

PENGARUH VARIASI JENIS BERAS DAN KONSENTRASI UWI UNGU (*Dioscorea alata* L.) TERHADAP SIFAT FISIK, KIMIA, DAN TINGKAT KESUKAAN BERAS UNGU

INTISARI

Uwi ungu (*Dioscorea alata* L.) dapat digunakan sebagai pangan fungsional karena mengandung sumber antioksidan alami. Penelitian ini bertujuan untuk menghasilkan beras ungu yang mengandung aktivitas antioksidan dari varietas beras yang berbeda dengan penambahan pasta uwi ungu dan mengetahui pengaruhnya terhadap sifat fisik, kimia, dan tingkat kesukaan.

Penelitian ini menggunakan tiga varietas beras, yaitu IR 64, Ciherang, dan Rojolele dengan konsentrasi pasta uwi ungu 10, 20, dan 30%. Beras ungu diuji warna, tekstur, kadar air, aktivitas antioksidan, kadar antosianin, fenol total, uji kesukaan, kadar abu, kadar protein, kadar lemak, dan kadar karbohidrat *by difference*. Rancangan percobaan menggunakan RAL faktorial dan data diuji statistik menggunakan *Univariate Analysis of Variance* dan ANOVA jika ada beda nyata dilanjutkan dengan uji DMRT dengan $\alpha=0,05$.

Hasil penelitian menunjukkan bahwa varietas beras dan konsentrasi pasta uwi ungu berpengaruh berpengaruh nyata terhadap sifat fisik, kimia, dan tingkat kesukaan beras ungu. Beras ungu terbaik dan disukai panelis adalah beras ungu varietas Rojolele dengan konsentrasi pasta uwi ungu 30% dengan kadar air 13,14%, aktivitas antioksidan 4,87% RSA, kadar antosianin 5,85 mg/100g bk, fenol total 323,26 mg GAE/g bk, kadar abu 0,37% bk, kadar protein 9,72% bk, kadar lemak 0,49% bk, dan kadar karbohidrat *by difference* 76,28% bk.

Kata Kunci: beras ungu, jenis beras, aktivitas antioksidan

**THE EFFECT OF VARIATION OF RICE TYPES AND
CONCENTRATION OF PURPLE YAM (*Dioscorea alata L.*) ON THE
PHYSICAL, CHEMICAL PROPERTIES, AND PREFERENCE LEVEL OF
PURPLE RICE**

ABSTRACT

Purple yam (*Dioscorea alata L.*) can be used as a functional food because it contains natural antioxidants. This research aims to produce purple rice with antioxidant activity from different rice varieties with purple yam paste and to find out the effect on physical, chemical, and preference level.

The research used three rice varieties, namely IR 64, Ciherang, and Rojolele, with the concentration of purple yam paste 10, 20, and 30%. Purple rice was tested for color, texture, moisture content, antioxidant activity, anthocyanin content, total phenolic content, preference level, ash content, protein content, fat content, and carbohydrate content by difference. The experimental design used factorial RAL, and the data was statistically tested using Univariate Analysis of Variance and ANOVA if there was a significant difference followed by DMRT test at $\alpha=0,05$.

The results showed that the rice variety and the concentration of purple yam paste had a significant effect on the physical, chemical, and preference level of purple rice. The best purple rice and favored by the panelists was purple rice of the Rojolele variety with a concentration of 30% purple yam paste with a water content of 13.14%, antioxidant activity 4.87% RSA, anthocyanin content 5.85 mg/100g db, total phenolic content 323.26 mg GAE/g db, ash content is 0.37% db, protein content is 9.72% db, fat content is 0.49% db, and carbohydrate content by difference is 76.28% db.

Keywords: purple rice, type of rice, antioxidant activity