

Abstract

Sweet basil (*Ocimum basilicum* L.) is a tender herbaceous annual plant growing around tropical zones. As a useful culinary herb, the basil leaves contain unique aromas and volatile oils, contributed as additional flavour in many foods and drinks. A crucial problem of exported sweet basil is accelerated shelf life due to water loss. To prolong the storage life, polyethylene (PE) bag and various low temperatures were selected to study. Sweet basil branches at 80 g average were sealed in a 12 μ m PE bag (20 \times 45 cm in dimension) with 4 perforated holes (0.7 cm in diameter) and stored at 4, 7, 10 and 13°C with 86 \pm 3% RH in cold rooms. Water loss and chilling injury symptoms reveal to be major indicants, limiting the storage life. Thirteen degree Celsius was the optimum storage temperature that acceptable quality of stored basil was extended to 15 days. After 9 days, sweet basil stored 4°C showed severe chilling injury symptoms. Moreover, leaf dropping, found increasingly between the storage proceeded, has emerged to be another concern in this MA storage. Colour a values (Hunter scale) inclined rapidly in basil leaves stored at 4°C. However, total chlorophylls in leaves measured in SPAD unit were not different between treatments.