

INTISARI

Telah dilakukan penelitian tentang pengaruh penggilingan terhadap kadar kalsium dalam beras bumibhol 50. Penelitian ini tergolong penelitian eksperimental murni dengan rancangan acak lengkap pola searah. Sampel padi dibagi menjadi empat kelompok. Kelompok pertama sebagai kontrol yaitu tanpa penggilingan, kelompok kedua penggilingan satu kali, kelompok ketiga penggilingan dua kali dan kelompok keempat penggilingan tiga kali. Kadar kalsium dianalisis dengan spektrofotometri serapan atom. Kadar kalsium dihitung menggunakan persamaan kurva baku untuk mengukur kadar dari nilai absorbansi. Validitas metode diperoleh dari nilai recovery, kesalahan acak dan kesalahan sistematis. Analisis kualitatif memberikan informasi bahwa masing-masing kelompok sampel mengandung kalsium.

Dari analisis dengan spektrofotometri serapan atom didapat kadar kalsium pada beras bumibhol 50 pada kontrol $91,0072 \pm 0,6067$ mg/kg; pada penggilingan satu kali $54,4617 \pm 0,6067$ mg/kg; pada penggilingan dua kali $35,7278 \pm 0,8991$ mg/kg dan pada penggilingan tiga kali $33,6525 \pm 0,6393$ mg/kg.

Data pengaruh penggilingan terhadap kadar kalsium dalam beras bumibhol 50 dianalisis dengan uji statistik anova satu arah dan tukey. Berdasarkan uji statistik, diambil kesimpulan bahwa penggilingan dapat memberikan pengaruh yang berbeda bermakna terhadap penurunan kadar Ca dalam beras bumibhol 50. Penurunan kalsium dari padi dengan penggilingan satu kali sebesar 40,15%; penggilingan dua kali 34,98% dan penggilingan tiga kali 5,80%.

ABSTRACT

The researcher has done the research on the effect of the milling toward the calcium level in the Bumibhol 50 rice. The researcher considers this research as a pure experimental research with full randomize direct pattern design. The rice samples are divided into four groups. The first group functions as the control, which are the rice that do not milled, the second group is rice which are milled once, the third group is rice which are milled twice, and the fourth group is rice which are milled three times. The calcium level analyzed using the spectrophotometer atomic absorption. The researcher calculates the calcium level using the standard curve equation to calculate the level from the absorption value. The method validity regained from the recovery value, randomize failure, and systematic failure. The qualitative analysis gives the information that each sample groups contain calcium.

From the analysis using the spectrophotometer atomic absorption, the researcher regains the calcium level from the bumibhol 50 rice: $91,0072 \pm 0,6067$ mg/kg in control, $54,4617 \pm 0,6067$ mg/kg in the milled once rice, $35,7278 \pm 0,8991$ mg/kg in the milled twice rice, and $33,6525 \pm 0,6393$ in the three times milled rice.

The milling effect data toward calcium level in the bumibhol 50 rice analyzed using the one-way anova statistic and tukey test. According to the statistical test that has been done, it can be assumed that milling gives different effect toward Ca decreasing level in bumibhol 50 rice. The calcium decrease in the milled once rice is 40,15%, the calcium decrease difference in the milled once and twice rice is 34,98%, and the calcium decrease in the milled twice and three times rice is 5,80%.

Keywords: Milling, Calcium, rice.