

### Abstract:

We studied the effect of precooling and the use of an ethylene absorbent (based on potassium permanganate) in the flower boxes, on the vase life of *Dendrobium* 'Pompadour' flowers, after simulation of air shipment (3 days at 25°C). Precooling at 10°C (85-95%RH) for 60 minutes reduced ethylene production, ACC activity, and the concentration of 1-aminocyclopropane-1-carboxylic acid (ACC) in the flowers, during shipment. Precooling for 90 minutes or longer did not have a positive effect on the chilling-sensitive *Dendrobium* flowers. The presence of an ethylene absorbent in the cardboard boxes further reduced ethylene concentration in the boxes. The combination of 60 min precooling and the ethylene absorbent was optimal to reduce epinasty of the buds and flowers, to promote bud opening and to prevent abscission of open flowers. It also considerably delayed the time to in visible petal withering.