

## **PENGARUH LOKASI PENANAMAN DAN UMUR PANEN TANAMAN TERHADAP KUALITAS TEPUNG TAPIOKA DARI KETELA GAJAH**

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### **INTISARI**

Telah dilakukan penelitian pengaruh lokasi penanaman dan umur panen tanaman terhadap kualitas tepung tapioka dari ketela gajah yang meliputi kandungan tepung tapioka. Ketela gajah diambil dari 2 lokasi tanam, yaitu dataran tinggi Ngablak-Mertoyudan (D, E, dan F) dan dataran rendah Tulungagung (A, B, dan C), serta variasi umur panen 8, 9, dan 10 bulan. Preparasi tepung tapioka dilakukan dengan cara memarut dan memeras ketela gajah, serta mengendapkan hasil perasan. Pengujian kandungan tepung yang dilakukan adalah uji amilum dengan uji Lugol, uji protein dengan uji Biuret, dan uji lemak. Penentuan kadar lemak dilakukan dengan metode Soxhlet dan penentuan kadar protein dilakukan dengan metode Kjeldahl.

Hasil penelitian diperoleh hasil uji amilum positif, uji protein positif, dan uji lemak negatif. Kadar protein sampel pada dataran tinggi lebih kecil dari sampel pada dataran rendah yaitu sebesar A (0,45%), B (0,48%), C (0,5%), D (0,2%), E (0,19%), dan F (0,21%). Kadar amilum sampel pada dataran tinggi lebih kecil dari sampel pada dataran rendah yaitu sebesar A (73,49%), B (76,5%), C (81%), D (50,04%), E (50,35%), dan F (50,41%). Kadar lemak sampel pada dataran tinggi lebih kecil dari sampel pada dataran rendah yaitu sebesar A (0,27%), B (0,28%), C (0,3%), D (0,15%), E (0,16%), dan F (0,16%). Berdasarkan data yang diperoleh, lokasi penanaman yang optimal untuk ketela gajah adalah pada dataran rendah (Tulungagung) dan umur panen 10 bulan.

Kata kunci : Ketela gajah, Soxhlet, Kjeldahl, uji biuret, uji amilum

**THE EFFECT OF PLANTING LOCATION AND AGE OF PLANT  
HARVEST ON QUALITY OF TAPIOCA FLOUR  
FROM ELEPHANT CASSAVA**

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**ABSTRACT**

The effect of planting location and age of plant harvest on quality of tapioca flour from elephant cassava which was the content of tapioca flour has been done. Elephant cassava was taken from 2 different planting locations, Mertoyudan D, E, and F (highland) and Tulungagung A, B, and C (lowland) and variations of harvest age were 8, 9, and 10 months. Preparation of tapioca flour was done by grinding and squeezing the elephant cassava, then preserving the juice. The tests for content starch were stellar test, protein test, and fat test. The determination of fat percentage was done by Soxhlet method. The determination of protein percentage was done by Kjeldahl method.

The results of this research were positive for starch test and protein test, but negative for fat test. The protein percentage of samples at highland were lower than lowland which was about A (0.45%), B (0.48%), C (0.5%), D ( 0.2%), E (0.19%), and F (0.21%). The starch percentage of samples at highland were lower than lowland which was about A (73.49%), B (76.5%), C (81%), D (50.04%), E (50.35), and F (50.41%). The fat percentage of samples at highland were lower than lowland which was about A (0.27%), B (0.28%), C (0.3%), D (0.15%), E (0.16%), and F (0.16%). Based on the obtained data, the optimal planting location for elephant cassava was in Tulungagung (lowland) and the optimal harvest time was 10 months.

keyword: Elephant cassava, Soxhlet, Kjeldahl, biuret test, starch test