Title Storage temperature affects quality of export *Dendrobium* cut-flowers

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Abstract

The export of *Dendrobium* cut-flowers from Thailand to overseas markets has been done by air shipment. Air shipment is the quickest possible delivery but it confronts with high cost of air freight and limited cargo space. The alternative of possible method of shipment to deliver *Dendrobium* cut-flowers to markets in Asia is under considered. Shipment by sea is a novel practice that should be considerably interested for a long-term transportation. We investigated the effect of storage temperature during 3-day shipment of *Dendrobium* cut-flowers. Cut inflorescences of four *Dendrobium* cultivars namely Sonia 17, Anna, Sanan White and Fatima were packed wet under simulated shipment for export and stored at 10, 15 and 20°C for 3 days. The storage temperature at 10ºC induced chilly injury of bud abscission in all four *Dendrobium* cultivars but it had no effect on open flowers. The optimal storage temperature of each cultivar was different. Temperature of 15ºC was optimum for 'Anna', while temperature of 15 and 20ºC were optimum for 'Sonia 17', 'Khoa Sanan' and 'Fatima'. Three days of sea shipment of cut *Dendroubium* flowers for markets in Asia may be possible with the ideal storage temperature during transportation at 15ºC. The customers will have chance to use cut flowers about 15 days.