Transportation of Perishables: Fresh Produce

Tiina Medel
President EIMC
Who is EIMC?

We are an independent company of professional consultants and adjusters, specialized in marine related transportation risks, and founded over 50 years ago with headquarters based in New Jersey, USA.

We have extensive experience assisting clients with the investigation of cargo claims as well as the development and implementation of risk management programs.
What are perishables?
Evaluating fresh fruits & vegetables

- Color
- Pulp temperature
- Stems
- Firmness
- Shrivel
- Split skins
- Decay and mold
Tools of the trade
Risk factors and considerations

- Inherent qualities
- Pre-shipment condition
- Temperature abuse
- Delay
- Contamination
- Physical damage
Inherent qualities

- Climacteric or non-climacteric
- Region of origin – chill prone?
- Varietal differences
- Recommended storage conditions
- Shelf life
Other pre-shipment factors

- Susceptibility to diseases and pests
- Field and mechanical scarring
- Category 1 or below
- Pack dates
- Post harvest / pre-shipment storage
- Growing season
Temperature

- Key factor in determining post-harvest condition
- Actual condition of fruit
- Temperature record
- Stowage
Chill damage
# Temperature records

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<th>PARTICULARS FURNISHED BY SHIPPER - CARRIER NOT RESPONSIBLE</th>
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"CONTAINER RECEIVED WITH RETURN TEMPERATURE OF DEGREES CELSIUS. CARRIER'S OBLIGATION IS LIMITED ONLY TO MAINTAIN THE SETTING AIR TEMPERATURE OF 0 DEGREES CELSIUS AS PER SHIPPERS / RECEIVERS WRITTEN INSTRUCTION, CONDITION AND SERVICE COVERAGE CONTAINER YARD in CALLAO (LIMA), PERU CONTAINER YARD in PORT ELIZABETH (NEW JERSEY), Continued on Appendix to BL Nr CHI#24ABFT500"

SHIPPERS DECLARED VALUE $(IF NOT DECLARED, LIABILITY LIMIT APPLIES AS PER CLAUSE 16.):
Stowage
Delay

- Transhipment delays
- Cold treatment, fumigation, inspections
Contamination

- Direct contact with contaminant
- Odor contamination
- Exposure to filthy environment
- Breach of seals
Physical damage

- Impact damages etc.
- Water damage
- Theft / loss
Controlled Atmosphere

- Not all CA systems are equal
- Usually no record available
- Determining effects is difficult
Fig. A – Ripening Control Comparisons

- **NO CONTROL**
- **TEMPERATURE CONTROL ONLY**
- **TEMPERATURE AND ATMOSPHERE CONTROL**

EATING QUALITY RATING

PRE-HARVEST → POST-HARVEST

MATURATION → SENESCENCE & DETERIORATION → RIPENING → TIME
Controlled Atmosphere
Valuation

- Sound market value versus invoice value

- Other considerations
  - Sorting / inventory
  - Destruction / disposal
  - Unincurred expenses
Thank you for your attention

Tiina Medel
EIMC
111 Town Square Place, Suite 1412
Jersey City, NJ 07310-1755, USA
O: +1 201 963 3355
D: +1 201 942 1200
M: +1 551 998 6330
Tiina.medel@eimc.com
www.eimc.com