

Abstract

Combined CO₂ shock (40% CO₂ for 9 h) and 6P mm thick polypropylene (PP) pack with or without perforations was tried to improve shelf life of sugar peas at 10°C. Gas composition in perforated bag did not greatly vary, equilibrating to 20.8% O₂ and 023% CO₂ while that in non-perforated bags, 2.83% O₂ and 215% CO₂. These different storage atmospheres did not cause marked variations in pod respiration. With increasing the number of bag perforations, RH decreased and pod weight loss correspondingly increased. Color parameter a* and hue angle were higher in pods in bags with 8 holes, indicating greener peel than those in bag with 18 or 32 hole, and without holes. It also maintained higher sugar and lower fiber contents and extended the storage life to 10 days. Pods held in non-perforated bags also lasted for 10 days but developed off-flavor.