



## **PENGARUH CARA PANEN PADI TERHADAP SIFAT KIMIAWI BERAS DAN SIFAT FISIK NASINYA**

### **INTISARI**

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Beras (*Oryza sativa* L.) merupakan komponen pangan yang dikonsumsi masyarakat sebagian besar negara. Padi dapat dipanen dengan berbagai metode. Metode pemanenan padi tradisional dilakukan secara manual oleh manusia. Seiring perkembangan ilmu pengetahuan dan teknologi, pemanenan kini banyak dilakukan menggunakan mesin, yang dapat mengefektifkan juga mengefisienkan waktu, tenaga, serta hasil panen.

Penelitian ini bertujuan untuk mengetahui pengaruh berbagai cara panen terhadap komposisi kimia beras dan sifat fisik nasinya. Komposisi kimia beras yang diuji antara lain kadar air, abu, lemak, protein, pati, dan amilosa. Kemudian dilakukan pengujian untuk mengetahui pengaruh komposisi kimia beras terhadap sifat fisik nasi, yang dilakukan dengan analisa profil tekstur dan warna. Data dianalisa menggunakan *one-way* ANOVA dengan uji lanjutan Tukey-HSD.

Hasil penelitian menunjukkan pengujian kimianya tiap sampel beras memiliki komposisi kimia yang berbeda pada kadar air 12,38% – 13,17%; kadar abu 0,70% – 1,13%; kadar lemak 0,63% – 1,11%, dan kadar pati 80,09% – 85,87%. Sedangkan kadar protein 7,80% – 9,95%, kadar karbohidrat 75,01 – 78,19%, dan kadar amilosa 17,11% – 18,05%, dengan tekstur sangat pulen. Pengujian lanjutan terhadap warna berupa derajat putih nasi berkisar antara 61,38 – 62,77; kemudian pengujian tekstur nasi meliputi kekerasan, kohesivitas, *resilience*, dan *springiness index*.

Kata kunci: varietas, proksimat, pati, amilosa, tekstur, warna



## **EFFECT OF RICE HARVEST ON RICE CHEMICAL AND PHYSICAL PROPERTIES**

### **ABSTRACT**

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Rice (*Oryza sativa* L.) is a food component that consumed by the people of most countries. Rice can be harvested with various methods. Traditional rice harvesting methods are done manually by humans. Due to the development of science and technology, harvesting is now done using machines that can also streamline the time, effort, and yields.

This study aims to determine the effect of various harvesting methods on the chemical composition of rice and the physical properties of rice. The chemical composition of rice that were tested are water content, ash content, fat content, protein content, starch, and amylose. Then testing was carried out to determine the effect of the chemical composition of rice on the physical properties of cooked rice, which was carried out by analyzing the texture and color profiles. Data were analyzed using one-way ANOVA with the Tukey-HSD follow-up test.

The results from chemical testing from each rice sample show that it had a different chemical composition in the moisture content of 12.38% - 13.17%; ash content 0.70% - 1.13%; fat content of 0.63% - 1.11%, and starch content of 80.09% - 85.87%. While protein content was 7.80% - 9.95%, carbohydrate content was 75.01 - 78.19%, and amylose content was 17.11% - 18.05%, with a very fluffy texture. Further testing of the color in the form of white degrees of rice ranges from 61.38 - 62.77; then testing rice texture includes hardness, cohesiveness, resiliency, and springiness index.

**Keywords:** varieties, proximate, starch, amylose, texture, color