

INTISARI

Penelitian terdiri dari tiga tahap, yaitu tahap satu yang merupakan seleksi panelis, tahap dua yang merupakan penentuan konsentrasi KMnO_4 dan persentase berat penyerap terhadap berat bayam yang akan digunakan pada penelitian tahap selanjutnya, dan tahap tiga yang merupakan penentuan pengaruh jenis penyerap etilen yang berbeda dan jenis pengemas plastik yang berbeda dan interaksi keduanya terhadap respon susut bobot, sensori kesegaran bayam, warna hijau bayam, dan aroma bayam selama penyimpanan 4 hari. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap dengan 9 perlakuan dan 3 ulangan.

Pada penelitian tahap satu, 12 panelis lolos seleksi dan kemudian dilatih menjadi panel terlatih. Pada penelitian tahap dua, perlakuan KMnO_4 0,15% dan persentase berat penyerap 15% (c_{1S1}) dipilih karena menunjukkan susut bobot paling rendah. Pada penelitian tahap tiga, hasil penelitian menunjukkan adanya pengaruh dari jenis penyerap etilen yang berbeda dan jenis pengemas plastik yang berbeda dan interaksi keduanya terhadap respon susut bobot, sensori kesegaran bayam, warna hijau bayam, dan aroma bayam selama penyimpanan 4 hari.

Perlakuan terpilih adalah perlakuan penyerap Ca(OH)_2 dan pengemas LDPE (k_{2p2}). Perlakuan tersebut dipilih karena memberikan nilai paling tinggi pada respon susut bobot (2,96%), sensori kesegaran bayam (2,93), dan warna hijau bayam (3,97). Perlakuan terpilih kemudian dilakukan analisis lanjut. Kadar klorofil menurun dari 5.820,82 ppm pada hari ke 0 menjadi 5.171,72 ppm pada hari ke 4, kadar serat menurun dari 4,60% pada hari ke 0 menjadi 4,08% pada hari ke 4, serta didapat nilai ΔL -1,01, Δa -0,66, dan Δb -0,71 pada hari ke 4.

ABSTRACT

The research contained of three stages, which were the first stage was panel screening, the second stage was determination of $KMnO_4$ concentration and adsorber weight percent (further would be used in the next stage), and the third stage was determination of the effect of different ethylene absorbers and plastic packagings and their interaction to physiological loss in weight, amaranth freshness, greenness, and aroma sensory responses during 4 days storing. The design experimentation used in the research was Randomized Complete Design with nine treatments and three replications.

In the first stage research, 12 panelists choosed and trained into trained panel. In the second stage research, $KMnO_4$ 0,15% and absorber weight percent 15% treatment (c_{151}) choosed because the result showed the lowest physiological loss in weight. In the third stage, the results showed there were effect from different ethylene absorbers and plastic packagings and their interaction to physiological loss in weight, amaranth freshness, greenness, and aroma sensory responses during 4 days storing.

*The chosen treatment was $Ca(OH)_2$ absorber and LDPE packaging (k_{2p2}). The treatment was choosed because it showed the lowest physiological loss in weight (2,96%), and the highest score in freshness (2,93) and greenness (3,97) sensory responses. The chosen treatment was analyzed futher. The chlorophyll content was decreased from 5.820,82 ppm in day-0 observation to 5.171,72 ppm in day-4 observation, crude fiber content was decreased from 4,60% in day-0 observation to 4,08% in day-4 observation, and the result showed the difference L^*a^*b value which were ΔL -1,01, Δa -0,66, and Δb -0,71 in day-4 observation.*