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Postharvest quality of hydroponic strawberry coated with chitosan and calcium gluconate

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The aim of this study was to evaluate the postharvest quality of hydroponic strawberry stored at 10°C for 10 days. Strawberries coated with chitosan or the combination of chitosan and calcium gluconate were stored at 10°C for 10 days. The weight loss, soluble solid content, firmness, surface color, vitamin C content, and disease severity was determined every day during the experiment. It was observed that coating extended the possible storage period. There was no symptom of decay after 10 days of storage. Soluble solid content showed only minor change for all samples. Weight loss of coated fruit was below 6 % after 10 days of storage, whereas the weight loss of control samples was around 10 % at the end of measurement. Moreover, coating could maintain the firmness of strawberry compared to the control. In addition, coated fruit had higher value in vitamin C content than that of control. The combination of chitosan and calcium gluconate showed the high potential for prolonging the storage period of hydroponic strawberry. Keywords: hydroponic, strawberry, coating, storage

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Effect of grafting on the quality and appearance of eggplant fruit

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The quality of vegetables is defined as size, shape, color, freshness, texture, flavour and health promoting compound. Grafting is a method of propagation that a part of a plant (scion) is joined to another plant (rootstock) which is forced to develop a vascular connection and grow as a single plant. Vegetable grafting has been used for several reasons: improving plant growth and yield, increasing tolerance against biotic and abiotic stresses. Vegetables produced by grafting methods can influence fruit quality and appearance. Labour and technique essential for grafting process; the price of grafted seedling and automated grafting machines are the disadvantage of this method. In the current review, we focus on effects and mechanisms involved in grafting on tomato, eggplant and pepper fruit quality. Investigators have found contradictory results due to different production environments, types of rootstock/scion combinations.