

Title Influence of exogenous spermidine on quality properties and vase life of rose (*Rosa Hybrida* Cv. Dolcvita)

Author Mehdi Hosseini Farahi ^{1*}, Ahmad Khalighi², Masood Mashhadi Akbar Boojar³, Bahman Kholdbarin⁴, Bijan Kavooosi⁵, Reza Amiri-fahlani⁶

Citation Abstracts of 7th International Postharvest Symposium 2012 (IPS2012). 25-29 June, 2012. Putra World Trade Centre (PWTC), Kuala Lumpur, Malaysia. 238 pages.

Keywords rose; spermidine

Abstract

Roses are important cut flowers and many studies have therefore focused on their quality after harvest. The vase life is often very short characterized by early wilting and bending of the pedicel. The development of such symptoms is considered to be caused by vascular occlusion, mainly located in the basal stem end. PAs influence many biochemical and physiological processes such as cell division, cell elongation, flowering, fruit set and development, fruit ripening, senescence, storage life. Spermidine is a polyamine that found in almost all tissues in association with nucleic acids. The aim of this study was to examine the effect of Spermidine on quality characteristics and vase life of rose (*Rosa hybrida* cv. Dolcvita) in soil-less culture. The experiment was carried out in a randomize completely design with 4 replication. Different levels of spermidine at 0, 0.5, 1, 1.5 mM concentration, were applied on three months old of rose cv Dolcvita in soil-less culture system. Result showed that Spermidine has significant effect on height of stem, stem diameter, flower diameter, flower height, stem weight and vase life. The highest vase life and fresh weight of stem was observed in Spermidine 0.5, 1.5 mM, respectively.