

ABSTRAK

PENDUGAAN UMUR SIMPAN TEPUNG JAMUR TIRAM PUTIH (*Pleurotus ostreatus*) PADA KEMASAN PLASTIK POLIETILEN DENGAN METODE AKSELERASI

Oleh

MUHAMMAD NURREZA HIDAYAT

Tujuan penelitian adalah mendapatkan umur simpan tepung jamur tiram putih dalam kemasan plastik polietilen dengan metode Arrhenius. Penelitian disusun secara deskriptif dengan dua kali ulangan. Tepung jamur tiram putih dalam kemasan plastik polietilen dengan ketebalan 0,03 mm disimpan pada tiga kondisi suhu penyimpanan yaitu suhu 30 °C; 40 °C dan 50 °C. selama satu bulan (28 hari). Pengamatan dilakukan terhadap kadar air, kadar asam lemak bebas, kadar protein, warna dan aroma tepung jamur tiram putih pada hari ke 0, 7, 14, 21 dan 28. Data hasil pengujian digunakan untuk menentukan umur simpan menggunakan metode Arrhenius dengan software Microsoft Excel. Hasil penelitian menunjukkan bahwa umur simpan tepung jamur tiram putih dalam kemasan plastik polietilen pada suhu 30°C selama 130.67 hari (4.3 bulan) berdasarkan parameter kadar protein ordo reaksi nol dengan kadar air sebesar 10,14 %, kadar asam lemak bebas sebesar 1,02 %, kadar protein sebesar 23,69%, aroma sebesar 3,70, dan warna sebesar 5,00.

Kata Kunci : metode akselerasi, plastik polietilen, umur simpan, tepung jamur tiram putih

ABSTRACT

SHELF LIFE PREDICTION of THE WHITE OYSTER MUSHROOMS (*Pleurotus ostreatus*) FLOUR in POLIETILAN PLASTIC PACKAGING with ACCELERATION METHOD

Oleh

MUHAMMAD NURREZA HIDAYAT

The aim of this research was to get the shelf life prediction of the white oyster mushrooms flour in polyethylene plastic packaging with Arrhenius method. The research is prepared descriptively with twice repeat. The white oyster mushrooms flour in polyethylene plastic packaging with 0,03 mm thickness were stored at 30°C; 40°C and 50°C temperatures for one month (28 days). Observations were focused on water content, free fatty acid content, protein content, and flavor and color of the white oyster mushrooms flour on 0, 7, 14, 21 and 28 days. The results of parameters data used to predict the shelf life of the white oyster mushrooms flour using Arrhenius method using Microsoft Excel Software. The result showed that white oyster mushrooms flour that packed in plastic polyethylene at 30°C temperature can last for 130,67 days (4,3 months) based protein content parameter on zero order reaction with contained 10,14% water, contained 1,02% free fatty acid, contained 23,69% protein, flavor score 3,70, and color score 5,00.

Keywords : *acceleration method, polietilen plastic packaging, shelf life, white oyster mushrooms flour*