

## Shelf-life enhancement of cowa (*Garcinia cowa* Roxb.)

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### SUMMARY :

Cowa (*Garcinia cowa* Roxb.) locally known as *Kujithekera* belongs to the family Clusiaceae is one of the popular indigenous fruits of north eastern region of India. The fruit is having commercial and medicinal values. It is the source for a natural diet ingredient hydroxycitric acid (HCA) which is an anti obesity compound. *Kujithekera* fruits are highly perishable in nature having short shelf-life which reduces the commercial values of the fruit. Extension of shelf-life using 5 different treatments was studied. The treated fruits were packed in transparent perforated (0.2% ventilation) low density polyethylene bags (25 $\mu$ ). The physico-chemical qualities of the treated fruits were found to decrease significantly with the advancement of storage period. Fruits dipped in 1 per cent wax emulsion for 5 min, air dried and packed in transparent perforated (0.2% ventilation) LDPE bags (25 $\mu$ ) retained the highest ascorbic acid (7.95 mg and 5.27 mg/100g), total sugar (6.3% and 3.72%), total phenol (1.2g and 1.96g/ 100g), hydroxycitric acid (6.20g and 6.67g/100g), energy value (39.95Kcal and 27.37Kcal/ 100g) both in pulp and peel, respectively on 6 days after storage. The wax coated fruits remained firmer (1.66 kg/cm<sup>2</sup>) and recorded the highest CIE lab parameters like L\*, a\*, b\* and C\* (45.73, 24.61, 13.02 and 27.84, respectively) with an extended shelf-life of 6 days at ambient conditions (29.8  $\pm$  1.1°C, RH 79.6  $\pm$  3%).

**KEY WORDS :** *Kujithekera*, *Garcinia cowa* Roxb, Hydroxycitric acid, LDPE bags, Shelf life

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