

Title Postharvest life of three chili (*Capsicum annuum* L.) cultivars as affected by fruit stalk removal and storage condition

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Abstract

Red chili with and without fruit stalk of two promising cultivars from AVRDC, 9955-15, CCA321, and a local check were kept in the open or in 25 μ -thick polypropylene bag as modified atmosphere pack (MAP) at ambient (25-36°C, 48-89% RH) and in the simple evaporative cooler (EC) (26-30°C, 83-93% RH). Weight loss and shriveling were inhibited in MAP. This effect was true in all cultivars regardless of fruit stalk removal or retention. EC also reduced weight loss and shriveling but not as dramatic as MAP. At ambient, weight loss rapidly increased to more than 10% after 3 days of storage in all cultivars with or without fruit stalk. Shriveling correspondingly increased but CCA321 fruit was less affected than the other cultivars. Fruit stalk removal also increased shriveling in the local cultivar. Decay incidence was very high in MAP due to moisture condensation inside the plastic bag. At ambient or EC, decay was either absent or very minimal. Fruit color (a^* and L^*) did not differ much from initial levels while soluble solids content increased with storage. Differences due to cultivar, fruit stalk removal and storage condition, were not significant.