Internal Quality Checks on Fruit in the UK

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Destructive sampling procedure

 No national legislation for destructive sampling

We rely on what is stated in 1148/01

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Regulation 1148/01

- Check for internal defects on the basis of reduced samples
- Especially where control destroys the trade value of the produce
- the size of the reduced sample shall not exceed 10% of the size of the bulk sample initially taken for the inspection

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Destructive sampling procedure

- The need to cut and destroy a sample falls into two categories:-
- Where there is an **outward sign** of an internal defect.
- Where there is no outward sign of an internal defect

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Outward Sign of Defect

Example: 30 kiwifruit in a tray showing water soaking.

Cut up to 10% to confirm suspicion.

 Count all kiwifruit exhibiting external symptoms and cut 3 per tray (being 10% of the sample) to confirm your suspicions

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NO Outward Sign of Defect

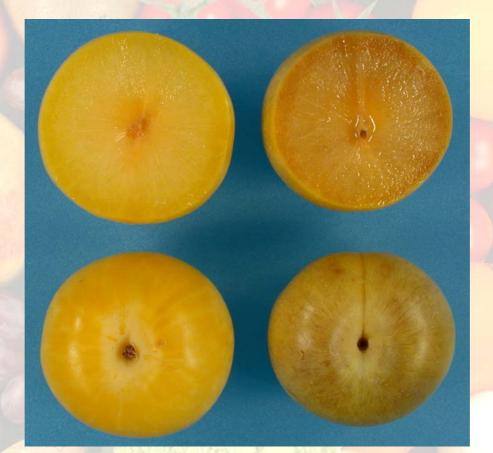
- Example: Apples, count 150, with suspect water core.
- Take a random sample of 10% from each container and cut the entire reduced sample.
- Remove 15 apples from the box at random and cut them.



DEFECTS REQUIRING DESTRUCTIVE SAMPLING



Internal browning - plum





Gum pocket - plum





Fractured stone - plum



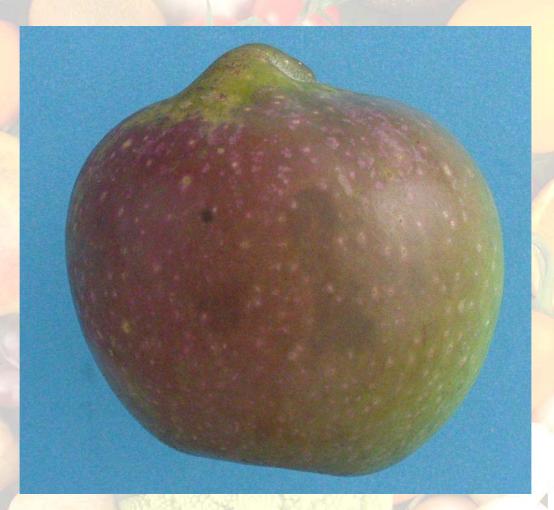


Split stone - nectarine





Suspected water-core - apple



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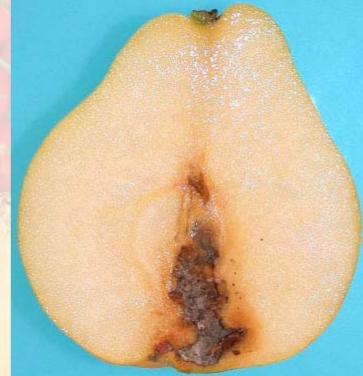
Water-core – out of grade





Pest Damage - pears







Kiwifruit - watersoaking





Avocado – rubbing/ bruise and chilling injury





OBJECTIVE TESTS CARRIED OUT BY HMI



Marketing Standards incorporating Objective Tests

APPLES **AVOCADOS** CITRUS GRAPES HAZELNUTS **KIWIFRUIT MELONS** PEACHES AND NECTARINES WALNUTS WATER MELONS

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Objective Tests

Sugar levels – ^oBrix Dry Matter Moisture Content Flesh Pressure Juice Content





Objective testing equipment











Dover

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We always encourage our inspectors to cut one or two items of fruit during inspection...





