

The study was conducted to determine the efficacy of two 1-MCP application regimes (2 ppm for 24 hours and 4 ppm for 12 hours) to extend the shelf life of passion fruits. The fruits were harvested at two stages of maturity (stage 1 and 2) based on peel colour. After 1-MCP treatments, the fruits were kept at ambient room conditions ($25\pm 1^{\circ}\text{C}$ and RH $60\pm 5\%$) to ripen. Physiological and physicochemical changes associated with fruit ripening, including ethylene evolution, respiration rate, weight loss, peel colour, total soluble solids and total titratable acidity were evaluated every 2 or 3 days from six fruits which were randomly sampled from each of the treatment combinations. 1-MCP treatments significantly ($p < 0.05$) delayed or reduced the rate of most of the ripening changes irrespective of the harvest maturity. Overall, based on the physiological and physicochemical changes observed, 1-MCP treatments prolonged the postharvest shelf life of passion fruits harvested at stage 1 and 2 by 3 and 4 days respectively.