

# Effect of bagging on fruit quality in mango

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## Abstract

'Zill' mango was bagged with four types of bags: adhesive-bonded fabric bag, yellow/black double layer bag, single white layer bag and single yellow bag. The results showed that bagging with single white bag significantly reduced contents of chlorophylls and carotenoids and significantly increased contents of anthocyanins and flavonoids in peel than those of other treatments, and also showed higher peel lightness, chroma and hue angle than those of other treatments. All these changes after single white bagging resulted in purple-red in maturity green periods and pink in ripe periods. Fruit bagged with single white bag had highest contents of vitamin C, titratable acids, soluble solids, sucrose, glucose and fructose, while those bagged with yellow/black double layer bags had significantly lower contents of chlorophylls, carotenoids, anthocyanins, and flavonoids than those of other treatments. Though peel lightness and chroma were remarkable higher, hue angle was significantly lower than those of other treatments. Therefore, yellow/black double layer bags tended to produce fruits with light yellow peel color in maturity green periods and orange-yellow peel in ripe periods and also worse internal quality fruits. The results showed that single white bag could be a promising practice for mango production.