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Seaweed based edible coating improves the colour degradation and antioxidant activities of minimally processed mangoes during the storage

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Abstract : Minimally processed mango samples (Mangifera indica L.) were coated with seaweed paste and gum Arabic solutions at concentrations of 0, 10, 20% and 0, 5, 10%, respectively. They were then placed into plastic trays, over-wrapped with polyvinylchloride film and stored at 5°C for 14 days. The objective of this study was to determine the effect of seaweed and gum Arabic on the color and antioxidant activity of minimally processed mango fruit. The minimally-processed mango treated with 10%, 20% seaweed paste mixed with 5% and 10% gum Arabic affected significantly ($P<0.05$) on the color of fruit, enhanced the total antioxidant activity (TPC, FRAP, DPPH and ABTS), showed the best appearance, a clear yellow colour without browning and higher antioxidant activity compared with control sample and other treated fruits.
Key-words : Minimally processed mango; Edible coating; colour; antioxidant activity.

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