

**Title** Recent developments in container transport for horticulture  
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### **Abstract**

Refrigeration for marine containers is a mature technology with innovation in recent years typified by incremental improvements rather than radical changes. Transport units need to be highly flexible as they very rarely carry just one type of cargo. Therefore, innovations which increase costs but offer improvements only for particular cargo types struggle to find commercial success.

Researchers have investigated alternatives to the traditional vapour compression cycle for transport applications. Such a shift would constitute a radical change. The results of these studies have indicated that vapour compression is the most effective technology at present, and therefore it appears that traditional refrigeration systems will remain the norm in refrigerated containers for the foreseeable future.

Recent innovations in the container refrigeration market, such as ThermoKing's high capacity 'Magnum' unit and AFAM+ system (Advanced Fresh Air Management) for transport of fresh produce have been moderately successful, but have not managed to penetrate the mass market. This presentation outlines recent developments in refrigerated containers and details a number of innovative technologies now available which are relevant to horticultural products.