NASI UNGU
DENGAN PENAMBAHAN TEPUNG DAN PASTA UWI UNGU
(*Dioscorea alata* L.)**

INTISARI

Uwi ungu (*Dioscorea alata* L) merupakan bahan yang mengandung antosianin yang berwarna ungu dan berpotensi sebagai sumber antioksidan. Pada penelitian ini dibuat nasi berwarna ungu yang warnanya berasal dari uwi ungu. uwi ungu dapat menjadi pengganti makanan pokok karena memiliki karbohidrat dan aktivitas antioksidan alami namun pemanfaatan uwi ungu belum optimal. Sehingga penelitian ini bertujuan untuk membuat nasi ungu dengan penambahan tepung atau pasta uwi ungu guna mengetahui pengaruh terhadap sifat fisik, kimia, tingkat kesukaan dan analisis kimia terhadap sampel terpilih

Pada penelitian ini dibuat nasi ungu dengan bahan baku beras yang diperlakukan dengan tepung dan pasta uwi ungu. Cara penelitian meliputi pembuatan tepung, pasta uwi ungu, dan nasi ungu. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) Faktorial dengan faktor jenis penambahan tepung atau pasta uwi ungu dan konsentrasi penambahan tepung uwi ungu sebesar 10%, 20% dan 30%, pasta uwi ungu sebesar 10%, 20% dan 30% pada beras ciherang. Analisis nasi ungu yang diuji meliputi sifat fisik yaitu warna, sifat kimia yaitu kadar air, total fenol, antosianin, dan aktivitas antioksidan, tingkat kesukaan dan analisis kimia sampel terpilih terhadap kadar abu, protein, lemak dan karbohidrat. Data dianalisis secara statistik menggunakan *Univariate Analysis of Variance (Anova)* jika ada beda nyata maka dilanjutkan dengan uji *Dunca Multiple Range Test (DMRT)* dengan tingkat kepercayaan 95%.

Nasi ungu dengan penambahan pasta uwi ungu mempunyai sifat fisik dan kimia yang di terima oleh panelis. Diketahui semakin bertambah konsentrasi penambahan tepung atau pasta uwi ungu maka sifat fisik dan kimia nasi ungu yaitu warna semakin gelap dan sifat kimia semakin meningkat sementara kadar air tidak berpengaruh. Panelis lebih menyukai nasi dengan penambahan pasta di karenakan penampilan fisik yang lebih menarik. Sampel terpilih yaitu nasi dengan penambahan pasta 30% dengan nilai uji warna, kadar air, total fenol, antosianin, aktivitas antioksidan, kadar abu, protein, lemak dan karbohidrat sebesar $L^* +53,98$, $a^* +1,56$, $b^* +0,78$, 68,27%, 4,01 mg GAE/g bk, 3,33 mg/100g bk, 7,57%, 0,92%, 1,64 %, 1,37% dan 29%.

Kata kunci: Uwi ungu, nasi ungu, aktivitas antioksidan.

PHYSICAL, CHEMICAL PROPERTIES, AND PREFERENCE LEVEL OF PURPLE RICE WITH THE ADDITION OF PURPLE YAM (*Dioscorea alata* L.) FLOUR AND PASTE

ABSTRACT

Purple yam (*Dioscorea alata* L) is ingredients that contain purple anthocyanins and potential as source antioxidants. In this research made purple rice whose originated from purple yam. Purple yam could be a substitute for staple food, purple yam has carbohydrates and natural antioxidant activity but the utilization of purple yam is not optimal. So this research aims to make purple rice with the addition of flour or purple yam paste in order to determine the effect on the physical, chemical properties, preference level and chemical analysis of the selected samples.

In this research, purple rice was made with raw rice treated with flour and purple yam paste. The research method includes making flour, purple yam paste, and purple rice. This research used a factorial Completely Randomized Design (CRD) with the type of adding purple yam flour or pasta and the concentration of adding purple yam flour by 10%, 20% and 30%, purple yam paste by 10%, 20% and 30% in ciherang rice. The analysis of purple rice tested included physical properties, namely color, chemical properties, namely water content, total phenol, anthocyanin, and antioxidant activity, preference level and chemical analysis of selected samples for ash content, protein, fat and carbohydrates. The data were statistically analyzed using *Univariate Analysis of Variance (Anova)*. If there was a significant difference, then it was continued with the *Dunca Multiple Range Test (DMRT)* with a 95% confidence level.

Purple rice with the addition of purple yam paste has physical and chemical properties that are accepted by the panelists. It is known that as the concentration of purple yam flour or paste increases, the physical and chemical properties of purple rice, namely the darker color and chemical properties increase, while the water content has no effect. Panelists prefer rice with the addition of pasta because of its more attractive physical appearance. The selected sample is rice with the addition of 30% paste with test values for color, water content, total phenol, anthocyanin, antioxidant activity, ash content, protein, fat and carbohydrates of $L^* +53,98$, $a^* +1,56$, $b^* +0,78$, 68,27%, 4,01 mg GAE/g bk, 3,33 mg/100g bk, 7,57%, 0,92%, 1,64 %, 1,37% dan 29%.

Keywords: purple yam, purple rice, antioxidant activity.