



Hive Readiness & Production Checklist for Royal Jelly

I. Colony Strength & Biology (Pre-Harvest Phase)

- **Sufficient Nurse Bee Population:** Ensure the colony has a high density of bees aged 5–15 days (the peak age for glandular secretion).
- **Brood Cycle Status:** Verify the presence of open brood; a healthy turnover of larvae is critical for triggering the nurse bees' feeding response.
- **Queen Pheromone Regulation:** Assess the queen's laying pattern to ensure the colony is not in a swarming state, but in a responsive, non-stressed condition.

II. Nutritional Environment

- **Pollen/Protein Intake:** Monitor for consistent incoming pollen or provide high-quality pollen substitute to support hypopharyngeal gland development in nurse bees.
- **Nectar Flow:** Ensure adequate nectar or syrup feeding to maintain the energy levels required for the heavy work of royal jelly production.

III. Technical Set-up & Hygiene

- **Grafting Tools Calibration:** Sanitize all grafting spatulas, suction devices, and queen cups.
- **Temperature Control:** Prepare an insulated transport container with ice packs to maintain the 0–4°C storage range immediately upon harvest.
- **Cell-Builder Setup:** Verify that your "cell-builder" colony is primed with the correct ratio of nurse bees to grafted larvae.

IV. Harvest Schedule

- **The 72-Hour Window:** Ensure the harvest occurs precisely 68 to 72 hours after grafting to capture the jelly before larval consumption peaks.
- **Clean Room Protocol:** Ensure the workspace is free of debris to prevent contamination of the delicate, protein-rich secretion.