

Successful Propagation Starts with Preparation: A Guide for Receiving and Sticking Cuttings

Prior to Arrival: Setting Up for Success

Preparation is key to successful propagation. By taking the right steps before your cuttings arrive, you can set your operation up for optimal results. Follow these essential guidelines:

- **Cleanliness is Crucial:** Thoroughly clean and sanitize the growing environment, coolers, sticking lines, and tools.
 - **Check Supplies:** Ensure that all necessary supplies are on hand—propagation trays, rooting media, rooting hormones, PGRs, etc.
 - **Prepare Your Labor:** Schedule and train your team to handle unboxing, quality inspection, processing, prioritizing, and sticking
 - **Test Environmental Systems:** Confirm that all supplemental lighting, coolers, and cooling and heating systems, including bench or floor heating, are working correctly and set to the appropriate set points.
 - **Verify Mist Systems:** Inspect your mist system to ensure even misting and that it is functioning as intended.
 - **Calibrate Injectors:** Check and calibrate injectors to ensure proper nutrient delivery.
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Upon Arrival: Handling Cuttings with Care

Cuttings endure various stresses during transit, including exposure to temperature extremes, ethylene buildup, and potential physical damage. Minimizing these stresses is critical for successful propagation.

- **Move Cuttings to a Humid Cooler:** As soon as the cuttings arrive, move them into a cooler with high humidity to reduce heat stress.
 - **Ventilate:** Open the boxes immediately to allow ethylene gas to escape. If possible, remove bags from the boxes to allow heat to dissipate faster.
 - **Inspect for Quality Issues:** Unpack and carefully inspect the cuttings for any quality problems. If issues are found, take clear photographs and include the farm tag for documentation. While we strive to deliver the highest-quality cuttings, occasionally cuttings do arrive in poor condition.
 - **Recovery Period for Stressed Cuttings:** For cuttings that arrive stressed, allow them to rest in the cooler for several hours or overnight before sticking. Some species—such as **euphorbia**, **geranium**, **lobularia**, and **poinsettia**—benefit from this recovery period.
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Cooler Temperatures and Humidity Guidelines

The correct cooler temperature and humidity levels are essential to keeping cuttings in optimal condition. Follow these guidelines:

- **Tropical and Chill-Sensitive Species:** 55-65°F (13-18°C)
 - **Temperate Species:** 40-55°F (5-13°C)
 - **If Limited to One Cooler:** use 45-55°F (7-13°C) and keep Ipomoea and Portulaca out of the cooler
 - **Humidity:** maintain **80-95% relative humidity**
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Sticking: The First Step to Rooting Success

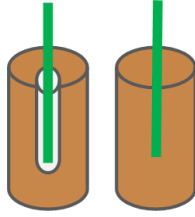
Follow these best practices to ensure that cuttings are handled correctly:

- **Sticking Priority:** Always stick the most sensitive cuttings first. The chart below outlines the priority order based on species sensitivity.

<u>Group A - stick day of arrival</u>	Geranium (Tag color ETH)
Crossandra	<u>White tops</u> —stick first
Euphorbia	<u>Yellow tops</u> —stick middle
Heliotrope	<u>Orange tops</u> —stick last
Hybrid Begonia	<u>Group C</u>
Lantana	Angelonia
Lobularia	Bidens
Purslane	Calibrachoa
Ipomoea (especially chartreuse)	Cuphea
Thunbergia	New Guinea Impatiens
<u>Group B</u>	Petunia
Begonia (hiemalis)	Phlox
Coleus	Salvia
Dahlia	Scaevola
Evolvulus	Verbena
Fuchsia	<u>Group D</u>
Geranium	Gaura
Lavandula	Hedera
Osteospermum	Sanvitalia
	Vinca major

- **Avoid Dehydration and Heat:** Only take a small batch of cuttings from the cooler at a time to reduce dehydration and heat stress. Cuttings should be stuck within **one hour** of removal from the cooler.
- **Seating the Cutting:** It's essential that cuttings make good contact with the rooting media, especially at the bottom of the cutting. If using dibble holes, ensure they are not

too deep or too wide. After sticking, be sure to properly water in the cuttings to eliminate excess air around the cutting base. This is particularly important for species like calibrachoa and petunia, where excess air can inhibit root development.



The cutting on the right is properly seated.

- **Labeling:** Always keep the farm label with each batch of cuttings. This will help troubleshoot any issues that arise later in the propagation process.
- **Mist Immediately:** New cuttings should be placed under mist immediately. If your sticking area doesn't have a misting system, move the trays to the propagation area as soon as possible.

By following these guidelines, you will be well on your way to successfully rooting cuttings and producing strong, healthy plants. Remember, the key to successful propagation lies in careful preparation, proper handling upon arrival, and quick action when sticking the cuttings.