

### **Abstract**

The potential benefits of edible films or coatings are to stabilize the product and thereby extend its shelf life. Edible films can delay ripening of climacteric fruit, delay color changes in non-climacteric fruit, reduce water loss, reduce decay, and improve appearance. The aim of this work was to evaluate the use of edible coatings to preserve the quality of fresh cut mango fruits stored under refrigeration. Mangoes (*Mangifera indica* L.) cv. Kent cultivated in Ivory Coast were used as raw material. Four treatments were evaluated: 1% Sodium Carboxy Methyl Cellulose, 0.75% Chitosan, 1% Dextrin potato starch, and distilled water as a control treatment. The mango cubes were dipped in the coating solutions and placed in polypropylene plastic trays sealed with polypropylene film. The trays were stored at 4°C for up to 9 days. At 3-day intervals, the fruits were taken for evaluation. The fresh-cut mango treated with Chitosan showed the lowest respiratory quotient and the best appearance, a clear yellow color without browning.