

Best-practice guidelines for

Fuji

These guidelines aim to improve the quality of Fuji apples through correct post-harvest practices.

Correct harvest maturity

Starch breakdown of less than 40% will reduce the risk of internal browning.

Post-harvest stabilisation phase

It is essential to manage the picking stress of the fruit through careful handling during the first 48 hours after harvest.

Keep fruit at 5°C for the first week. Deliver cold-room air at 5°C.

Keep the cold-room doors open to prevent build-up of CO₂.

Treat fruit with 1-MCP during the first week according to protocol.

Implementation of storage conditions

Set the cold-room temperature to 0° after the first week. Ensure that fruit temperatures do not fall below 0°C.

Keep CO₂ levels as low as possible — preferably below 0.5%. Keep the cold-room doors open if possible. Alternatively use lime or CO₂ scrubbers.

Controlled-atmosphere storage

Close the doors and implement the controlled atmosphere after 14–28 days.

Keep CO₂ levels as low as possible — preferably below 0.5%. Industry guidelines recommend levels below 1%.

The first weeks of controlled-atmosphere storage are the most critical for the prevention of internal browning. It is therefore essential to control CO₂ levels initially, even if very low CO₂ levels cannot be maintained throughout the entire storage period.

Oxygen levels may also be important. Industry guidelines recommend levels of 1.5% O₂ but more research is required.

Temperatures can be reduced to -0.5°C or -0.7°C after 30 days.

Packaging

Use perforated bags to prevent the accumulation of CO_2 . Bags can be folded over the inner carton as for Taiwan.

Recooling

Deliver air at 0°C during recooling.

Shipping

Keep vents 15% open to prevent the accumulation of CO_2 .

Ship at 0°C — use PPECB shipping code DO and not D-1.5. Never expose fruit to temperatures below 0°C during shipping.