

Kajian Pengaruh Radiasi Sinar Gamma Terhadap Susut Bobot pada Buah Jambu Biji Merah Selama Masa Penyinaran

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Abstrak

Telah diradiasi sampel jambu biji merah (*psidium guajava linn*) menggunakan sinar gamma pada dosis 0.2, 0.4, 0.6, 0.8 dan 1 kGy serta sampel yang tidak diradiasi sebagai kontrol untuk mengetahui pengaruh radiasi sinar gamma terhadap perlambatan proses fisiologis pada buah jambu biji merah. Seluruh sampel diukur massa dan kadar airnya selama waktu penyimpanan 8 hari. Hasilnya menunjukkan bahwa sampel kontrol mengalami penyusutan bobot rata-rata 20.27% dan sampel yang diradiasi mengalami penyusutan bobot rata-rata sebesar 1.23-5.98%. Akan tetapi, baik sampel yang diradiasi maupun kontrol tidak mengalami perubahan kadar air yang signifikan. Iradiasi gamma mampu memperlambat proses fisiologis, tetapi tidak menunjukkan pengaruh yang nyata terhadap kadar air pada buah jambu biji merah selama masa penyimpanan.

Kata Kunci: Iradiasi gamma, Jambu biji merah, Penyusutan bobot, Kadar air

Study of the Effect of Gamma Ray Radiation on Weight Loss in Red Guava Fruit during the Irradiation Period

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Abstract

Samples of red guava (*psidium guajava linn*) have irradiated using gamma rays at doses 0.2, 0.4, 0.6, 0.8 and 1 kGy and un-irradiated samples as control to determine the effect of gamma irradiation on slowing of physiological processes in red guava fruit. The entire sample mass and water content were measured during 8 days storage time. The result show that the control sample shrinkage weighted average 20.27% and the samples were irradiated shrinkage weighted average of 1.23 to 5.98%. However, both irradiated and control samples do not undergo significant changes in water content. Gamma irradiation is able to slow the physiological process, but did not show a significant effect on the water content in red guava fruit during storage.

Keywords: Gamma irradiation, Red guava fruit, Weight loss, Water content

Pembimbing Akademik

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