STANDARD OPERATING PROCEDURE

Harvest and Post-Harvest Handling SOP

Document no.	SOP-AGR-002
Revision	1.0
Owner	Farm Manager
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Review cycle	Every 12 months

1. Purpose

To harvest crops at the right maturity and handle them in a way that preserves quality and safety from the field through packing and cold storage.

2. Scope

Applies to harvesting, field handling, cooling, grading, packing and traceability tagging of crops. Pesticide application and livestock activities are covered by separate SOPs.

Definitions

Field cooling	Removing heat from harvested produce quickly after picking, using shade, hydrocooling or forced-air cooling before it reaches long-term storage.
Lot	A batch of harvested crop from a specific field and date, tracked together for traceability.
Culling	Removing damaged, diseased or undersized produce during grading.

3. Responsibilities

Harvest Crew Lead	Directs the harvest crew, checks maturity and quality in the field, and manages field bins and cooling.
Field Worker	Picks the crop using correct technique and handles bins carefully to avoid damage.
Packing House Supervisor	Oversees grading, packing, labeling and cold storage of harvested product.
Farm Manager	Sets harvest timing, approves lot tagging standards, and reviews quality and traceability records.

RACI matrix

Activity	Harvest Crew Lead	Field Worker	Packing House Supervisor	Farm Manager
Check maturity and decide harvest timing	R	-	I	A
Pick and handle the crop in the field	A	R	-	I
Field cool harvested product	R/A	C	I	-
Grade, cull and pack the crop	I	C	R/A	I

Activity	Harvest Crew Lead	Field Worker	Packing House Supervisor	Farm Manager
Apply lot tags and traceability records	C	-	R/A	C

R = Responsible, A = Accountable, C = Consulted, I = Informed

4. Materials and PPE

Materials, tools and systems

- Field harvest bins or totes
- Harvest knives, shears or picking equipment
- Shade cover or field cooling equipment
- Grading and packing line
- Lot tags and traceability log
- Cold storage with temperature and humidity control

Personal protective equipment

- Sun protection for field crews
- Cut-resistant gloves for harvest tools
- Closed-toe footwear

5. Procedure

Step	Task	Owner	Done
5.1	**Check crop maturity before harvest** The crew lead checks a sample of the crop for maturity indicators such as color, size or firmness, following the standard set for that crop, before scheduling the harvest. **Checkpoint:** A representative sample meets the maturity standard before the crew begins harvesting a block.	Harvest Crew Lead	☐
5.2	**Confirm harvest timing with the farm manager** The farm manager confirms the harvest date and crew assignment based on maturity checks, weather forecast and packing house capacity.	Farm Manager	☐
5.3	**Inspect and stage clean harvest bins** Inspect bins and totes for cleanliness and damage before use, and stage them at the field so crews are not carrying product long distances by hand.	Harvest Crew Lead	☐
5.4	**Pick using correct technique** Pick or cut the crop using the technique that avoids bruising or damaging the plant, such as a gentle twist or clean cut with a sharp tool, rather than pulling forcefully. **Warning:** Handle harvested produce gently. Dropping or overfilling bins causes bruising that shortens shelf life.	Field Worker	☐
5.5	**Place harvested product into bins without overfilling** Place picked product into bins in a single layer where required for delicate crops, and avoid overfilling bins beyond their designed capacity.	Field Worker	☐
5.6	**Move bins out of direct sun promptly** Move filled bins to a shaded staging area as soon as they are full, rather than leaving them in direct sun in the field.	Harvest Crew Lead	☐

Step	Task	Owner	Done
5.7	**Begin field cooling quickly** Start cooling the harvested crop as soon as possible using shade, hydrocooling or forced-air cooling appropriate to the crop, to remove field heat before transport. **Checkpoint:** Field heat removal begins within the target window set for that crop after picking.	Harvest Crew Lead	☐
5.8	**Transport to the packing house carefully** Load bins onto the transport vehicle securely to prevent shifting or crushing, and move them to the packing house without unnecessary delay.	Harvest Crew Lead	☐
5.9	**Grade and cull at the packing house** Sort product by size and quality standard, removing damaged, diseased or undersized items during grading before packing.	Packing House Supervisor	☐
5.10	**Wash product where required** For crops that require washing, rinse with clean, potable water following the standard for that crop before drying and packing.	Packing House Supervisor	☐
5.11	**Pack and label with lot information** Pack the graded product into its shipping container and apply a lot tag showing the field, harvest date and crew, so it can be traced back if needed. **Checkpoint:** Every packed lot carries a tag with the field, harvest date and crew identifier before it enters cold storage.	Packing House Supervisor	☐
5.12	**Move packed product into cold storage** Place packed containers into cold storage at the temperature and humidity setting required for that crop as soon as packing is complete.	Packing House Supervisor	☐
5.13	**Log traceability and quality records** Record the lot number, quantities, grading results and storage location in the traceability log, and file any quality issue noted during grading.	Packing House Supervisor	☐

6. Quality checks

- A maturity sample check is completed and passes before harvest begins on a block.
- Field heat removal starts within the target window after picking.
- Every packed lot has a traceability tag before entering cold storage.
- Cold storage temperature and humidity match the requirement for the crop.

7. Records

- Harvest maturity check log
- Field cooling start and completion times
- Lot traceability log
- Grading and quality inspection notes

8. KPIs

- Percent of lots meeting the maturity standard at harvest
- Average time from picking to start of field cooling
- Cull rate during grading
- Percent of lots with complete traceability tags

9. Common mistakes

- Leaving filled bins sitting in direct sun before moving them to shade.
- Overfilling bins, which bruises product at the bottom of the load.
- Delaying field cooling until product reaches the packing house.
- Packing product without a complete lot tag, breaking traceability.

10. Revision history

Revision	Date	Description	Reviewed by
1.0	September 15, 2026	Initial release	Ilia Pirozhenko

Approval

Prepared by	Approved by	Date

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