

Title Sea transport of ornamental branches: problems and solutions
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Abstract

A wide range of decorative foliage and leaves are cultivated by the Israeli growers for a very successful and increasing export to Europe and USA, including mainly leaves of *Aralia japonica* Thunb., *Aspidistra elatior* Blume, *Monstera deliciosa*, as well as branches of *Ruscus hypoglossum*, *Pittosporum tobira variegata*, *Asparagus myriocladus* baker, *Asparagus virgatus* Bak. and *Leucadendron* 'Safari Sunset'. To achieve the savings of transportation cost that sea transport offers, the vase life of foliage shipped by sea must be extended to provide the consumer with equivalent quality as foliage transported by air. The problems encountered during the prolonged sea transport of ornamental branches include: decay development, leaf senescence, blackening and wilting, organ abscission and discoloration. The strategies used to solve these problems and to enable sea transport of 1-4 weeks to distant markets include: 1) Controlled atmosphere (CA) with reduced O₂ and increased CO₂ levels; 2) Box perforation to enable a better air circulation during shipment; 3) Application of various anti-transpirants and gloss materials which also delay leaf senescence. These strategies were combined with various postharvest treatments, such as plant hormones, carbohydrates and preservatives, applied before shipment. All these technologies and treatments enable prolonged sea transport of the six species of decorative foliage and leaves examined, and preserved their quality during shipment and subsequent vase life.