



Research Paper

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Effect of chemicals and packaging on quality of mango fruits under cold storage

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ABSTRACT : Mango is a climacteric fruit and highly perishable in nature. To maintain the post-harvest quality in mango cv. Langra, fruits were treated with calcium chloride (2.0, 4.0 %) and gibberellic acid (100, 200 ppm) or combined with LDPE packaging. Treated fruits were placed in CFB boxes and subsequently stored at 13±1°C with 90-95% RH for 34 days. The effectiveness of treatments in extending fruit shelf life was evaluated by determining fruit firmness, TSS, acidity and vitamin C content. All LDPE packed fruits maintained higher fruit firmness as compared to non LDPE treatments and control. TSS contents improved throughout storage in LDPE treatments while in others these increased sharply up to 27 days and then a decline was noticed. Various treatments delayed reduction of acid and vitamin C contents during storage over the control. Results indicated that calcium chloride @ 2% + LDPE treatment were found significantly effective in maintaining firmness, total soluble solids, titratable acidity and retaining more ascorbic acid at the end of the storage.

KEY WORDS : Mango, CaCl₂, LDPE packaging, Low temperature storage, Fruit quality

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