

**EFFECT OF PACKAGING MATERIALS ON RETENTION OF QUALITY
CHARACTERISTICS OF SELECTED DEHYDRATED GREEN LEAFY VEGETABLES
DURING STORAGE**

S.Vasantharuba¹, P.Banumathi¹, M.R.Premalatha¹, S.P.Sundram² and T.Arumugam³

¹Department of Food Science and Nutrition, Tamil Nadu Agricultural University, Madurai, India, ²Department of Agric. Microbiology, Tamil Nadu Agricultural University, Madurai, India, ³Department of Horticulture, Tamil Nadu Agricultural University, Madurai, India.

ABSTRACT

Green leafy vegetables such as *Alternanthera sessilis* and *Amaranthus polygonoides* were dehydrated in a cabinet drier at $50\pm 2^{\circ}\text{C}$ and ground to fine powder and packed in three different packaging materials {300 gauge high density poly ethylene (HDPE), 200 gauge polypropylene (PP) and 300 gauge metalized polypropylene (MPP)} and stored at room temperature ($28-36^{\circ}\text{C}$) for a period of three months to evaluate the best packaging material for maximum retention of quality characteristics in the selected green leafy vegetables during storage. Among the three different packaging materials MPP was retained significantly ($p<0.05$) higher levels of chlorophyll, ascorbic acid, β -carotene and rehydration ratio and absorb significantly ($p<0.05$) lower level of moisture in the both selected dehydrated green leafy vegetable powder samples when compare to HDPE and PP during three months of storage period.

Keywords: Green leafy vegetables, Storage, Dehydration, Packaging Materials, Quality characteristics