

Effect of Plastic Films on Shelf-life of Okra (*Abelmoschus esculentus* L.)

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ABSTRACT

Okra fruits were prepacked in polyethylene 200 gauge (P_1), polyethylene 150 gauge (P_2) and polypropylene 100 gauge (PP) with 0% (V_0), 1% (V_1) and 2% (V_2) perforation or ventilation and then shelf-life was studied in ambient condition (25.4°C to 33.3°C temperature and relative humidity of 78 to 80%). It was found that P_1 (polyethylene, 200 gauge) was superior over P_2 (polyethylene, 150 gauge) and PP (Polypropylene, 100 gauge) for the different post harvest characters i.e. physiological loss in weight (PLW), shrinkage, blackening and sensory quality during storage at ambient condition. Non-perforated packages (V_0) in general maintained the quality for longer period and increased shelf-life compared to perforated packages (V_1 and V_2). The effect of P_1V_0 treatment (Polyethylene 200 gauge \times 0% perforation) was best because of low PLW, shrinkage, blackening and maintained better sensory score upto 12 days of storage. This was followed by P_2V_0 (Polyethylene 150 gauge \times 0% perforation) and PPV_0 (Polypropylene 100 gauge \times 0% perforation) treatment.

Key words : Okra, Perforation, Polyethylene, Polypropylene, Shelf-life.