

Can consumers eat our avocados?



A partnership between AAGF, HAL, QHI, HortResearch,
NZAGA, ripeners, retailers

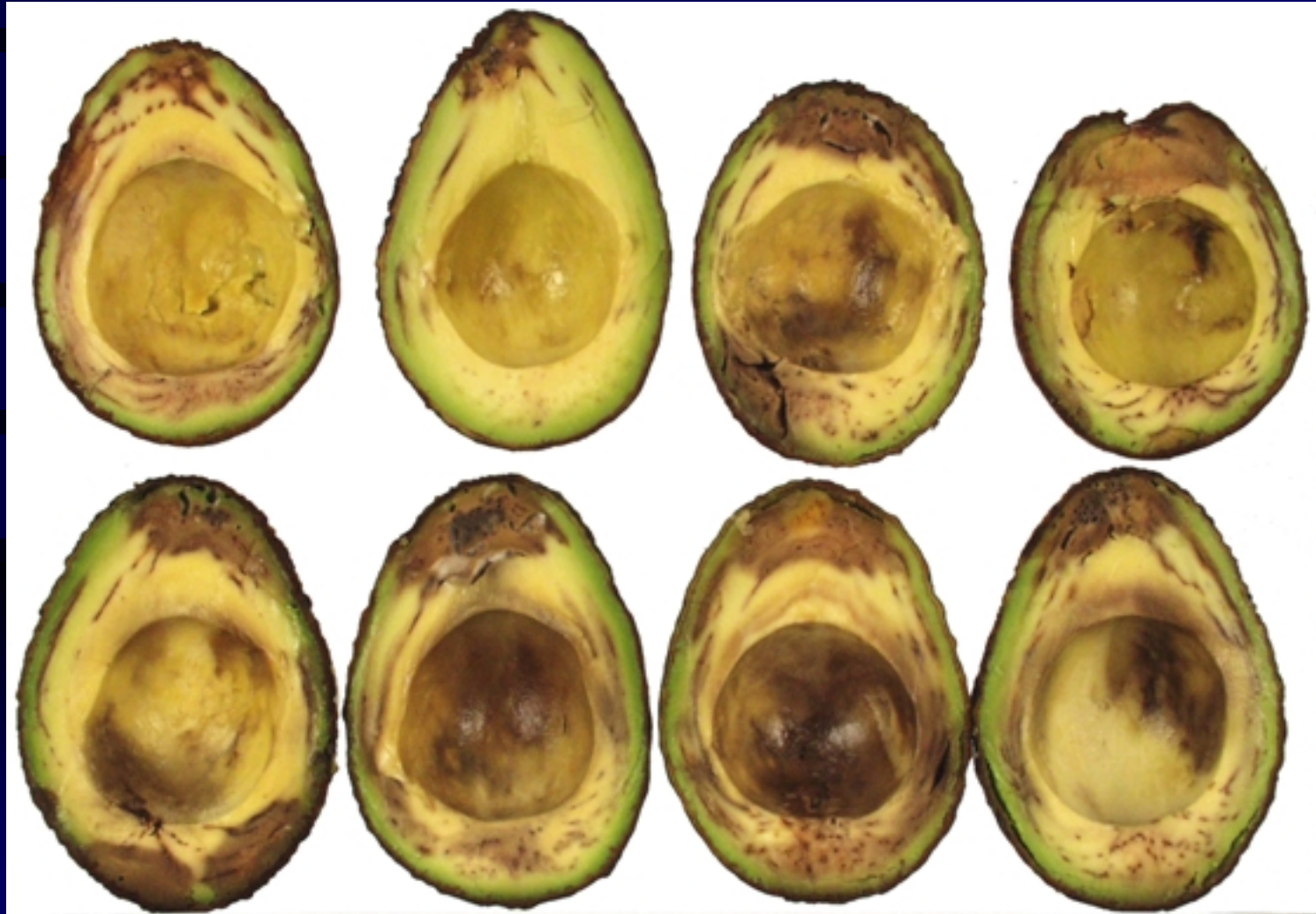


Horticulture
Australia

HortResearch
www.hortresearch.co.nz



What consumers are buying!



What consumers are buying?



Avocare objectives

- Identify practices in the supply chain that contribute to poor quality on the retail shelf
- Recommend improved practices

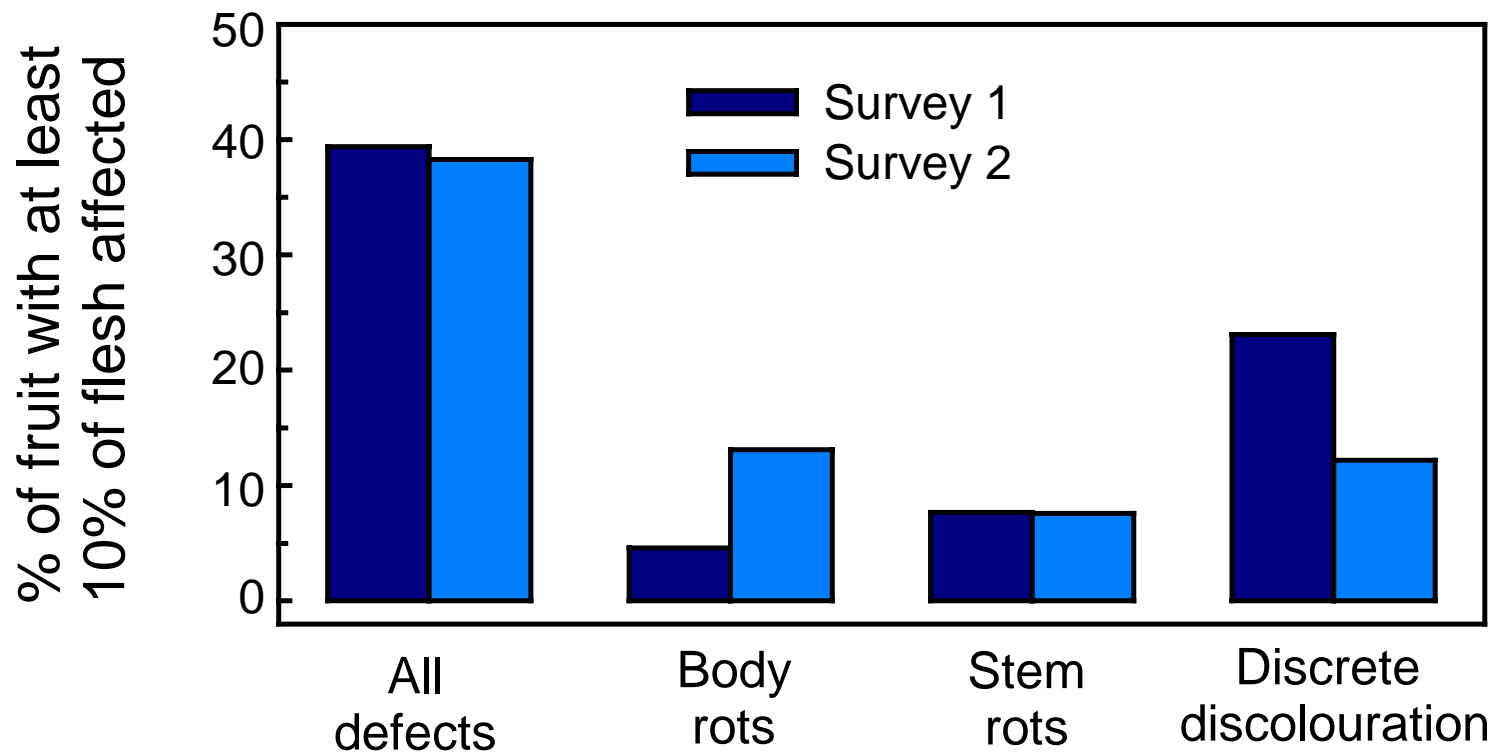


Avocare methods

- Two surveys
 - two weeks each
 - 6 stores; 3400 fruit
- Fruit sampled at different locations then ripened in the laboratory
- Quality of ripe fruit assessed
- Fruit history and movements recorded



Defects incidence



Discrete discolouration - bruising

- Significant damage before ripener dispatch
- Significant damage pre-shelf
- Trends of increasing damage on shelf, but not consistent



Impacts to softer fruit?



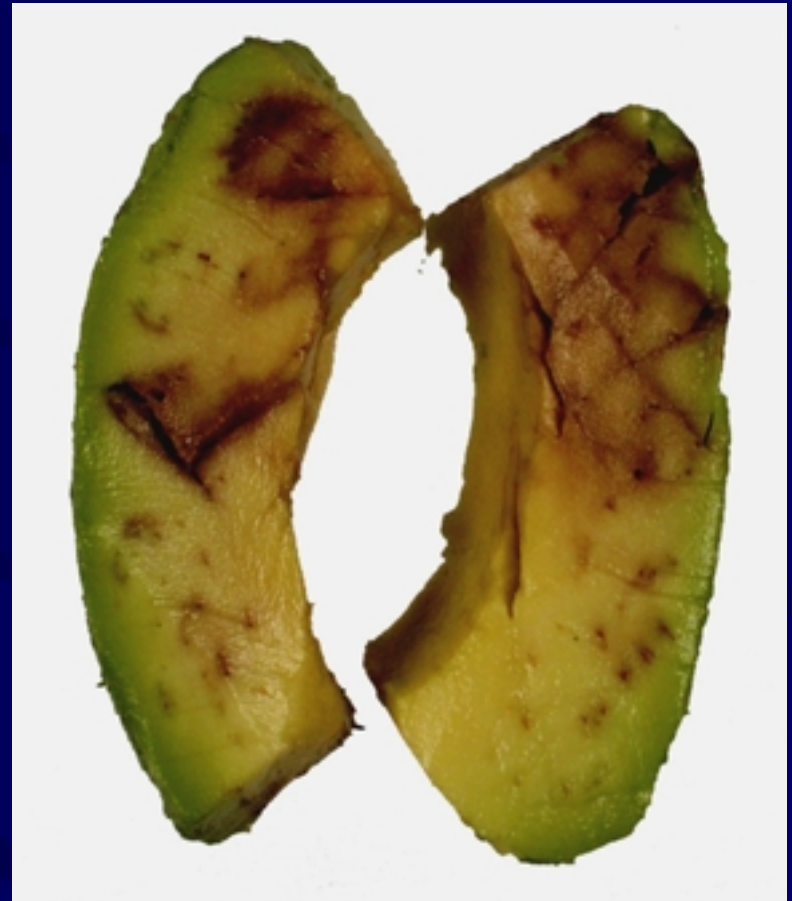
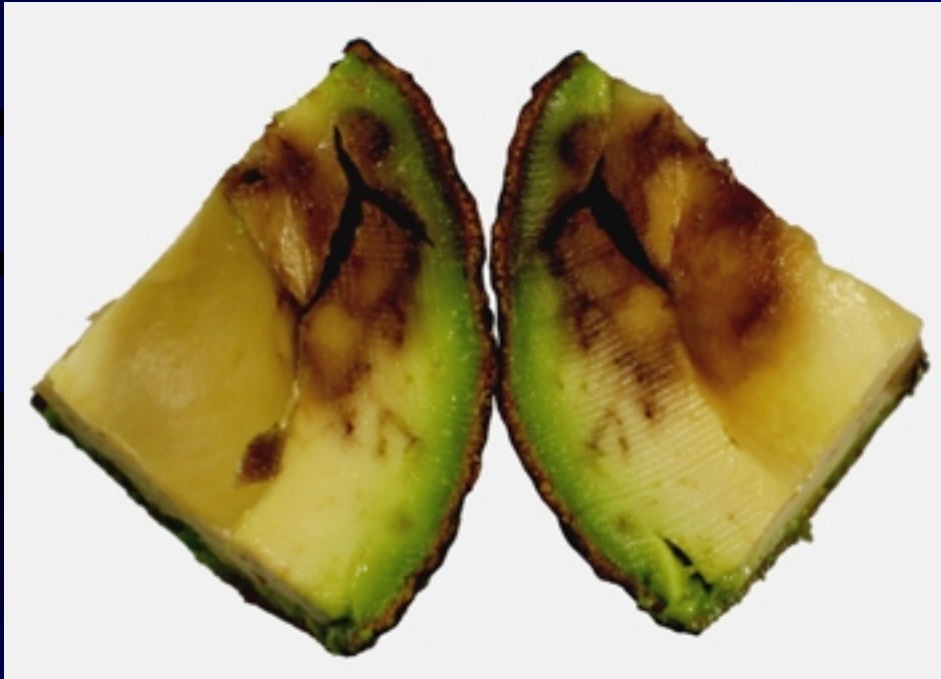
Impacts to firm fruit?



2nd survey discrete symptoms



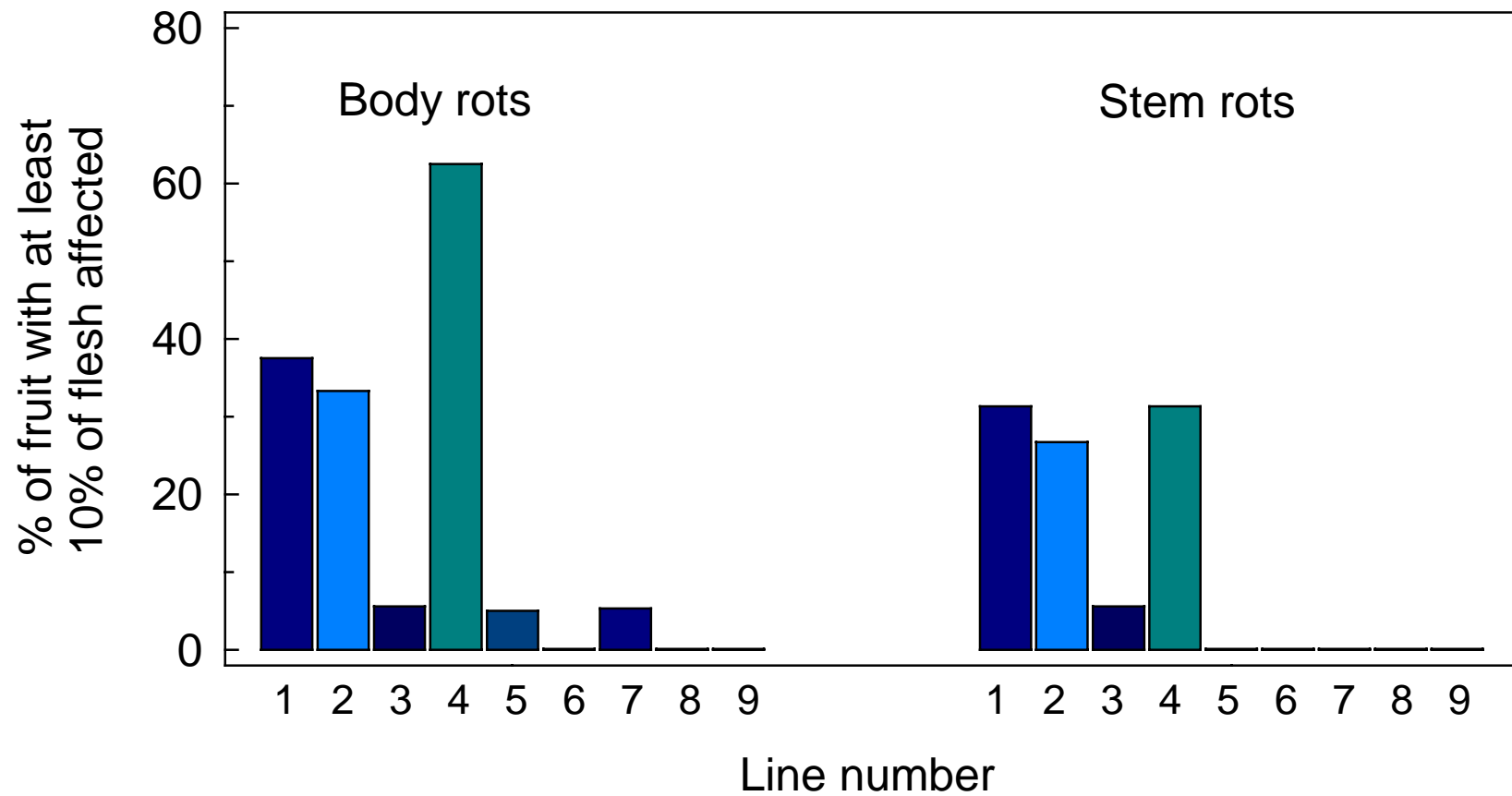
2nd survey discrete symptoms



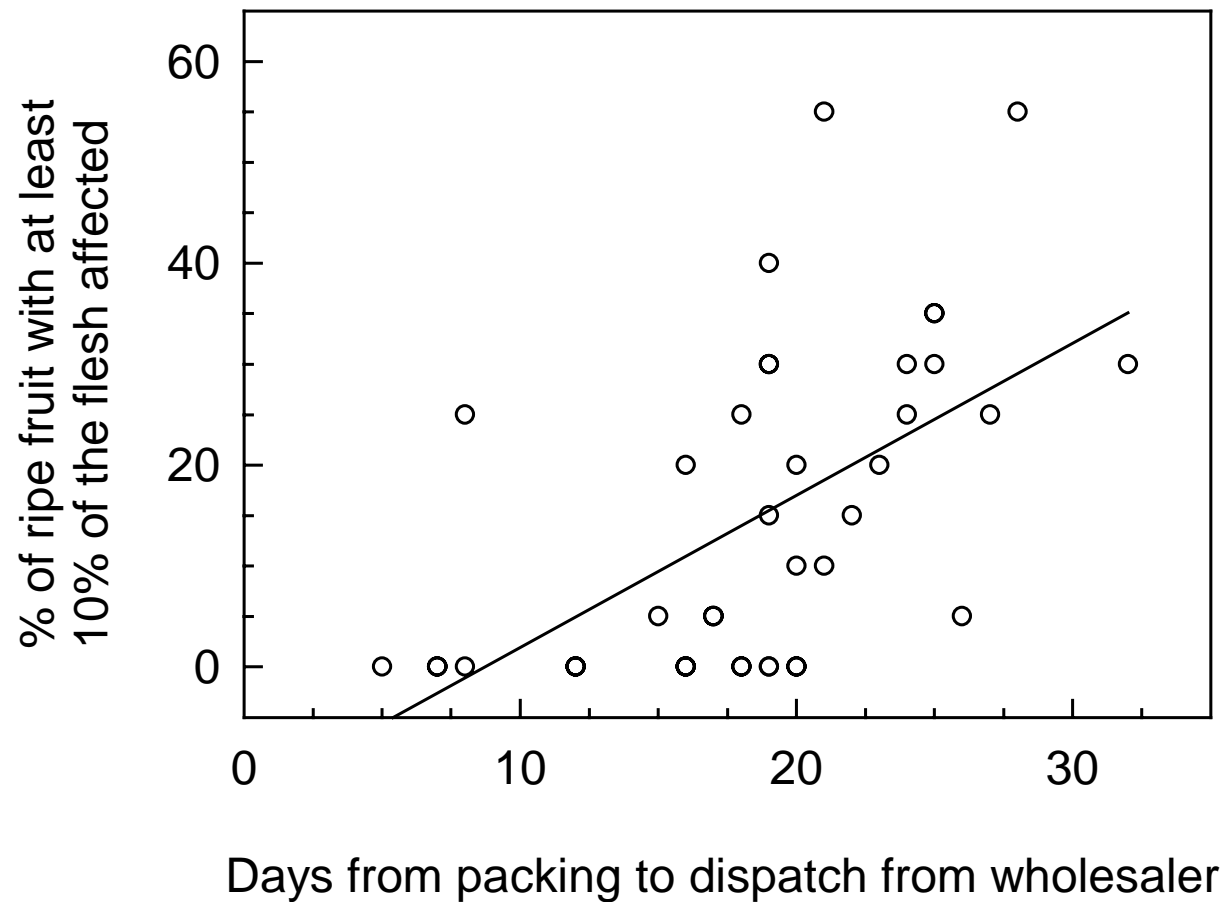
Body and stem rots



Grower/packer practices



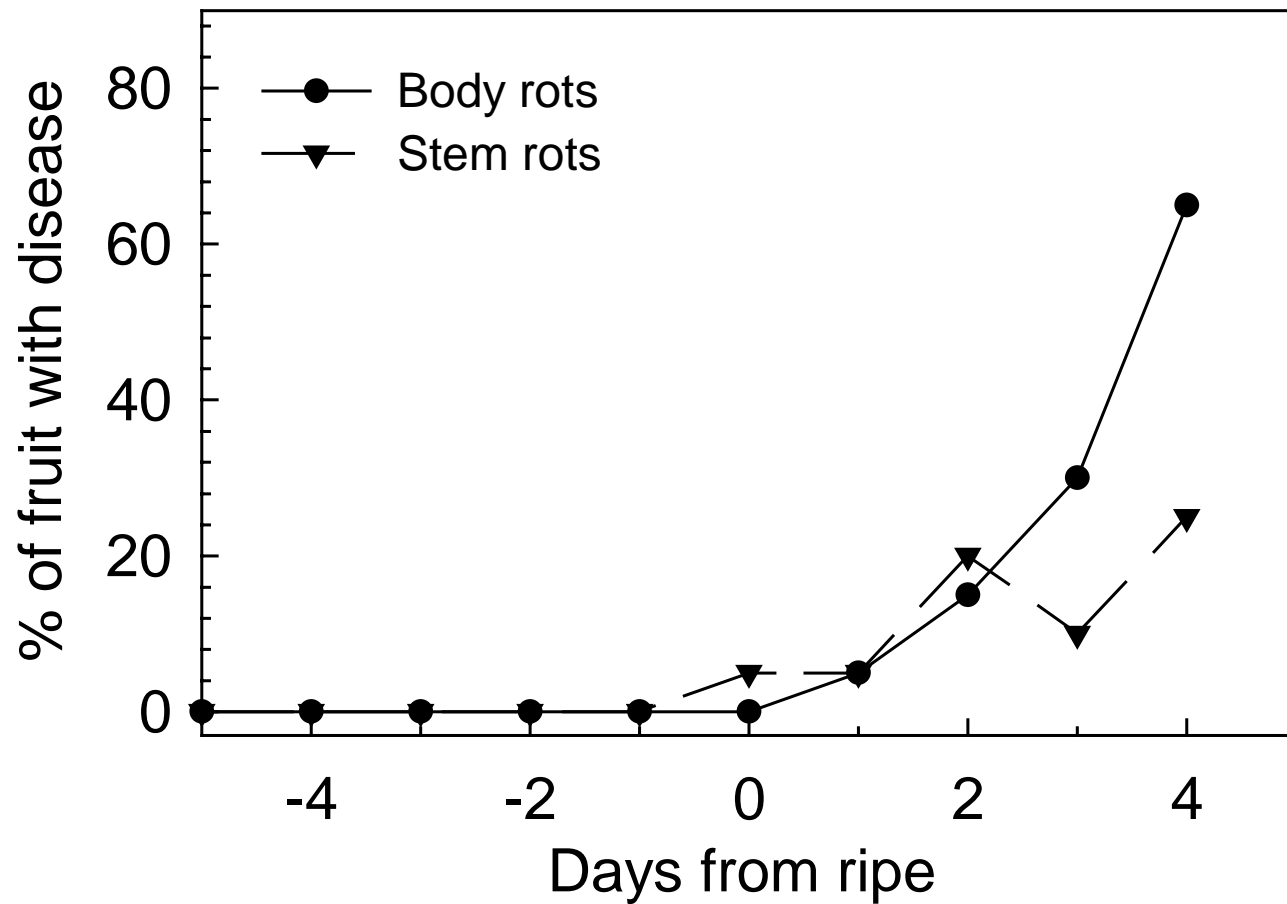
Rots - time in the chain



Time in the chain

<i>Stage</i>	<i>Average</i>	<i>Range</i>
<i>Grower to wholesaler</i>	4	1-12
<i>Holding before ripening</i>	4	0-14
<i>Ripening</i>	4	2-6
<i>Ripening to dispatch</i>	3	0-21
<i>Ripener dispatch to store</i>	1	1-5
<i>Store cold room</i>	2.5	1-7
<i>Shelf</i>	3.5	1-11
<i>Total time</i>	22	

Fruit age and rots

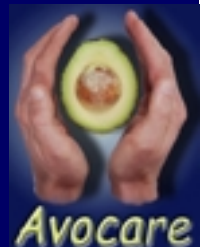


Packaging



Body rots and diffuse less
in open top trays

Bruising no worse in
open top trays



Pallets at the distribution centre



The challenges - bruising

- More careful handling
 - during harvesting and packing
 - during distribution/marketing
 - improved training at DC and store
- Improved packaging
 - reduce carton collapse & re-stacking
 - absorb impacts



The challenges - rots

- Better management
 - on farm
 - in packhouse
- Correct holding and ripening conditions
- Reduce time in the system
 - stock rotation
 - COORDINATED SUPPLY (integration)
 - communication



The challenges - consumers

Education

- Rots
 - consume before over-ripe
 - holding conditions
- Bruising
 - carry carefully



Conclusions

- Bruising
 - can occur at all stages
 - softer fruit more sensitive
- Rots
 - grower/packer practices
 - time in chain
 - stage of ripeness (consumer education)



The challenge of the balance

