LM-SCM2014 XII International Logistics and Supply Chain Congress - "Supply Chains of the Future", Istanbul, Turkey, 30-31 October 2014

## The handling of fruit reefer containers in the Cape Town container terminal

Leila L. Goedhals-Gerber<sup>1</sup>, Christo Stander<sup>2</sup>, Esbeth van Dyk<sup>3</sup>

- 1 Department of Logistics, Stellenbosch University, South Africa, <a href="mailto:leila@sun.ac.za">leila@sun.ac.za</a>
- 2 Department of Logistics, Stellenbosch University, South Africa, <u>15614689@sun.ac.za</u>, <u>christostander111@gmail.com</u>
- 3 CSIR Built Environment, South Africa, FEvanDyk@csir.co.za

## **Abstract**

South Africa is one of the world's largest fresh fruit exporters, exporting a vast number of different fruit types and cultivars. The fresh fruit industry has seen significant growth in the past few years with the future looking promising. However, exporting large quantities of fruit brings forth some logistical challenges. Fruit needs to be kept cold during this process to ensure that the consumer receives the highest quality fruit possible. Each fruit type and cultivar has an optimal storage temperature which is regulated during the export process. For the South African fruit industry to continue to succeed in the export markets it needs to continually improve the quality of fruit and service that it delivers to its international clients. The objective of this paper is to identify opportunities for improvement in processes, especially aimed at reducing or eliminating temperature breaks in the cold chain. The focus is on the port leg of the summer fruit export cold chain and more specifically on the Cape Town container terminal, through which the majority of the reefer containers are exported. Data was collected by physically following a number of reefer containers from arrival at the port until they were loaded onto the vessel. In addition, data such as the ambient temperatures within the containers as well as the duration of time that reefer containers are unplugged from a power source were also observed. This paper concludes with recommendations to address the identified problem areas by improving the operational procedures in the Port of Cape Town.