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Study on the Effects of Packaging and Storage of Amrapali Mango

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Abstract—The experiment on packaging and storage of mango (cvs. Amrapali) was conducted in Bidhan Chandra Krishi Viswavidyalaya, Nadia, to study the effect of treatments on quality of mango fruits. The fruits were harvested at fully mature but unripe stage and were packed in different packages (Un-perforated LDPE, Perforated LDPE, Plastic crate, CFB box and Perforated LDPE with CFB box) and placed in cold store (12-15°C; 85-90% RH) whereas control was without packaging under ambient condition. The fruits were examined for physiological loss in weight (PLW), pulp penetration pressure and shelf life with respect to physiological parameters. While, chemical parameters viz., TSS, titratable acidity, ascorbic acid, total sugar, reducing sugar and β - carotene content were examined. The organoleptic score were taken on the 8th, 12th and 16th for Amrapali during storage. The results revealed that fruits packed in perforated LDPE (100 gauge) and kept in CFB box in cold storage proved to be the best treatment than rest of the treatments. This treatment effectively reduced PLW, and there is more gradual increase in TSS and total sugar than other treatments up to 16th day in Amrapali. This treatment also showed maximum shelf life and maximum retention of nutritional quality for the cultivar.

Keywords: Amrapali, storage, packaging.