Handling of Australian mangoes at export destinations

Leigh Barker, Jodie Campbell, Scott Ledger, Terry Campbell

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Handling of Australian mangoes at export destinations
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- Australian Mango Industry Association
- Mango Sub-Committee of QFVG (now Growcom)
- Horticulture Australia Limited
- Asian Markets Horticulture Initiative of DPI&F Queensland
- Mango businesses – producers, transporters, wholesalers, retailers, exporters

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1. How to use the guide

This guide describes best practice handling systems for a range of mango supply chains for export market destinations. All of the supply chains include controlled ripening, where the temperature of the fruit is maintained between 18°C to 20°C, ethylene is injected into the ripening room for 2 to 3 days, and the room is vented to remove carbon dioxide. Controlled ripening may occur before the mangoes leave Australia or may need to be done at the export destination.

There are three different handling systems described in this guide to provide some flexibility in how mangoes can be handled at the export destination. To optimise mango quality, the handling system should be selected on the basis of what facilities are available at the export destination.

This guide provides three recommended handling systems for export market destinations:

- Air freight of pre-ripened mangoes
- Air freight of unripe mangoes (to be control ripened at the export destination)
- Sea freight of unripe mangoes

The durations recommended for the steps in each handling system refer to the Kensington Pride variety. These durations may vary for other varieties. For example, the R2E2 variety may be stored for an extra 1 to 3 days before and after ripening.
2.1 Air freight of pre-ripened mangoes

- Colour 2 / 3
  - Hold at 12°C
  - 1 - 2 days
- Colour 4 / 5
  - Hold at 18° - 20°C
  - 1 - 2 days
- Colour 5 / 6
  - Hold at 18° - 20°C
  - 1 - 2 days
  - Deliver to importer
  - 1 - 2 days
  - Total time 2 - 4 days

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2.2 Air freight of unripe mangoes

![Diagram of mango ripening process]

- **AIR FREIGHT**
- **Colour 1**: Deliver to importer. Hold at 12°C if ripening is not required within 1 day of arrival.
- **Colour 2 / 3**: Control ripen at 18°C - 20°C.
- **Colour 4 / 5**: Hold at 18°C - 20°C.
- **Colour 5 / 6**: RETAIL

- **1 - 3 days**
- **2 - 3 days**
- **1 - 2 days**

Total time: 4 - 7 days

Handling of Australian mangoes at export destinations
2.3 Sea freight of unripe mangoes

- **Sea freight**
  - Colour 1
    - Importer facility
    - Warm mangoes to 18° - 20°C
  - Colour 2 / 3
    - Control ripen at 18° - 20°C
  - Colour 4 / 5
    - Hold at 18° - 20°C
  - Colour 5 / 6
    - Retail

- **Total time**: 4 - 7 days
  - 1 - 2 days
  - 2 - 3 days
  - 1 - 2 days
3. References

Mango ripening guide

Mango skin colour guide

Mango handling guide

Mango defect guide