Packaging for Soft Pears

Jim Thompson & David Slaughter
Project Goals

• Develop a packaging system allowing soft, ripe pears to be marketed. Consider both retail and food service markets.
Background

- Tight fill packaging is difficult to implement.
- Air ride suspension helps.
- Bagging fruit helps.
- But none of the above completely solve the problem nor do they work for very soft fruit.
Bruising Damage

• Relative motion between fruit and any other solid object.
• Softer fruit are more damage susceptible.
• A lot of bruising happens at retail display.
UCD Suspended Tray
'Hammock Pack'
How Does it Work?

- Separates fruit.
- Immobilizes fruit.
- Clamshell protects fruit on display.
Testing

![Graph showing the relationship between Penetrometer Firmness and Sinclair Firmness, with data points for Std Tray, UCD Suspended, and Conventional Clamshell, and a Nonvibrated control.](chart.png)
Cost

- Clamshell + tray = 44¢ ea.
  - 6 fruit /clamshell
  - 8 clams in a 2-layer Euro box
- Support and tray for a half Euro box = 77¢ ea.
- Packages are made by:
  FDS Manufacturing Co.
  Pomona, CA
  (909) 591-1733