

ABSTRACT

INFLUENCE OF PLANT LEAF COUNT AND HARVEST AGE ON THE RATE OF CHANGE IN THE QUALITY OF CAVENDISH BANANA (*Musa Acuminata Cavendish*) DURING STORAGE

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Bananas are the most popular fruit for Indonesian people, as they are rich in potassium, low in sodium, and easy to grow in many places in Indonesia. PT Great Giant Pineapple is an agro industry located in Lampung that cultivates the Cavendish banana (*Musa Acuminata Cavendish*). The aim of this study was to study the changes in the physico-chemical properties of bananas during storage harvested from cultivated Cavendish banana plants at different leaf counts, hand levels (representing the fruit ripeness), and harvest ages. In addition, we also wanted to know the change in the physiological parameters of the banana at the time of harvest, before ripening and after ripening. The study used bananas harvested from PT Great Giant Pineapple in PG4 Lampung Timur with the number of plant leaves when cultivated conditioned at 2 weeks before harvesting as 2 and 5 leaves. The fruits were harvested at the age of 8, 10, and 12 weeks after the heart was cut. The banana samples used in the study were taken from the 2nd and 6th hand of a bunch. The banana used for testing was a CJ40 variety. The samples were kept in a vacuum plastic bag for 42 days at 16°C. The results of the study stated that the difference in the number of banana leaves during cultivation affects the quality of the banana, which can be seen from the rate of change in skin color and the total dissolved solids (TDS) of the fruit during storage. Similarly, the difference in the age of the harvest (8, 10, and 12 weeks) affects the rate of change in the quality of the fruit during storage, mainly in the parameters of skin color, fruit temperature, hardness, and weight loss. Furthermore, the difference in the level of the fruit fingers as a representation of the degree of ripeness of the fruit (2nd and 6th fingers) affects only the parameters of the color of the skin of the fruit.

Keywords: Cavendish banana, number of leaves, harvest age, senescence (finger).

ABSTRAK

PENGARUH JUMLAH DAUN TANAMAN DAN UMUR PANEN TERHADAP LAJU PERUBAHAN MUTU BUAH PISANG CAVENDISH (*Musa Acuminata Cavendish*) SELAMA PENYIMPANAN

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Pisang merupakan komoditas yang paling banyak dikonsumsi masyarakat Indonesia, karena kaya akan kalium dan rendah kadar natrium. PT Great Giant Pineapple di PG4 membudidayakan buah pisang berjenis pisang Cavendish (*Musa Acuminata Cavendish*). Tujuan dari penelitian ini adalah mengetahui perubahan sifat fisiko-kimia buah pisang selama penyimpanan yang dipanen dari tanaman pisang Cavendish yang dibudidayakan pada perbedaan jumlah daun, tingkat sisir (ketuaan buah), dan umur panen yang berbeda. Selain itu juga ingin mengetahui perubahan parameter fisiologi buah pisang pada saat panen, sebelum ripening dan setelah ripening. Penelitian ini menggunakan buah pisang yang dipetik dari PT Great Giant Pineapple di PG4 Lampung Timur dengan jumlah daun tanaman saat dibudidayakan yang dikondisikan pada 2 minggu sebelum panen sebanyak 2 dan 5 lembar daun. Buah pisang sampel dipanen pada umur 8, 10, dan 12 minggu setelah potong jantung. Sampel buah pisang yang digunakan pada penelitian diambil dari sisir ke-2 dan ke-6 pada satu tandan. Buah pisang yang digunakan untuk sampel yaitu berjenis CJ40. Sampel pisang disimpan dalam kemasan plastik vakum selama 42 hari pada suhu 16°C. Hasil penelitian menyatakan bahwa perbedaan jumlah daun pisang saat budidaya berpengaruh kualitas buah pisang yang dihasilkan, yang mana dapat dilihat dari laju perubahan warna kulit dan total padatan terlarut buah selama penyimpanan. Demikian juga perbedaan umur panen (8, 10, dan 12 minggu) berpengaruh pada laju perubahan mutu buah selama penyimpanan, utamanya pada parameter warna kulit, suhu buah, kekerasan, dan susut bobot. Selanjutnya, perbedaan tingkatan sisir buah sebagai representasi tingkat ketuaan buah (sisir ke-2 dan ke-6) berpengaruh hanya pada parameter warna kulit buah.

Kata Kunci: pisang Cavendish, jumlah daun, umur panen, tingkat ketuaan (sisir).