

#### Abstract:

Parthenocarpy may reduce problem owing to poor fruit setting, however its effect on the ripening of melon fruit is not well documented. Therefore, we have investigated the effect of parthenocarpic fruit setting on the ripening behavior of melon fruit (*Cucumis melo* cv. 'Andes'). Parthenocarpic fruit setting was achieved by using 4-chlorophenoxy acetic acid (4-CPA) and gibberellic acid (GA3). Control fruits were hand-pollinated. Melon fruits were harvested at 50 days after fruit set, and their ethylene production rate as well as several ripening-related biochemical traits were evaluated. The ethylene climacteric production of parthenocarpic fruit was delayed about 8 days compared to pollinated fruit. Fruit size and total soluble solid did not vary, however, flesh firmness of parthenocarpic fruit was maintained longer. We therefore propose that the delay in ethylene production caused retardation in the ripening of parthenocarpic melon.