

Reduction of postharvest losses in leeks (*Allium porum*) during transportation using wooden bulk packages

RMNA Wijewardane, ^{1*}, GD Senevirathne ², NWIA Jayawardana², TMR Dissanayake¹, WMCB Wasala¹, and BMKS Thilakarathne ¹, 2014, Reduction of postharvest losses in leeks(*Allium Porum*)during transportation using wooden bulk packages., Proceedings of the International Research Symposium on Postharvest Technology, Institute of Post Harvest Technology, Sri Lanka ,pp57-61

1 Institute of Postharvest Technology, Jayanthi Mawatha, Anuradhapura, Sri Lanka

2 Faculty of Agriculture, Rajarata University of Sri Lanka, Anuradhapura

Leek (*Allium porum*) is an economically important vegetable which occupies a prominent position among vegetables grown in Sri Lanka. Due to variation in length, presently available packages are not suitable for leeks transportation and reported annual postharvest loss was 15.7%. This study evaluated the suitability of wooden bulk packages for leek transportation from Nuwara Eliya to Dambulla supply chain. The treatments used; T1-75cm x 45cm x25cm with filling height 20cm , T2- 75cm x 45cm x30cm with filling height 25cm, T3-75cm x 45cm x 25cm with filling height 20cm, T4- 75cm x 45cm x 30cm with filling height 25cm and T5-80cm x 45cm 30cm cover with plastic coated wire on four sides with filling height 25cm. Existing transportation package which wrapped with poly sack and tight with a rope at the middle (T6) was used as control. During transportation in package temperature, RH%, respiration rate and ethylene production were measured in four hours interval .To evaluate the quality of the produce; weight loss %, visual quality rating (VQR), Physical damages, wilting rate, were measured before and after transportation. Among the packaging methods tested, T2- 75cm x 45cm x30cm with filling height 25cm showed better performances by reducing wilting %, physical damage and weight loss (%) while retaining higher in visual quality rating.