Post-harvest treatment of guava fruits with 1-Methylcyclopropene and gibberellin to regulate fruit quality under cold storage

Jatinder Singh, Shailesh Kumar Singh and Kawalpreet Singh

Received April 15, 2016 and Accepted July 20, 2016

ABSTRACT : Guava fruits, being climacteric and perishable, have very small shelflife under ambient condition. Postharvest treatment of fruits by using 1-MCP (1-methylcyclopropene) or gibberellin (GA₃)and storage at low temperature can be suitable to enhance shelf life of guava fruits without any quality deterioration. The present investigation reflected an increasing TSS and acidity in winter season guava fruits when stored under low temperature after treating them in various concentration of 1-MCP and GA₃. The fruits treated with 1-MCP had also retained relatively high fruit size, fruit weight, palatability rating, ascorbic acid content and titratable acidity in comparison to GA₃ treated or untreated guava fruit.

Key Words: 1-Methylcyclopropene, ascorbic acid, cold storage, gibberellin, guava, shelf life.