

Title Effects of irradiation on quality attributes of two cultivars of mango  
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### **Abstract**

Irradiation is a commercial technology for reducing postharvest losses, reducing microbial infections and fruit fly infestation and extending shelf-life of fresh produce. The effects of gamma irradiation at 0, 0.4 and 0.6 kGy from Cobalt 60 on the texture, colour and disease incidence in mangoes were investigated. The mangoes cv. Nam Dokmai and Chok Anan were harvested at the 70% and 90% stages of maturity and assessed after ripening at 25°C. Ripened 'Chok Anan' mangoes harvested at 70% and 90% maturity were softer than untreated fruits. In contrast, ripened irradiated 'Nam Dokmai' mangoes appeared firmer compared to untreated fruits. Polygalacturonase activity in 'Nam Dokmai' mangoes of 90% maturity was not affected by gamma irradiation. Gamma irradiation had no effect on skin or flesh colour and soluble solids content of mangoes of both cultivars harvested at both maturity stages. It was concluded that gamma irradiation at doses up to 0.6 kGy had no adverse effects on ripening of the test mangoes harvested at both maturity stages.