

ABSTRACT

THE EFFECT OF VARIETY AND HARVEST AGE ON PHYSICOCHEMICAL PROPERTIES OF CASSAVA (*Manihot esculenta* *Crantz*) FROM PALAS SOUTH LAMPUNG

By

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Most of the cassava grown in Palas is sweet type cassava, but the physicochemical properties of each variety and at age of harvest have never been reported. The aims of the research are to determine the effect of varieties, harvesting age and interaction between varieties and the harvesting age in Palas District, South Lampung. The research was arranged factorialy and in a Complete Randomized Block Design (CRBD) with two factors and four repetitions. The first factor is variety (V) which is consisted of 3 levels namely (V1) Manalagi, (V2) Mentega, and (V3) Krembi. The second factor is the harvest age (U) which is consisted of 2 levels, namely (U1) 7-8 months and (U2) 8-9 months. The data were tested for similarity in variance with Barlett test and data addition by Tuckey test and further tested using Duncan Test at the level of 5%. The results showed that the variety and harvest age significantly affected water content, ash content, starch yield, starch content, amylose and amylopectin. There was a significant

interaction between varieties and age of harvest on moisture content, starch yield, and starch content, but there was no significant interaction effect on ash, amylose and amylopectin. The highest value of water content was found in Manalagi aged at 7-8 months (67.275% wb), the highest value of starch yield was found in Manalagi aged at 8-9 months (16.34%), the highest value of starch content was found in Mentega aged at 8-9 months (17.52 % wb), the highest value of amylose was found in Mentega aged at 8-9 months (0.35% db), the highest value of amylopectin was found in Krembi aged at 7-8 months (92.78% db).

Keywords: Manalagi cassava, Mentega, Krembi, age of harvest

ABSTRAK

PENGARUH VARIETAS DAN UMUR PANEN TERHADAP SIFAT FISIKOKIMIA UBI KAYU MANIS (*Manihot esculenta Crantz*) ASAL KECAMATAN PALAS, KABUPATEN LAMPUNG SELATAN

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Ubi kayu yang ditanam di Kecamatan Palas sebagian besar ubi kayu manis, namun belum diketahui sifat fisikokimia dari tiap varietas dan umur panen. Tujuan dari penelitian ini adalah mengetahui pengaruh varietas, umur panen dan interaksi antara varietas dan umur panen ubi kayu manis di Kecamatan Palas, Kabupaten Lampung Selatan. Penelitian ini disusun Rancangan Acak Kelompok Lengkap (RAKL) faktorial dengan dua faktor dan empat kali ulangan. Faktor pertama adalah varietas (V) yang terdiri dari 3 taraf yaitu (V1) Manalagi, (V2) Mentega, dan (V3) Krembi. Faktor kedua adalah umur panen (U) yang terdiri atas 2 taraf yaitu (U1) 7-8 bulan dan (U2) 8-9 bulan. Data hasil penelitian diuji kesamaan ragam dengan uji Bartlett dan kemenambahan data dengan uji Tuckey, selanjutnya data dianalisis sidik ragam untuk mengetahui pengaruh antar perlakuan dan data dianalisis lebih lanjut dengan Uji Duncan pada taraf 5%. Hasil penelitian menunjukkan bahwa Perlakuan varietas dan umur panen berpengaruh nyata terhadap kadar air,

kadar abu, rendemen pati, kadar pati, amilosa dan amilopektin. Terdapat interaksi yang nyata antara varietas dan umur panen terhadap kadar air, rendemen pati, dan kadar pati, namun tidak terdapat interaksi pada kadar abu, amilosa dan amilopektin. Nilai tertinggi pada kadar air terdapat pada varietas Manalagi umur 7-8 bulan (67,275%), rendemen pati pada varietas Manalagi umur 8-9 bulan sebesar (16,34 %), kadar pati pada varietas Mentega umur 8-9 bulan sebesar (17,52%), amilosa pada varietas Mentega umur 8-9 bulan sebesar (10,35 %), amilopektin pada varietas krembi umur 7-8 bulan sebesar (92,78 %).

Kata kunci: ubi kayu Manalagi, Mentega, Krembi, umur panen.