

Annexure vii

Department of Floriculture & Landscape Architecture, Coimbatore

ACTION TAKEN REPORT - FOR SWC 2019

S.No. and Title as in the Proceedings	Remarks	Reply
3.2. Management of Horticultural Crops	The protocol for packaging of jasmine for export purpose needs to be given to DHPC	The protocol is furnished in Annexure 1 below.
	Technologies may be developed for off-season flowering in jasmine under low cost polyhouse conditions	Research at TNAU has shown that pruning of <i>Jasminum sambac</i> (Gundu malli) plants during September induces off-season flowering during the months of October to February both under open field conditions and protected conditions.

Export packaging technology for Jasmine flowers

Commercial floriculture in India comprises of both the modern and the traditional groups of flowers. Among the traditional flowers, jasmine is the most significant. Tamil Nadu is the leading producer of jasmine in the country. The flowers are exported from Coimbatore market to Dubai, Singapore and USA markets by air. Since jasmine flowers are very delicate, they show signs of wilting with an abrupt loss of fragrance within 24-36 hours after harvesting.

Keeping in view of the increasing demand for a reliable export packaging technology that would cater to the needs of near and far overseas markets, an export packaging technology for jasmine was standardized at the Department of Floriculture and Landscaping, TNAU, Coimbatore.

Description of the technology

Jasmine buds are harvested early in the morning before 7.00 am at fully developed tight bud stage and the buds are tied into strings and cut into pieces of 30 cm length each. The strings are dipped in 4% boric acid and surface dried.

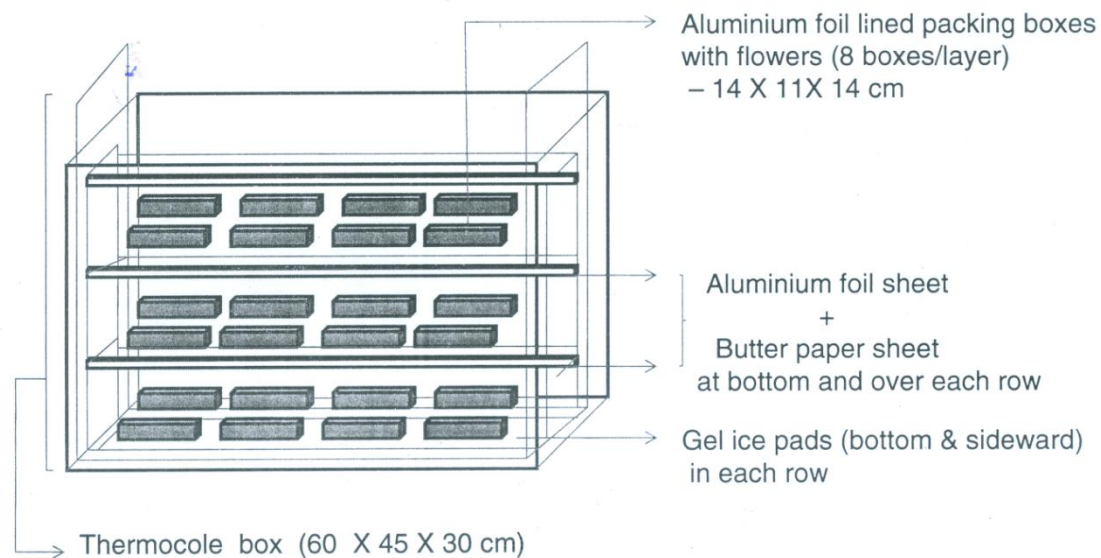
For long distance markets, five pieces of strings are packed in a small aluminium lined cardboard box of dimension 11 x 13.5 x 4 cm and further lined with butter paper. Twenty four such boxes are in turn packed in a larger thermocole box of dimension 60 x 45 x 30 cm lined with aluminium foil (in 3 layers with 8 boxes per layer) and ice gel sheets are placed in between each layer and the top layer is covered with aluminium foil. The boxes are closed and covered with brown sealing tape after which the packages can be airlifted.

For short distance markets, 1 kg of strings are packed in corrugated fibre board boxes (24 cm X 24 cm X 24 cm) with 4 % ventilation and lined with butter papers, sealed and airlifted.

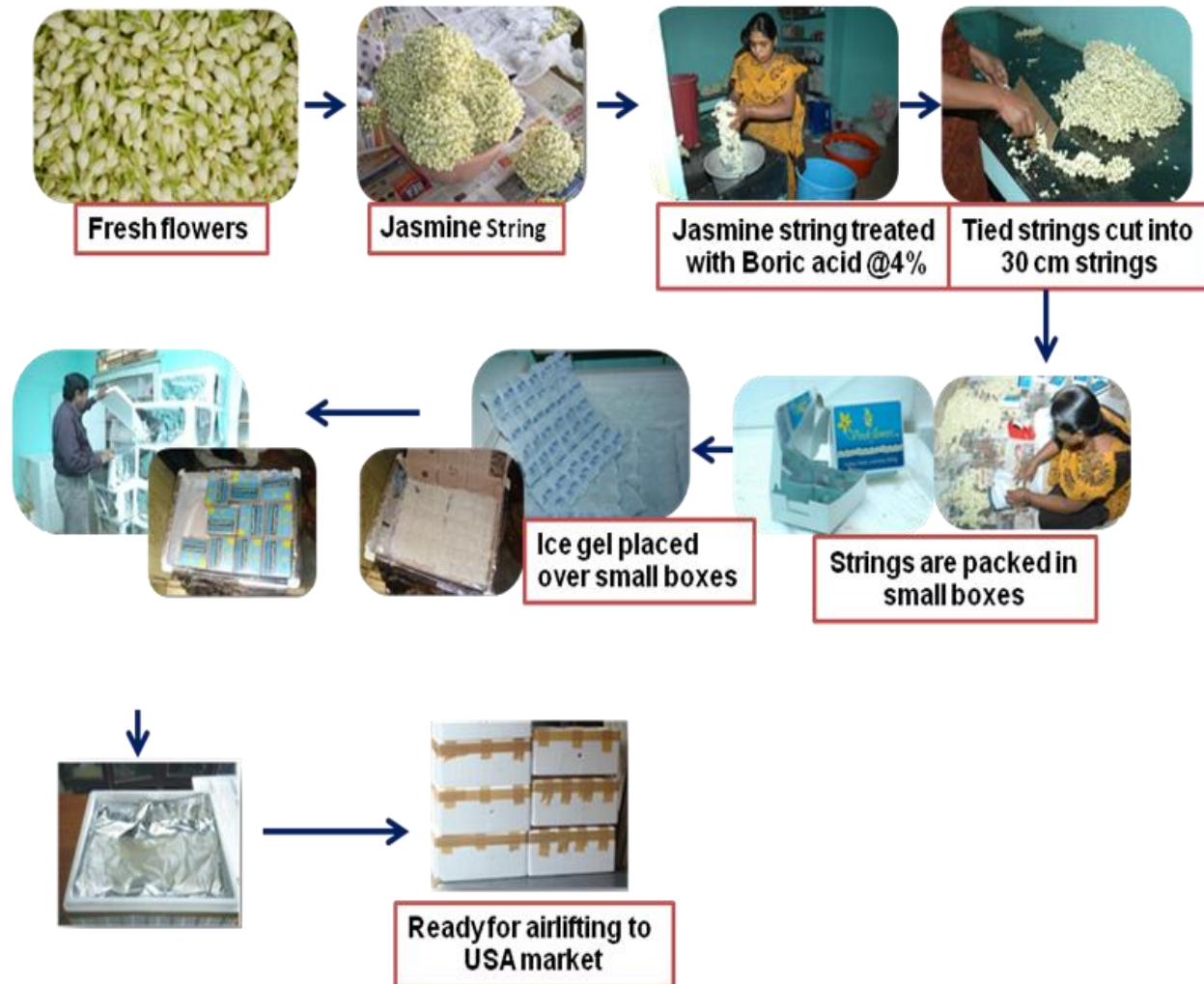
Impact of the technology

The packaging technology standardized was tested for its export suitability by M/S. Vanguard Exports located at Coimbatore in Tamil Nadu, India, which is a Private exporting firm of fresh jasmine flowers to US market. The package was found to be suitable with acceptable level of freshness, colour and fragrance. The technology was also found to be economically feasible with a cost benefit ratio of 1:2.44. As observed from feedback from jasmine exporters, adoption of this export packaging technology has helped to reduce post harvest losses in jasmine from 40% to 10%, leading to an increase in the export volume. Further, 6 new exporters were promoted owing to the training programmes and demonstrations conducted to disseminate the technology.

Export packaging technology – Schematic representation



Flow chart of packaging operations of jasmine flowers for export (Long distance markets)



Flow chart of packaging operations of jasmine flowers for export (Short distance markets)



Fresh flowers



Making of jasmine strings



Treating jasmine strings with Boric acid @4%

Packing treated jasmine strings in ventilated Corrugated Fibre Board (CFB) boxes



Ready for airlifting to Dubai market

