Common Banana Quality Issues

1. Pesticide Marks

White powdery residue on the surface of the peel from talc-based powder pesticide application. Caused by failing to properly wash fruit.

2. Misshapen Fruit

Fingers with an irregular shape including fruit that is too straight or arched, ridged or pinched. No double pulped or fused fruit.

3. Cut/Hole/Puncture

Physical damage that is deep enough to expose pulp. This may be caused by a knife, animal, bird or insect.

4. Cigar End Rot

Fungus causes dry rot at the flower tip end of the finger with infection extending 10 to 20 mm into fruit. Affected area is blackened, becoming grey to white due to spores resembling ash on the end of a cigar.

5. Neck Damage

Minor neck creasing that does not break the skin resulting from twisting or bending during post-harvest handling and packing. The damage becomes darker over time.

6. Flower Thrips

Egg laying on the surface of young fruit results in scarring seen as minute raised black spots. Scarring may become less noticeable as fruit matures but if damage is severe, it may result in fruit being classed as defective.

7. Corky Scab

Scarring from feeding by Flower Thrips results in slightly raised grey-brown to grey-silver areas on the skin. This develops into corky brown raised scabs, often on the cushion end and neck, but may be present on other areas.

8. Rust Thrips

Reddish brown discolouration of the peel, which may become dark brown to black over time. Occurs between the fingers but severe damage may cover a large area of the fruit surface and cause superficial cracks in the peel.

9. Animal Scratches

Scratches and superficial punctures caused by a bird or bat landing on the bunch to feed on flower nectar.

10. Caterpillar Damage

Irregular, smooth or scabby brown superficial scarring of fruit, often accompanied by holes and frass. Caused by the larval stage of various moths grazing on fruit peel.

11. Soldier Fly Damage

Shallow dark brown cracked scarring caused by larvae feeding on the peel. Most often found between fingers where eggs are laid. Scarring may also occur from a chemical secreted with the eggs during laying.

12. Sap Stains

Light brown to black marking as a result of sap not being washed off fruit after harvest or from sap pooling in the bottom of a carton.

13. Abrasion and Rub

Dry, brown and calloused to fresh, wet appearing, black patches on the peel. Caused by rubbing of bract, flower tip, leaf, bag or adjacent fruit against the peel or poor post-harvest handling.

14. Bruising

Occurs when enough impact or compression forces are applied to fruit. Appears as a flat, sunken or partially broken area of peel which will darken and become increasingly obvious as fruit ripens. Predominantly caused by poor post-harvest handling.

15. Maturity Bronzing

Bronze to brown discolouration of mature bananas with finely cracked, scabby peel. Uncertainty remains regarding the cause of this pre-harvest disorder.

NSW DPI would like to acknowledge the support provided by Golden Dawn Fruit Wholesalers, D&D Ripeners, Matt Weinert, Leanne Davis, Michael Davy and all NSW Banana growers whose fruit was evaluated as a part of the study.

Hort Innovation Strategic levy investment | BANANA FUND

This project has been funded by Hort Innovation using the banana research and development levy and funds from the Australian Government. For more information on the fund and strategic levy investment visit horticulture.com.au

NSW GOVERNMENT | Department of Primary Industries

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Fruit Defect Type and Packing Tolerance

GENERAL APPEARANCE

DEFECT	DEFECT TOLERANCE*
1. Pesticide mark	None allowed
2. Misshapen fruit	Max 10% of fruit sampled

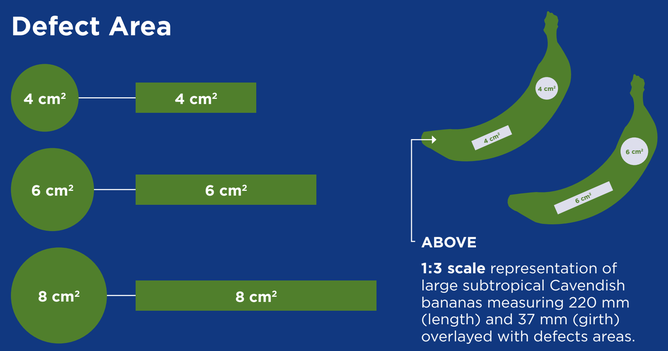
MAJOR DEFECT (Total major defects must not exceed 2% of total fruit sampled)*

DEFECT	DEFECT TOLERANCE*
3. Cut/Hole/Puncture	Any finger affected will qualify the whole cluster as major defect
4. Cigar End Rot	

MINOR DEFECT (Total minor defects must not exceed 10% of total fruit sampled)*

DEFECT	DEFECT TOLERANCE*
5. Neck Damage	1 finger per cluster
6. Flower Thrips	Greater than 2 fingers affected will qualify the whole cluster as minor defect
7. Corky Scab	
8. Rust Thrips	
9. Animal Scratches	
10. Caterpillar Damage	Less than 4 cm^2/cluster
11. Soldier Fly Damage	
12. Sap Stains	
13. Abrasion and Rub	
14. Bruising	Less than 6 cm^2/cluster
15. Maturity Bronzing	Less than 8 cm^2/cluster

Defect Area



ABOVE

1:3 scale representation of large subtropical Cavendish bananas measuring 220 mm (length) and 37 mm (girth) overlayed with defects areas.

Cluster Characteristics

CLUSTER SIZE — Defined as having 3 to 8 fingers

FINGER LENGTH — To determine the banana length correctly, measure the outer curvature of the finger from pulp to pulp.

Check your relevant retailer length requirements to ensure fruit are within specification.

FINGER GIRTH — Using callipers, measure at right angles to the curve of the fruit at a point one third from the flowering end.

Check your relevant retailer girth requirements to ensure fruit are within specification.

CARTON WEIGHT — Gross carton weight must allow for moisture loss and weight of the carton.

Below is a guide to gross carton weights for 13 kg of bananas.

Carton Style	Gross Weight
Flat pack non folded	13.895 kg
Flat pack folded	14.105 kg
Corner-post non folded	13.775 kg
Corner-post folded	13.805 kg

Weights guide provided by Golden Dawn Fruit Wholesalers

***Always check the most recent fruit specifications relevant to your business as they vary between retailers and over time.**
The defect specifications outlined are based on the Woolworths Subtropical Cavendish Banana – Ripened standards issued 10/06/2019.